

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2022

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE
TRANSITION PERIOD FROM TO
Commission File Number 001-39781

AbCellera Biologics Inc.

(Exact name of Registrant as specified in its Charter)

British Columbia
(State or other jurisdiction of
incorporation or organization)
2215 Yukon Street
Vancouver, BC
(Address of principal executive offices)

Not Applicable
(I.R.S. Employer
Identification No.)
V5Y 0A1

Registrant's telephone number, including area code: (604) 559-9005

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common shares, no par value per share	ABCL	The Nasdaq Stock Market

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

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

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

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

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

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

Large accelerated filer Accelerated filer

Non-accelerated filer Smaller reporting company

Emerging growth company

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

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 in previously issued financial statements.

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

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

The aggregate market value of the Registrant's Common Stock held by non-affiliates of the Registrant based on the closing price of the Registrant's Common Stock as reported on the Nasdaq Stock Market on June 30, 2022, the last business day of the Registrant's most recently completed second quarter, was approximately \$2,404,551,632.

The number of shares of Registrant's Common Stock outstanding as of February 17, 2023 was 287,686,199.

DOCUMENTS INCORPORATED BY REFERENCE

The registrant's definitive proxy statement relating to the annual meeting of shareholders will be filed with the Securities and Exchange Commission within 120 days after the close of the registrant's fiscal year ended December 31, 2022 and is incorporated by reference in Part III to the extent described herein.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K includes “forward-looking statements” within the meaning of the U.S. Private Securities Litigation Reform Act of 1995 and “forward-looking information” within the meaning of Canadian securities laws, or collectively, forward-looking statements. Forward-looking statements include statements that may relate to our plans, objectives, goals, strategies, future events, future revenue or performance, capital expenditures, financing needs and other information that is not historical information. Many of these statements appear, in particular, under the headings “Business,” “Risk Factors,” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations”. Forward-looking statements can often be identified by the use of terminology such as “subject to”, “believe,” “anticipate,” “plan,” “expect,” “intend,” “estimate,” “project,” “may,” “will,” “should,” “would,” “could,” “can,” the negatives thereof, variations thereon and similar expressions, or by discussions of strategy. In addition, any statements or information that refer to expectations, beliefs, plans, projections, objectives, performance or other characterizations of future events or circumstances, including any underlying assumptions, are forward-looking. In particular, these forward-looking statements include, but are not limited to:

- our expectations regarding the rate and degree of market acceptance of our antibody discovery and development engine;
- companies and technologies in our industry that compete with our business;
- our ability to manage and grow our business by introducing our antibody discovery and development engine to new partners and expanding our relationships with existing partners;
- our operating results and financial performance;
- our partners’ ability to achieve projected discovery and development milestones and other anticipated key events, including commercial sales resulting in royalties owed to us, in the expected timelines or at all;
- our ability to provide our partners with a full solution from target identification to investigational new drug, or IND, submission;
- our partners’ ability to develop and commercialize a molecule discovered by us, on a timely basis or at all;
- our expectations regarding the completion of our good manufacturing practices, or GMP, facility and our manufacturing capabilities;
- our ability to establish and maintain intellectual property protection for our technologies and workflows and avoid or defend against claims of patent infringement;
- our ability to attract, hire and retain key personnel and to manage our personnel growth effectively;
- our ability to obtain additional financing in future offerings;
- the volatility of the trading price of our common shares;
- business disruptions affecting our operations and the development of our antibody discovery and development engine;
- the global economic impact of the ongoing conflict between Russia and Ukraine and related sanctions and market volatility;
- our ability to avoid material weaknesses or significant deficiencies in our internal control over financial reporting in the future;
- our expectations regarding our Passive Foreign Investment Company, or PFIC, status for our taxable year ended December 31, 2022, or any future taxable year;
- our expectations regarding our recent business acquisitions and our ability to realize the intended benefits of such acquisitions;
- our expectations regarding the use of our cash resources;
- our expectations about market trends; and
- our ability to predict and adapt to government regulation.

We may not actually achieve the plans, intentions, or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions, and expectations disclosed in our forward-looking statements. We have included important factors in the cautionary statements included in this Annual Report, particularly in “Risk Factor Summary” below and “Risk Factors”, that we believe could cause actual results or events to differ materially from our forward-looking statements. We operate in a competitive and rapidly changing environment and new risks and uncertainties emerge from time to time, and it is not possible for us to predict all risks and

uncertainties that could have an impact on the forward-looking statements contained in this Annual Report. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, collaborations, joint ventures, or investments we may make or enter into.

You should read this Annual Report and the documents that we file with the Securities and Exchange Commission, or the SEC, with the understanding that our actual future results may differ materially from what we expect. The forward-looking statements contained in this Annual Report are made as of the date of this Annual Report, and we do not assume any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by applicable law or regulation.

In addition, statements that “we believe” and similar statements reflect our current beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this Annual Report, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete. Our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

This Annual Report includes statistical and other industry and market data that we obtained from industry publications and research, surveys, and studies conducted by third parties as well as our own estimates of potential market opportunities. All market data used in this Annual Report involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such data. Industry publications and third-party research, surveys, and studies generally indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information. Our estimates of the potential market opportunities for our product candidates include several key assumptions based on our industry knowledge, industry publications, third-party research, and other surveys, which may be based on a small sample size and may fail to accurately reflect market opportunities. While we believe that our internal assumptions are reasonable, no independent source has verified such assumptions.

We express all amounts in this Annual Report on Form 10-K in U.S. dollars, except where otherwise indicated. References to “\$” and “US\$” are to U.S. dollars and references to “C\$” and “CAD\$” are to Canadian dollars.

Except as otherwise indicated, references in this Annual Report on Form 10-K to “AbCellera,” the “Company,” “we,” “us” and “our” refer to AbCellera Biologics Inc. and its consolidated subsidiaries.

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Summary of the Material and Other Risks Associated with Our Business

Our business is subject to numerous material and other risks and uncertainties. You should carefully consider the following information about these risks, together with the other information appearing elsewhere in this Annual Report, including our financial statements and related notes hereto. The occurrence of any of the following risks could have a material adverse effect on our business, financial condition, results of operations and future growth prospects. The risks and uncertainties described below may change over time and other risks and uncertainties, including those that we do not currently consider material, may impair our business. These risks include, but are not limited to, the following:

- We have incurred losses in certain years since inception and we may not be able to generate sufficient revenue to maintain profitability.
- Our quarterly and annual operating results have fluctuated significantly in the past and may fluctuate significantly in the future, which makes our future operating results difficult to predict and could cause our operating results to fall below expectations.
- Unstable market and economic conditions may have serious adverse consequences on our business, financial condition, and stock price.
- Our commercial success depends on the quality of our antibody discovery and development engine and the acceptance by new and existing partners in our industry.
- Failure to execute our business strategy could adversely impact our growth and profitability.
- If we cannot maintain and expand current partnerships and enter new partnerships that generate discovery programs for antibodies, our business could be adversely affected.
- 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.
- Development of a biologic is inherently uncertain, and it is possible that none of the antibody drug candidates discovered using our antibody discovery and development engine that are further developed by our partners will receive marketing approval or become viable commercial products, on a timely basis or at all.
- The failure of our partners to meet their contractual obligations to us could adversely affect our business.
- We may be unable to manage our current and future growth effectively, which could make it difficult to execute on our business strategy.
- We have invested, and expect to continue to invest, in research and development efforts that further enhance our antibody discovery and development engine. 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.
- Our partners have significant discretion in determining when and whether to make announcements, if any, about the status of our partnerships, including about clinical developments and timelines for advancing collaborative programs with the antibodies that we have discovered, and the price of our common shares may decline as a result of announcements of unexpected results or developments.
- 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 shares to decline.
- The life sciences and biotechnology 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.
- Upgrading and integrating our business systems could result in implementation issues and business disruptions.
- If we are unable to obtain and maintain sufficient intellectual property protection for our technology, including our discovery and development engine and Celium, our proprietary antibody visualization software, 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 data packages may be impaired.
- If we fail to maintain proper and effective internal control over financial reporting, our operating results and our ability to operate our business could be harmed.
- Sales of a substantial number of our common shares in the public market could cause our share price to fall significantly, even if our business is doing well.

Investing in our common shares involves a high degree of risk. You should carefully consider the following risks and uncertainties, together with all other information in this Annual Report on Form 10-K, including our consolidated financial statements and related notes and “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” as well as our other filings with the Securities and Exchange Commission, or the SEC, before investing in our common stock. Any of the risk factors we describe below could adversely affect our business, financial condition or results of operations. The market price of our common stock could decline if one or more of these risks or uncertainties were to occur, which may cause you to lose all or part of the money you paid to buy our common shares. Additional risks that are currently unknown to us or that we currently believe to be immaterial may also impair our business. Certain statements below are forward-looking statements. See “Forward-Looking Information” in this Annual Report on Form 10-K.

PART I

Item 1. Business.

OVERVIEW

We are a team of scientists, engineers, creatives, and business professionals addressing the barriers of conventional antibody drug development. Motivated by our mission to bring better antibody drugs to patients faster, we focus on solving general problems to catalyze a transformation in how antibody drugs are discovered. To maximize the value and impact of our work, we partner with companies of all sizes – from innovative biotechnology companies to leading pharmaceutical companies – propelling programs to the clinic, together.

We have several core beliefs that impact how we think about our business:

1. Investments in technology will improve the quality, speed, and success of drug development.
2. Long-term value-creation begins with building a company that can create multiple products repeatedly and successfully.
3. People are the foundation of success.
4. Building a great company takes time. We define our strategy and allocate resources to optimize long-term value.

After a decade of building our Company and working on over 100 drug discovery programs, we have grown from six entrepreneurial founders in a laboratory, to a high-performing team of approximately 500 people spread across four countries and three continents. We continue to invest in improving the efficiency of our business to increase the precision and speed by which we can bring new therapies to the clinic. We aspire to be recognized as the biotechnology industry's most powerful engine for antibody discovery and development, spanning the path from target to the start of clinical testing.

Drug development timelines are long

We understand that the challenges and opportunities in biotechnology are different from those of other sectors. The process of developing drugs is complex and highly regulated, and as a result product development timelines are long. Historically, it has taken more than 10 years for the average biologic drug to go from early discovery to reach the market, at a cost of well over \$1 billion (inclusive of the research and development costs of drugs which do not reach the market).

Because of the inherently complex regulatory regime governing the testing, approval, and marketing of a drug candidate, drug developers may commit large amounts of time and resources toward the development of a particular drug. For this reason, we believe that drug developers need to ensure they have optimal drug candidates from the beginning.

Our strategy is based on two basic elements

We focus on the development of antibody-based drugs and are committed to improving the way these drugs are discovered and developed. As business operators, we think deeply about capital allocation and strive to maximize long-term value while mitigating the risks that are inherent in drug development and in scaling a company. This balance is reflected in our business model and investments. We look for opportunities where we believe low-risk investments in building technology and operational efficiency can create a sustained competitive advantage and drive long-term value by making antibody drug development faster and more efficient.

Our basic strategy is simple and has remained unchanged since the founding of our Company:

- First, we seek to be the best in the world in bringing antibody therapeutics from target to the start of clinical testing by combining expertise, technologies, and infrastructure to build an integrated engine for antibody drug discovery and development.
- Second, we use our engine to work with partners to build a large and diversified portfolio of royalty (and equivalent) stakes in future antibody drugs.

Our business model is capital-efficient and based on partnering

We build and apply our engine to solve long-standing problems in drug discovery. As we do, we convert investments in talent and technology into intellectual capital: intellectual property, know-how, optimized workflows, expertise, and data. We believe this continued accumulation of intellectual capital makes our engine increasingly effective at discovering and developing future antibody drugs. Our teams and technology get stronger as we solve each new problem. Improved capabilities enable and attract new program opportunities.

Partners seeking a competitive advantage approach us with ideas for new antibody drugs and specific problems that need to be solved. We deliver optimized clinical antibody candidates for further preclinical development and IND-enabling studies. Our typical partner-initiated discovery agreements, include near-term payments, clinical and commercial milestones, and royalties on net sales. While upfront fees generally cover our initial costs, the majority of the value of each deal is associated with downstream stakes that accrue in our portfolio. All together, we believe that these dynamics allow us to deploy capital efficiently.

As of December 31, 2022, we had 174 programs under contract with 40 unique partners, 149 of which include downstream participation in the form of milestones and royalty (and equivalent) stakes. We have started over 100 of these programs. At the portfolio level, we reduce risk through diversification across discovery programs, therapeutic areas, and partners, making our portfolio risk significantly lower than the binary risk that is typical of single drug development programs. We select partners and programs to include in our portfolio based on our assessment of their likelihood of success, thereby creating a slice of the market that we believe is enriched for its best parts. We also work to expand the capabilities of our engine in areas of high value. These self-initiated technology-development efforts may produce wholly owned assets for partnering.

We are well-positioned to execute on our business strategy

We have been characterized as part of a new category of company called “tech-enabled biotech” or “techbio”. We believe that companies in this space – including ours – should be evaluated not on the promise of their technology, but on the output of their platforms. We believe evidence of a successful platform includes:

- Success in solving discovery problems that are recognized as difficult across the biotechnology industry;
- A growing list of new and expanding partnerships with top-tier drug-developers; and
- A growing number of drug candidates discovered on the platform advancing towards and through the clinic.

Since our incorporation in 2012, we have accumulated over 10 years of experience in discovering therapeutic antibody candidates and have built substantial capabilities, scale, and expertise. We estimate that we have invested over \$500 million in our engine and – with over 40 partnerships, approximately 500 employees, and over 650,000 square feet in facilities available or under construction – we believe we have earned a significant competitive advantage in the maturity of our technology and the scale of our operations. We have worked on more than 100 different programs and have succeeded in discovering antibodies against recognized difficult targets. We have also validated our engine both clinically and commercially. Since 2012, we have generated over \$425 million in cumulative earnings and with approximately \$900 million in liquidity, we believe we are well-placed to continue executing on our strategy.

We do not expect to receive further royalties from our COVID-19 program, which were the driver of our recent profitability and positive operating cash flows. Therefore, we expect to generate losses and negative operating cash flow in the near-to-medium term, a period of continued investments in our engine ahead of revenues generated from milestone payments and royalties in the longer term.

OUR COMPANY AND ENGINE

The development of antibody-based drugs comes with unique challenges

Antibodies are specialized proteins, adept at binding biological and non-biological targets with high specificity and potency. This gives antibodies potential tolerability advantages relative to small-molecule-based drugs and makes therapeutic antibodies central to the precision-medicine toolkit. In addition, the success rates of antibodies in the clinic are driving drug developers of all sizes to invest in antibody drug development. Together, these factors contribute to the rapid growth of the therapeutic antibody market.

As proteins, antibodies are larger and more complex than small-molecule drugs. This creates unique challenges for drug developers. For example, antibodies and other protein-based drugs are more costly and time-consuming to manufacture compared to small molecules. Similarly, obtaining the right antibody for a particular program requires highly specialized capabilities relating to

immunization, screening, high-throughput analytics, functional and biophysical characterization, protein engineering, and optimization. Efficient development of antibody therapies requires the integration of highly specialized skills, technology, and infrastructure – something that few firms are able to do successfully. For this reason, we believe there is a serious structural challenge in the biotechnology industry that makes it difficult to turn biological insights into drugs that are ready for clinical testing.

These problems, which are inherent in developing new drugs, are hard to solve. As the biotechnology industry matures and becomes increasingly competitive, the problems are getting harder. Solving these problems would open new areas of drug development and has the potential to unlock additional value.

Our founding idea and insight

Our Company was founded to deliberately re-think the optimal approach to discovery and development of new antibody drugs. This idea originated from deep insights into the structure of our industry and the three essential steps of drug development, which are:

1. **Product ideation.** This step includes basic science and biomedical research to identify disease targets and define the properties of an optimal antibody therapy.
2. **Product creation.** Once ideation is complete, the next step is to create the therapeutic product candidate. This step is arguably one of the most complex, regulated, and technologically intensive in any sector, yet this is also the step that is most critical to get right.
3. **Product testing.** Once the drug developer has committed to a therapeutic product, it needs to be thoroughly tested in patients to demonstrate safety and efficacy. This is the step that incurs most of the product development spend. It is also the step that represents the most frequent, and most expensive, point of failure.

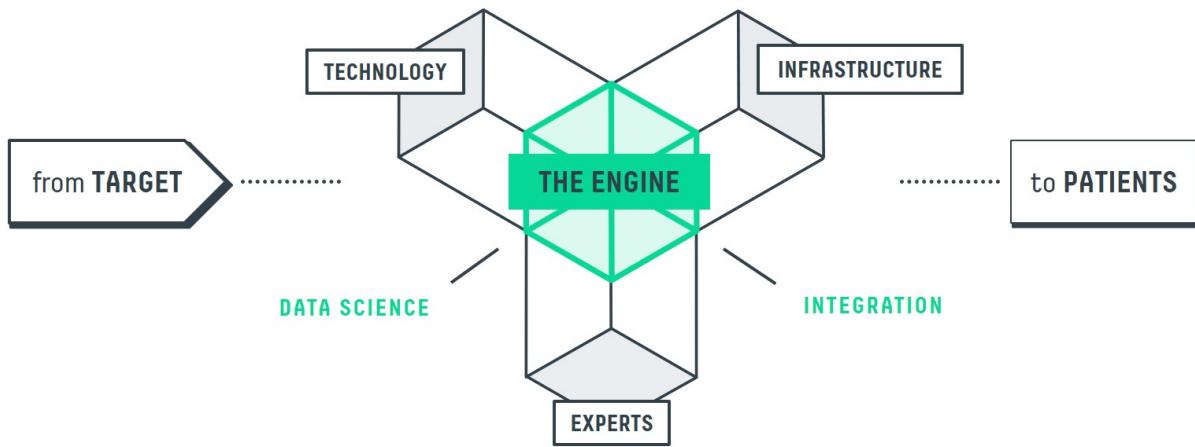
We believe there has been chronic underinvestment in developing product-creation capabilities for antibody drug development. We also believe this step represents significant opportunities for learning and the development of capabilities that are transferable between different drug development projects. Finally, we believe this is the place where investments in technology can most effectively drive value.

Our integrated engine for accelerated drug discovery

Our founders had a vision of building an antibody discovery and development engine based on sound process-engineering and design principles. Functionally, the goal of this engine is to systematically produce therapeutic antibodies that meet the many requirements for proceeding into clinical testing. Over the past decade, we have worked to achieve this vision, deliberately building our engine (Figure 1) to break the barriers of conventional antibody discovery and to deliver optimal clinical candidates to partners with both precision and speed.

Our engine discovers antibodies from natural immune responses, which are pre-enriched for antibodies with higher target-binding specificity and developability than those generated by synthetic methods. Through proprietary immunization strategies and single-cell screening, we maximize the search space to generate a wide range of diverse antibodies. Using robust characterization and developability assessments, we downselect these antibodies to optimal clinical candidates.

Figure 1: Our integrated engine for drug discovery.



Our engine integrates expert teams, technology, and facilities with data science and automation to support the optimized workflows that are necessary to move therapeutic programs from concept through to the clinic. Today, our engine allows us to take discovery and development programs through to the delivery of optimal clinical candidates. To expand our capabilities, we are integrating process development, manufacturing, and regulatory capabilities into our engine. When complete, our engine will be able to advance programs from targets to delivery of investigational drug products, complete with data and the regulatory documents necessary to start clinical testing.

Our engine brings together data and computational tools

A key pillar of our engine is the integration of modern software and data science infrastructure. Across many sectors, data science has revolutionized business performance, but many of its most promising applications have yet to be exploited by biotechnology.

The primary motive of our data science efforts is to make our business more efficient and scalable. We achieve this through deep integration of software and data architectures with our experimental work into a much larger engine.

Our engine integrates the collection, standardization, and storage of data with a suite of computational tools and an interactive interface that allows our scientists to quickly explore and interpret complex antibody data sets. Data from every experiment is securely stored in a central database designed to maintain the relationships that exist between different measurement types, samples, protocols, metadata, and antibodies. Because we do not rely on third-party data, we are able to maintain strict data quality assurance and standardization.

We believe this approach provides an advantage that increases the value of the data resulting from discovery programs, as we can extract informative insights by uncovering relationships that are hidden within the data. We believe that managing data and leveraging the proprietary datasets in this way allows us to continually refine our approach to antibody drug development and leverage the benefits of artificial intelligence and machine learning methods.

Our data science infrastructure allows us to make use of artificial intelligence and machine learning methods

Artificial intelligence (“AI”) generally refers to advanced computational methods and algorithms that enable the discovery of data features, patterns, or associations within large and complex data sets that can be used to classify data sets, make predictions, and solve problems.

We currently use AI and machine learning methods extensively in our engine, with an emphasis on the automation and scaling of data operations associated with our experimental workflows. While we believe AI has tremendous potential to accelerate antibody discovery through the prediction, engineering, and potentially even *de novo* design of antibodies with improved therapeutic properties, it is our view that many of the claims associated with AI drug discovery are ahead of current capabilities. What we believe is missing, in most cases, is the data and the experimental capabilities needed to iterate and learn. Ultimately, we believe it is only through the accumulation of large, complex, and high-quality data sets that the full promise of AI in drug discovery will be realized.

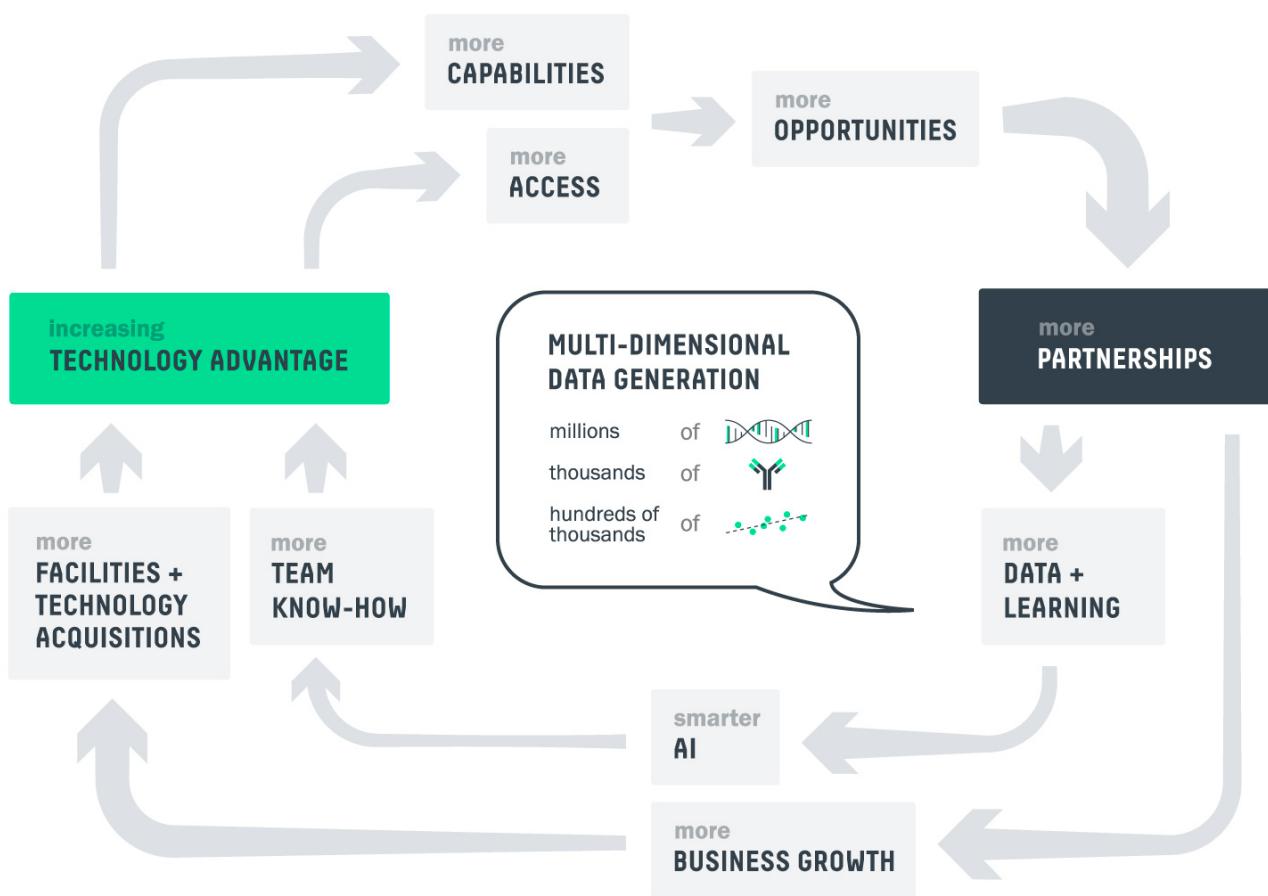
We believe a strong foundation that integrates large-scale experimentation with software and data infrastructure will be required to successfully apply AI and machine learning methods to biological data sets. We believe this is the only way the necessary data sets can be captured and standardized, while also maintaining the integrity of relationships between different data types. We also believe the importance and difficulty of developing the necessary robust software and data infrastructure is widely underestimated.

We invest significant resources to build the necessary foundations for using AI and machine learning methods successfully. We generate large amounts of data throughout each program and can capture these large data sets because we (i) prioritize investing in the experimental capabilities and their necessary integrations with software and data science and (ii) use these capabilities frequently in real drug discovery and development programs. We believe these features of our business will position us to be a leader in the application of advanced computation to antibody drug development.

We aim to be the best in the world in going from target to clinic

Already, we find that seamless data capture along an integrated end-to-end workflow allows us to improve our efficiency and ability to predict early in the discovery process how antibodies will behave later in development and manufacturing (Figure 2). Today, we integrate data from the start of a program right through to comprehensive characterization of antibody candidates. We are also investing in our engine to connect program data from program launch through to manufacturing and regulatory submissions for clinical testing. We believe that the additional insights to result from these data may also allow us to select and advance antibody candidates that are more potent or more easily manufactured.

Figure 2: Our integrated engine and capabilities create a virtuous cycle.



We have active construction projects on three buildings that will expand our facilities by more than 500,000 square feet when completed. These expanded facilities will allow us to scale up operations and support cell-line development, process development, and GMP manufacturing of antibody therapeutics. In April 2020, in support of this effort, we received a commitment for CAD \$175.6 million (\$129.7 million as of December 31, 2022) in financing from the Government of Canada. Upon completion of this facility, we expect to be able to support our partners from program-initiation to fill-finish. We believe that the integration of an optimized manufacturing process with our discovery and protein-engineering capabilities will create synergies in speed and efficiency and will allow us to more rapidly test and validate new antibody therapeutic formats, including bispecific antibodies and antibody conjugates. We expect to complete this facility and to have GMP manufacturing capabilities in use in 2025.

Using this approach to workflow optimization – alongside the continuous elimination of inefficiencies across the operations of our engine – we can meaningfully accelerate the speed of antibody drug discovery. At full scale, we believe our engine will allow us to reduce by half the time required to go from an idea to an antibody drug candidate ready for clinical testing, from three to five years today to under two years.

To date, we estimate that we have invested more than \$500 million in building our engine and expanding its capabilities. We have also successfully used our engine to overcome some of the hardest problems in the biotechnology industry. As an example, our engine discovered two antibody therapies for patients with COVID-19 (under emergency use authorization in 2020 and 2022), in what we believe was one of the most competitive and time-sensitive drug development efforts in history. We continue to invest in expanding and improving our engine, with approximately two-thirds of our total research and development spend applied to platform development.

OUR PEOPLE

Our people are critical to our success

We believe that great and enduring companies are built by strong teams of exceptional people. For this reason, team-building is a top priority in our business. We see talent and team-development as an opportunity to build a competitive advantage that amplifies every dimension of our business. We see investments in our people as investments that are necessary for the success of our Company.

We build systems to support our people

We believe a strong corporate culture is essential for the recruitment, development, and retention of exceptional employees and teams. Although leaders must model corporate values and desired behaviors, we do not believe culture can be invented or enforced from above. Instead, we see the responsibility for building and stewarding our culture as shared across our entire organization. We believe culture starts from individuals with shared core values and a common sense of purpose, and that culture emerges and is strengthened through a network of interactions and relationships built on mutual trust and appreciation.

Building a winning culture requires investment and continuous diligent effort. Our Company and our Talent Development team works to develop and deliver the necessary processes, training programs, and events that we believe are essential for our culture to thrive. These are designed to:

- Encourage relationship-building across interdisciplinary teams;
- Share information broadly, to promote mutual appreciation and to ensure our employees see how their work and the work of others connects to our overall strategy;
- Craft mentorship networks and leadership-training systems that help our employees develop strong leadership skills;
- Promote our corporate values and engage in conversations with our teams to understand how our values apply across the organization;
- Develop and deliver a curriculum of learning and development programs to accelerate career progression; and
- Offer events that help build strong relationships and a shared sense of purpose and community.

Through these and related activities we believe our Talent Development team plays a critical role in creating an effective organization that our teams are proud to be a part of.

Our philosophy for hiring and recruitment

Our philosophy for hiring is based on insights gained over more than a decade of building and managing interdisciplinary teams. First, we recognize that the success of a large and complex organization depends on the contributions of people with broad and complementary sets of technical expertise and aptitudes. Second, we prioritize the long-term potential of candidates and invest in our team's continued development. We believe this framework has allowed us to build an exceptional team at all levels and to develop strong leaders that drive the continued growth of our business in the long term.

How we structure our pay and compensation packages

We believe our long-term success depends on our ability to compete for top talent. To attract and retain top talent, we aim to offer total compensation that is competitive for any given role, as determined by market data on local, regional, or global conditions, as appropriate. In addition to competitive salaries, equity awards, and performance bonuses, our compensation includes comprehensive healthcare benefits, fitness and active-lifestyle benefits, and retirement-savings contributions.

We grant equity awards, comprising stock options and restricted stock units, to all employees. We do this because we believe that shared ownership promotes employee retention, creates alignment, and promotes a sense of shared ownership in the long-term success of our Company.

As discussed above, we also recognize that our ability to compete effectively for talent also depends on us maintaining a strong corporate culture, that our programs for training and development remain strong, and that we can continue to offer attractive working conditions. We further stress the importance of guidelines and cultural norms that encourage each team-member to find their optimal work-life synergy, aiming for productivity and constant improvement that is sustained over time. Finally, we believe that our strategy of using technology to positively impact the lives of patients is attractive to top talent who want to spend their days well and who value challenging work with a clear sense of purpose.

Our discovery engine requires interdisciplinary talent

Interdisciplinarity is a core feature of our business. The nature of our work in technology development and drug discovery requires a workforce that is exceptionally interdisciplinary in its scientific, engineering, and professional skills. After more than a decade of technology development at the nexus of science, engineering, and computation, we believe we are effective at assembling and integrating strong cross-functional teams. As of December 31, 2022, our research and development team comprised approximately 47% scientists, 36% business professionals, and 17% engineers and data scientists. Over 50% of our team members have either a Master's degree and/or a Ph.D.

Our geographic locations give us an advantage in recruitment

Attracting and retaining large teams of highly trained scientists and engineers is one of the most critical challenges in executing on our strategy. We believe that we have a significant recruitment advantage by virtue of our largest research facilities being in Vancouver, Canada, and Sydney, Australia. Both the Vancouver and Sydney regions are consistently ranked amongst the most liveable cities in the world. Both also have world-class universities that train large pools of talent in fields relevant to our work, including computer science, biochemistry, genomics, engineering, cell biology, and immunology. We believe the combination of (i) these regions providing access to large talent pools and less-developed biotechnology sectors, and (ii) our willingness to hire for potential and invest in employee training and development are key factors contributing to our success in discovering, attracting, and retaining top talent. Our facilities in Vancouver and Sydney are complemented by smaller specialized research teams in biotechnology hubs including Boston, United States, and Cambridge, United Kingdom.

We foster and enjoy high levels of employee engagement

We see employee engagement and retention as two important measures of the health of a company. We take regular measurements of our employee engagement and our ability to retain professional talent. In 2022, we had a voluntary turnover rate of less than 4%.

Over the past year, our team has grown by 28%, from 386 to 495 full-time employees. As of December 31, 2022, we had 495 full-time employees in Canada, the United States, the United Kingdom, and Australia, representing over 50 nationalities.

OUR MARKET OPPORTUNITY

We believe the biotechnology sector will be one of the most important opportunities for growth and investment over the next 30 years. The large size and rapid growth of the market for therapeutic antibodies combined with the capabilities of our engine represents a large opportunity for our business to make a difference for patients and partners by catalyzing a change in how antibody drugs are discovered.

Therapeutic antibodies are one of the largest and fastest growing classes of drugs

Antibodies are one of the largest and fastest growing classes of drugs and are used across multiple therapeutic areas, such as oncology, inflammation, infectious disease, ophthalmology, cardiovascular disease, autoimmunity, and neurodegeneration.

In 2022, therapeutic antibodies generated almost \$250 billion in global sales. This market is expected to grow to over \$350 billion by 2027, representing a five-year compound annual growth rate, or CAGR, of 9%. In 2022, over 40 antibody therapeutics achieved blockbuster status, defined as achieving annual with sales in excess of \$1 billion. In 2021, therapeutic antibodies also represented 4 out of the world's 10 top-selling pharmaceutical products.

The mean peak-year sales for currently marketed monoclonal antibody drugs and monoclonal conjugate antibody drugs are estimated at approximately \$3 billion. In 2022, there were over 140 approved antibody therapeutics, with more than 220 in Phase 3 clinical trials worldwide.

Historically, the time for antibody discovery projects to reach Phase 1 clinical trials from target selection has been approximately 5.5 years. On average, antibody drugs have taken between seven and ten years to reach market-authorization from the start of Phase 1 clinical trials. Each year, around 220 antibody therapeutics enter Phase 1 clinical trials. Between 2017 and 2022, this number grew at an 11% CAGR.

Our approach to expanding markets and creating value

We believe the best way for companies to create value is by providing solutions that empower their industry broadly. We seek to align our business objectives with those of our partners. By making antibody drug development faster, doing things that have not been done before, and leveling the playing field for our partners, we believe that our engine creates value for our industry in three main ways:

- **Improve discovery speed:** Bringing antibody treatments to market faster than the current industry standard would make a difference for those who need it. We estimate that accelerating the path to market by one year could improve the value of an average approved treatment by more than \$100 million dollars in net present value, considering only the impact of bringing cash flows forward. If our engine can help partners to be the first to bring a new drug to market, the drug may capture greater market share with the potential to generate billions of dollars in additional therapy sales over the patent life of the product.
- **Unlock new markets:** Opening new target space and enabling new modalities has the potential to unlock new market segments. We believe that many of these segments could represent multi-billion-dollar commercial opportunities for our partners.
- **Level the playing field:** With our centralized engine, we can remove the need for a biotechnology company to build its own discovery and development infrastructure. We believe this lowers the barriers to entry in our industry and can help small companies compete more effectively. For example, we estimate that our capabilities could save innovative biotechnology companies more than a year and tens of millions of dollars in discovery and development efforts at the earliest stages. We believe even more impactful is that our business model is designed to allow smaller companies to access specialized expertise and state-of-the-art capabilities for rapidly discovering and developing optimal clinical candidates.

OUR PARTNERS

We have extensive experience in forging partnerships with emerging biotechnology companies, leading pharmaceutical companies, and non-profit and government organizations. Our partners are specialist scientific ideators and skilled product testers that are predominantly based in the United States and Europe. They seek increased speed and probability of success of their drug development programs. As of December 31, 2022, we had a total of 40 unique partners for whom we have conducted or are conducting antibody discovery activities.

Our partnership agreements commonly include: (i) near-term payments for access, research, and intellectual property rights; (ii) downstream payments in the form of clinical and commercial milestones; and (iii) royalties on net sales of therapeutics. We also structure agreements with additional approaches to capture value, including through equity in our business partners and various options for deeper investment in moving therapeutic candidates forward. We believe the long-term value of our business will be driven by downstream milestone payments and royalties on the net sales of a resulting therapeutic.

As our Company has grown and developed, we have strategically emphasized agreements where we add more value for partners beyond the initial discovery work. These programs include more-valuable downstream terms and help maximize the value of our portfolio.

Our partners are specialists who come to us for help to develop clinical candidates

Our partners are specialists with deep knowledge and understanding of their targets. They seek to use this understanding of target and disease biology to develop therapeutic products for the ultimate benefit of patients. Biotechnology companies that do not have internal antibody discovery capabilities partner with us to help discover and develop clinical candidates at greater speed, with higher quality, and with a fraction of the capital outlay that has historically been associated with internal discovery efforts. Leading biopharmaceutical companies with well-developed internal discovery capabilities partner with us to help solve discovery problems that have proven intractable using their platforms.

The capabilities of our engine have made us a preferred partner in the biotechnology industry

We believe we have become a preferred partner in the biotechnology industry, as our integrated engine aims to improve the speed and probability of success of antibody drug development. We leverage our partners' specialist insights into target biology and use our engine to generate what we believe are optimal clinical candidates for downstream development. Our investments in full integration also allow us to take a big-picture perspective on antibody drug discovery, starting with the end in mind and optimizing for the final developability of antibodies from the start. This approach is intended to increase our partners' probabilities of success in developing an antibody candidate, with a commensurate improvement in their return on investment.

We take the selection of our partners seriously

We take a deliberate and strategic approach to selecting partners. We believe successful antibody drugs are developed in collaboration with partners who have skills and experience complementary to our own. We look for partners with innovative and impactful ideas, strong leadership teams, and the continued ability to raise the capital needed to fund the development of a product candidate. Being a preferred partner in our industry also allows us to work on the programs that mean the most to partners.

Our agreements emphasize participation in the success of antibody therapeutics

Our agreements emphasize participation in the success and upside of the future antibody therapeutics we help to discover and develop. Typical partnership agreements for partner-initiated discovery programs include (i) near-term payments for access, research, and intellectual property rights; (ii) downstream payments in the form of clinical and commercial milestones; and (iii) royalties on net sales of therapeutics. Agreements may include alternative approaches to capture value, including equity in our business partner and various options for deeper investment in moving drug candidates forward.

As of December 31, 2022, we had 174 partnered programs under contract that were either completed, in progress, or pending target nomination by the partner. Of these, 149 programs have the potential for milestone and royalty payments. Our partnership agreements are typically terminable at will with 90 days' notice prior to identification of a target, after which point they may only be terminated for cause. A summary of publicly disclosed partnerships is included in the table below.

Table 2: Summary Partnership Agreements with Pharmaceutical & Biotechnology Companies that include downstream participation from 2016 to 2022*

Partner	# of Targets & Duration	Therapeutic Indication or Modality	Date Announced
AbbVie Inc.	Up to 5 targets, multi-year	Undisclosed	December 15, 2022
Rallybio Corporation	Up to 5 targets, multi-year	Rare metabolic disorder and undisclosed	December 1, 2022
Atlas Ventures - stealth stage company	Up to 3 targets, multi-year	Undisclosed	August 3, 2022
Undisclosed biotechnology company	Up to 3 targets, multi-year	Undisclosed	June 29, 2022
Empirico Inc.	2 additional targets	Undisclosed	May 3, 2022
Everest Medicines Ltd.	Up to 10 targets, multi-year	Oncology and undisclosed	September 22, 2021
Moderna, Inc.	Up to 6 targets, multi-year	RNA-encoded antibodies	September 15, 2021
EQRx, Inc.	Multi-target, multi-year	Oncology and immunology (initially)	August 4, 2021
Tachyon Inc.	Single target	Oncology	August 3, 2021
Undisclosed biotechnology company	Up to 4 targets, multi-year	Undisclosed	June 30, 2021
Angios GmbH	Multi-target, multi-year	Ophthalmology	May 6, 2021
Undisclosed biotechnology company	Multi-target, multi-year	Oncology	May 6, 2021
Empirico Inc.	5 targets, multi-year	Undisclosed	April 14, 2021
Gilead Sciences, Inc.	8 targets, multi-year	Undisclosed	April 1, 2021
Abdera Therapeutics Inc.	9 targets, multi-year	Oncology	January 14, 2021
Invetx, Inc.	Multi-target, multi-year	Animal Health	November 19, 2020
Kodiak Sciences Inc.	Multi-target, multi-year	Ophthalmology	October 29, 2020
IGM Biosciences, Inc.	Multi-target, multi-year	Oncology and immunology	September 24, 2020
Undisclosed	Single target	Bispecific	June 3, 2020*
Eli Lilly and Company	Up to 9 targets, multi-year	COVID-19 program and additional indications	May 22, 2020*
Regeneron Pharmaceuticals, Inc.	Multi-target, multi-year	Multiple undisclosed	March 16, 2020
Invetx, Inc.	Multi-target, multi-year	Animal health	February 23, 2020
Undisclosed	Multi-target, multi-year	Cell therapy	September 25, 2019*
Gilead Sciences, Inc.	Single target	Infectious disease	June 13, 2019
Denali Therapeutics, Inc.	8 targets, multi-year	Neurological diseases	February 28, 2019
Novartis AG	Up to 10 targets, multi-year	Undisclosed	February 14, 2019
Autolus Therapeutics plc	Single target	Cell therapy (CAR-T)	November 29, 2018
Denali Therapeutics, Inc.	Single target	Neurological diseases	June 12, 2018
Undisclosed mid-cap pharmaceutical company	Undisclosed	Undisclosed	January 25, 2018
Teva Pharmaceuticals Industries Ltd.	Single target	Membrane protein	June 13, 2017
Pfizer Inc.	Multi-target, multi-year	Membrane protein	January 5, 2017
Undisclosed global biotechnology company	Multi-target, multi-year	Undisclosed	November 4, 2016
Kodiak Sciences Inc.	Single target	Ophthalmology	August 24, 2016
Teva Pharmaceuticals Industries Ltd.	Undisclosed	Undisclosed	February 2, 2016

* Effective date of agreement

Most of the programs with our partners will generate milestone payments to us if our partners reach certain preclinical, clinical, regulatory, and commercial milestones. In addition, programs that generate drug candidates which become commercial products may generate royalty payments to us on the net sales of those products. We also have other forms of downstream economic participation, including equity and equity-like positions, and options to co-invest. The following table represents the range of royalty (and equivalent) rates and the hypothetical maximum value of the milestone payments included in our partnership agreements as of December 31, 2022:

Table 3: Downstream Participation

Milestones (in billions) ¹	Royalty on net sales, 5th to 95th percentile range ²
Preclinical	\$0.07 2015-2019 contracts 0-4.0%
Clinical	\$0.96 2020-2022 contracts 2.0-8.4%
Regulatory	\$1.26
Commercial	\$4.26 Other downstream participation
Total	\$6.55 Equity/equity-like positions Options to co-invest

¹ All programs under contract, not probability adjusted

² Includes range of royalty (and equivalent) rates of each contract, considering step-downs, if any

OUR INDUSTRY STRUCTURE

Ideas for new antibody drugs can come from anywhere

We believe that sound biological insights and new ideas for new antibody drugs are a key input of our work. As product creators, we compete with other companies for access to ideas. The complexity and vastness of disease biology means that there is no universal approach to generating ideas for new drugs. Good ideas can come from anywhere. Academic institutions, venture capital groups, non-government organizations, small biotechnology companies, and large biopharmaceutical companies all have a role to play in driving ideation in our industry. To us, this dynamic suggests that broad partnerships are essential for connecting with the decentralized ecosystem of ideators that are the source of ideas for new antibody drugs.

The standard model for turning ideas into antibody drugs is inefficient

The conventional model for turning ideas into drugs requires biotechnology companies to independently recruit the teams, build the infrastructure, and acquire the technologies needed for product creation. If these companies end up building such capabilities internally, we estimate that up to \$50 million could be spent per company in pursuit of such efforts. Because these companies would build these capabilities separate from their core area of focus, and because such businesses have limited time to develop these capabilities, we believe that such decentralized capabilities are unable to approach the state of the art in our industry.

Ideation is dominated by innovative biotechnology companies

Industry-wide, ideation is dominated by small biotechnology companies. Between 2011 and 2021, over 50% of new-drug approvals in the United States originated with smaller biotechnology companies with annual revenues below \$500 million. For blockbuster therapeutics, the probability of the idea originating with a smaller biotechnology company increases to over 60%. These early-stage companies are often rich in ideas but low on capital and lack the necessary capabilities to efficiently pursue their ideas. In the absence of a centralized engine that operates at the highest level, these companies are forced to develop and to use suboptimal technology, or to piece together fragmented point solutions and contract services. Spread across a number of smaller biotechnology companies, we believe that the costs to advance their ideas – both in capital and in opportunity – can create serious economic barriers and inefficiencies that artificially restrict innovation and damage productivity in our industry.

Our integrated engine levels the playing field and enables new therapies

We believe our engine and business model improves efficiencies in our industry in three main ways:

1. We prioritize integration over the accumulation of stand-alone tools

We believe that drug development cannot be broken down into a series of independent steps and see the development of new drugs as a single process with one end goal – the rapid delivery of successful antibody drugs to patients. We prioritize the outcome of an integrated end-to-end workflow over the accumulation of stand-alone tools. Where other providers in our industry may offer partial solutions or stand-alone instruments, we offer an integrated engine for the creation of new antibody drugs. By delivering complete and optimized solutions to our partners, we think this perspective gives us a competitive advantage relative to providers of modular solutions.

2. We level the playing field to empower a more diverse set of innovators

As our centralized infrastructure for antibody drug discovery lowers the barriers to entry in our industry, we create the conditions for smaller biotechnology companies to focus on what is unique and valuable in their businesses, and to compete on the merits of their ideas. We believe this dynamic has the potential to catalyze a structural change in how antibody drugs are developed. By leveling the playing field to create opportunities for a more-diverse set of innovators, we believe that our engine has the potential to expand the ecosystem and make our industry more efficient.

3. We enable new types of antibody therapies

The differentiated capabilities of our engine make more and new kinds of antibody discovery possible. For instance, we believe our engine gives us a unique advantage in the discovery of antibodies that modulate the function of difficult transmembrane protein targets, such as G-protein-coupled receptors (“GPCRs”) and ion channels. These are two large and well-validated families of drug targets for which antibody discovery using traditional techniques has been extremely difficult. By unlocking access to these and other types of targets with antibodies, we believe that our engine has the potential to grow the market for antibody therapies.

COMPETITION

We operate in the global market for solutions that enable the discovery and development of therapeutic antibodies. The solutions and applications offered by companies operating in this market vary in size, breadth, and scope. These solutions are restricted by significant intellectual property barriers.

Given the broad promise of antibody therapeutics, we face competition from a number of sources, including companies that provide antibody discovery services such as contract research organizations (“CROs”) and companies that provide specialized solutions to antibody discovery using proprietary technologies or platforms.

- Examples of companies that provide antibody discovery and development services include fully integrated CROs that offer contract research, development, and/or manufacturing services include WuXi Biologics Inc., Evotec SE, and Charles River Laboratories International, Inc. These CROs operate on a large scale and earn fees on research work, but often lack differentiated capabilities at critical steps of antibody discovery and development.
- Examples of companies that use proprietary platforms or technologies to discover antibodies include Adimab LLC, Twist Bioscience Corporation (“Twist Bioscience”), and OmniAb, Inc. These and similar antibody discovery specialists engage in discovery activities with partners and earn downstream payments based on the value added by their proprietary technology platforms.

Many emerging and established life sciences companies have also been built around technologies that focus on one or a limited number of steps in antibody discovery and development. These companies provide technological point-solutions that can be integrated into antibody discovery workflows within our partners’ laboratories or at CROs.

An example of a company that provides a technological point-solution that is integrated into antibody discovery workflows is Berkeley Lights, Inc. (“Berkeley Lights”). They and similar tool-providers place instruments with our potential customers and with

CROs that compete with us for business. Such point-solution companies commonly earn revenues on the sale of machines and proprietary reagents, and in some cases also perform discovery services with fees and royalties that compete with our business. For example, Twist Bioscience markets and provides antibody discovery services using the Berkeley Lights Beacon platform to its customers.

OUR APPROACH TO CAPITAL ALLOCATION

We think like owners when making investments and have historically been profitable

Our founders, leadership team, and employees own a significant portion of the equity in our Company. Our teams think like owners when making decisions to allocate time and capital across our business activities. Cognizant of the specific challenges that characterize biotechnology as a sector, we specialize in addressing hard but tractable engineering problems and avoid staking our fortunes on high-risk science projects. We believe this is the best way for us to create value, and to do so reliably. Historically, our business has been both high-growth and capital-efficient. We have generated positive operating cash flow cumulatively since our inception in 2012 and in every successive year since 2018. However, as we do not expect to receive further royalties from our COVID-19 program, which were the driver of our recent profitability and positive operating cash flows, we expect to generate losses and negative operating cash flow in the near-to-medium term. We are thus anticipating a period of continued investments in our engine ahead of revenues generated from milestone payments and royalties in the longer term.

We invest with a long-term perspective

We allocate capital with a long-term perspective and our largest investments are in the intellectual capital and infrastructure that comprise our engine. Using our engine, we make capital-efficient investments in the early development of new antibody drugs, with the largest value tied to their long-term success. In many cases, this results in cash flows that are further in the future. We do this because we believe that our emphasis on milestone payments and royalty positions will result in stakes that substantially exceed in value the price we could command upfront for access to our engine. In the long run, we believe this approach has the potential to yield exceptional rates of return.

Consistent with the long timelines for drug product development and testing, we expect the most meaningful additional royalty revenues from our portfolio to begin after 2030. As our royalty positions mature, we believe that the layering of programs in our portfolio will result in a long-lived stream of strong cash flows and a high rate of return on invested capital. We accept that royalty-driven cash flows will only result when we have created value for patients, *i.e.* when the drug candidates that compose our portfolio reach the market as successfully commercialized antibody drugs.

Our engine helps us build a valuable portfolio with capital efficiency

Our engine is a focal point of our capital-allocation strategy. We make investments in infrastructure and intellectual capital, improving our discovery and development engine. This engine in turn generates our growing portfolio of valuable stakes in drug candidates in a capital-efficient manner.

By using our engine and its differentiated capabilities to attract business from our partners across the biotechnology industry, we believe that discovery partnerships can be used to grow our portfolio without significant capital outlay apart from the investments we make in expanding the capabilities and capacity of our engine.

We select opportunities and partners to maximize the value of our portfolio

As business operators, we understand the value of active portfolio management and how it can be used to enhance value in an industry where not all ideas are equally likely to succeed. With our dedication to discovery and development, we do not claim any specific expertise in ideation or selecting targets. Instead, we focus our efforts on connecting with strong partners whom we believe have compelling ideas for therapeutics and the capabilities to clinically develop the drug candidates that we discover.

The largest risk to our portfolio is not wasted effort, but rather the opportunity cost of missing out on potential future blockbuster therapeutics. To maximize our chances of investing in the most promising opportunities in our industry, we make the required substantial investments in our engine that make us a preferred partner in the biotechnology industry and an attractor of ideas for new antibody drugs.

Thinking like investors, we believe active management is most impactful when used to screen out weak opportunities. When partnering, we look for companies with what we believe are innovative and impactful ideas, strong leadership teams, and the

continued ability to raise the capital needed to support a drug candidate on its way to and through the clinic. Being a preferred partner in our industry also allows us to collaborate on the programs that mean the most to partners, where product quality and the speed to the clinic really matter. We think this strategy allows us to enrich our portfolio for programs with above-average potential to deliver commercially successful therapeutics.

We seek to maximize the net present value of our portfolio of stakes

Contractual rights to royalties and commercial milestones are financial stakes in the commercial success of the drug candidates that we help develop. We negotiate these stakes as part of our agreements with partners.

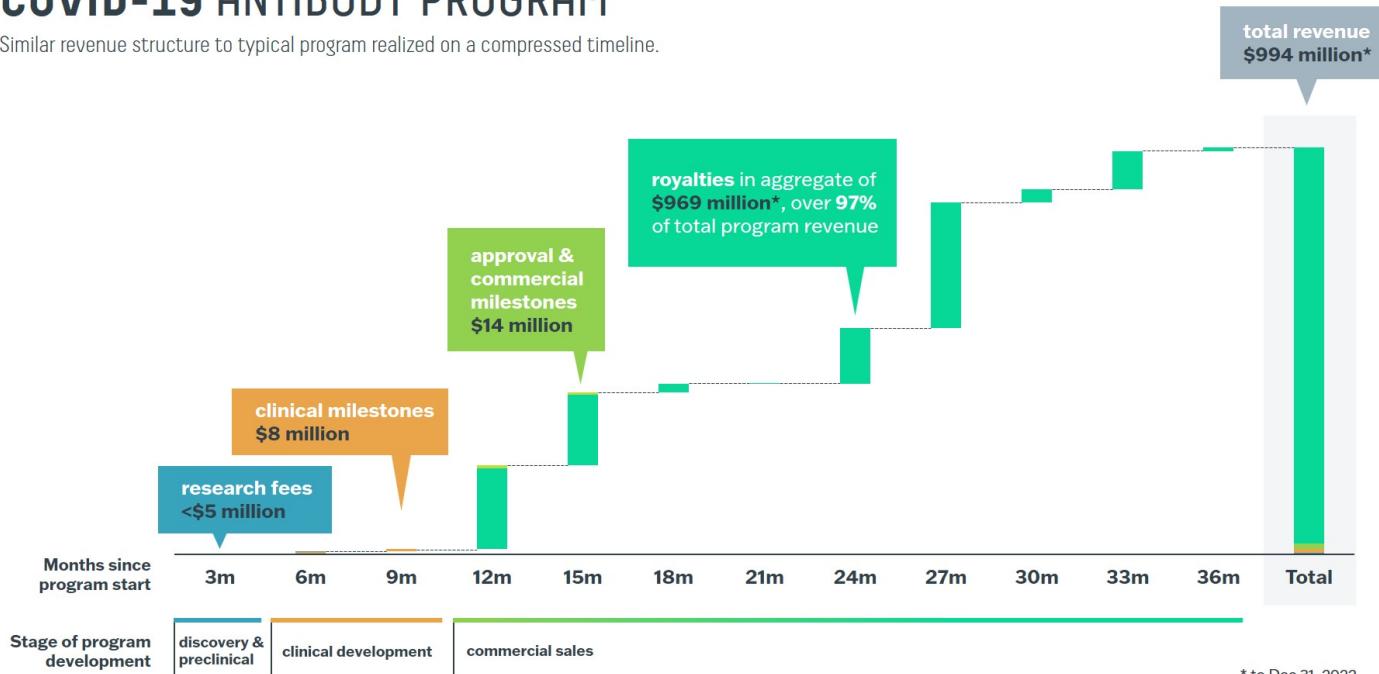
We believe the near-term and clinical milestone payments we earn from programs are only a small proportion of the expected total value that we ascribe to an individual program. Instead, for a given program that undergoes clinical development, obtains marketing approval, and is successfully commercialized, we expect the bulk of the revenues to result to be associated with our downstream royalty rights and commercial milestone payments. Figure 3 shows the distribution of revenues associated with our COVID-19 program by revenue category over time. We believe the dominance of royalty revenues as a category as seen in this program is broadly characteristic of a typical antibody discovery program that ultimately produces a successfully marketed drug. We do, however, recognize that our COVID-19 program was realized on a very compressed timeline (owing to the dynamics of a global pandemic) which is unlikely to be repeated by other programs.

Our approach is to maximize the expected net present value of our stakes in future antibody drugs. We believe this approach will maximize free cash flow in the long term and the value of our business overall.

Figure 3: Revenue profile for our COVID-19 program – a successful pre-partnered program.

COVID-19 ANTIBODY PROGRAM

Similar revenue structure to typical program realized on a compressed timeline.



Our portfolio is built using three distinct program types

By partnering, we generate opportunities to leverage our engine's power to contribute value to drug discovery efforts. As of December 31, 2022, we have entered contracts for 174 antibody discovery and development programs. The economics we earn on partnered programs scale with the value we bring to each program. Typically, these economics take the form of near-term payments, clinical and commercial milestone payments, and royalties on the net sales of a resulting therapeutic.

We increase the value of our portfolio and our business in three ways – by partnering on additional drug development programs; by contributing more value to the drug development programs we work on; and by capturing more of the value we contribute to a program. In addition to the partner-initiated discovery program model which we have entered since the founding of our Company, we have introduced additional program structures. These aim to unlock additional partnering opportunities, to allow us to develop and deploy additional value-creating capabilities, and to enhance the potential economics in programs where the value we add is particularly large.

Our programs now fall into three different categories:

Partner-Initiated Discovery

In partner-initiated discovery programs, partners come to us with a target in mind and work with us to turn their idea into an antibody drug product. This is our first category of program, dating back to 2014.

The volume of programs in this category is high. As of December 31, we had started 94 partner-initiated discovery programs. Of these, 69 programs include downstream milestones or royalty stakes. Through new and expanded partnerships, we continue to add programs to this portfolio.

We work closely with our partners on these programs, leveraging their insight and expertise into target and disease biology while using the discovery and development capabilities of our engine to create value. Depending on the terms of the program, we may perform work from target specification as far as the delivery of a final drug candidate. For some large or well-enabled partners, we will hand our work off at an earlier stage, allowing our partner to work with our panel of characterized antibodies while leveraging their own proprietary data.

The royalties on net sales in our typical discovery program are in the low-to-mid-single-digit-percentage-point range. Because the research fees we earn on the work generally more than cover our marginal costs of running these programs, the potential return on our incremental investment in these programs is high. In the long term, as our portfolio matures and results in approved therapies, we believe our aggregate economic position in this category has the potential to produce large revenues at near-100% margin.

Partner-Initiated Co-Development

In partner-initiated co-development programs, we work with targets picked or nominated by partners. We announced our first co-development partnership in 2021. As of December 31, 2022, we had started six partner-initiated co-development programs.

Our co-development programs represent a further amplification of our business model, as they enhance the potential economics in our portfolio by giving us the option – but not the obligation – to co-invest in the development of drug candidates. We begin discovery with a 50% stake in the program and have the option to invest to retain our ownership position on a stage-by-stage basis. Some programs in this category also include equity investments in partner companies.

The investments we make under this type of program are in the form of cost-sharing, where we initially contribute to discovery and development costs in proportion to our level of program ownership. After completing the initial work phases (typically to identify a development candidate), we have the option – but not the obligation – to continue co-funding further development of the drug candidate in return for a maintained ownership share.

As a co-owner of these programs, we have complete visibility on data and progress. We believe this preferential insight into program potential and viability puts us in an attractive position to make the decision on exercising our option to continue to invest. If we exercise our option to continue co-development in a program, we invest at cost and at what we believe to be at a discount to the intrinsic value of the incremental stake.

In cases where we do not exercise our option to continue to invest, our stake typically converts to a royalty-and-milestones position, with royalty rates reflecting the value of our contributions to that point. For each staged investment we make in a co-development program, our effective royalty position is increased. The royalty rates for these programs are generally higher than for our partner-initiated discovery programs.

The potential for us to assume deeper ownership stakes through a co-development agreement allows us to capture more value from programs to which our engine can make an outsized contribution and from programs in which we have a particularly high level of conviction.

Pre-Partnered Programs Associated with Technology Development

Our pre-partnered programs have the potential to generate wholly owned assets discovered in connection with long-range technology development projects that seek to unlock new areas in antibody drug development. While the primary objective of our pre-partnered work is technology development to demonstrably expand the capabilities of our engine, an additional benefit of these efforts could be assets with the potential to be advanced as first-in-class or best-in-class therapeutics.

In our technology development work, we prioritize areas where we believe there are multiple high-value therapeutic opportunities to explore. We believe doing this work on widely recognized real-world problems with large commercial potential is critical both to the development and validation of our engine. To date, we have undertaken three such technology development efforts:

- With funding from DARPA, we developed our pandemic response platform and used this platform to initiate work to discover and develop two antibodies against SARS-CoV-2. The assets we generated were partnered to and commercialized by Eli Lilly and Company (“Lilly”).
- We have developed our T-cell-engager platform and started pre-partnered programs to develop therapeutic antibody candidates against five important tumor targets.
- We have initiated reagent-generation for 13 pre-partnered programs associated with our platform investments to unlock difficult target classes like GPCRs and ion channels. Of these, six programs have progressed past the point of discovery start.

The majority of our pre-partnered programs are still at an early stage. A subset of programs is more advanced, and we anticipate the first of these progressing to selection of therapeutic antibody candidates for IND-enabling studies within the near-to-medium term.

Assets that potentially result from our technology development-associated pre-partnered programs are wholly owned by us, and we intend to license them to partners for clinical development and commercialization. Given the high technical barriers these programs need to overcome, and our selection of targets that are widely sought after, we anticipate that any such deals could achieve significant economics in the form of large near-term payments and above-average downstream participation through milestones and royalties.

Precedent suggests that the important assets which we target with our pre-partnered programs can be partnered on attractive economic terms. For example, in 2020, we partnered with Lilly to develop and commercialize COVID-19 antibody assets resulting from pre-partnered work using our pandemic-response platform. As of December 31, 2022, we have earned over \$900 million in combined royalties from commercial sales of bamlanivimab and bebtelovimab.

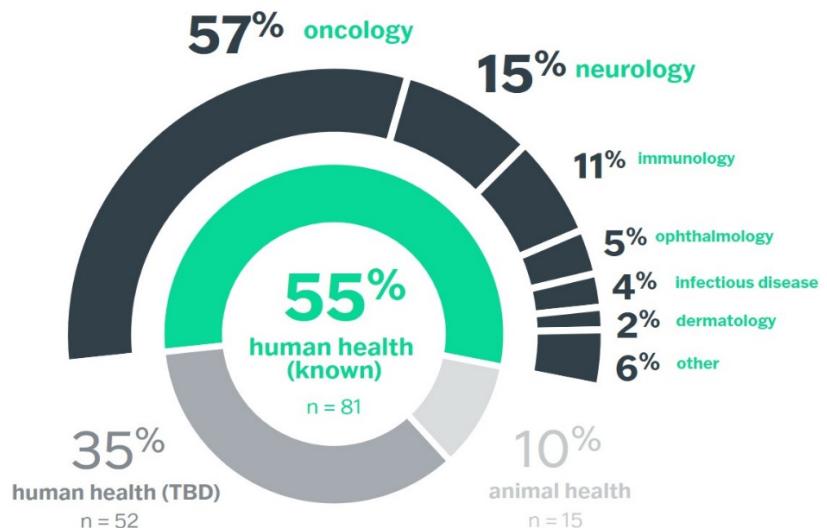
Our portfolio is well-diversified

We believe the optimal portfolio is diversified, long-term, and robust. Diversification reduces the binary risk associated with individual drug development programs. Because the capabilities of our engine are broadly applicable to antibody-based drug development, we can access the full depth and breadth of programs in the biotechnology industry through our partnering approach. Our resulting portfolio of programs is well-diversified across therapeutic areas (Figure 4), modalities, and partner types. We believe the current distribution of programs in our portfolio broadly reflects the overall distribution of programs in our industry.

Figure 4: Our large, diversified portfolio of stakes in next-generation antibody therapies.

LARGE DIVERSIFIED PORTFOLIO IN NEXT-GEN ANTIBODY THERAPIES.

148 partner-initiated programs with downstream participation is diversified across the following therapeutic areas.



Drivers of value in our portfolio

The value of our portfolio is driven by several factors, which we believe include:

- Our number of downstream stakes in drug discovery programs (our “**program starts**”);
- The **probability of success** of a drug discovery program;
- The expected **timeline** for a program to proceed through development and to commercial sales;
- The expected resulting **commercial sales** if a program is successful;
- Our economic stake in a program’s commercial success (with most of the value being defined by the **royalty rates** associated with each program); and
- The value of **other downstream stakes** which we may obtain as part of our agreements.

We invest in and operate our business with the belief that we can favorably impact each driver of value in our portfolio:

Program starts. Each program that we start has the potential to turn an idea into a new marketed therapy. The investments we make in our engine and our capabilities and capacity for business development allow us to connect with, and credibly pursue, an increasing number of therapeutic ideas in our industry. We believe that our ability to connect with and pursue such ideas is reflected in the growth in our cumulative number of partners and our cumulative number of program starts.

We believe our ability to accelerate drug development timelines and to unlock new types of targets put us in a position to continue driving business development growth. In pursuing the growth of our portfolio, we are mindful of the strong connection between commercial success of our programs and our largest payouts, as well as of opportunity costs. We do not aim to simply maximize our number of program starts. Instead, we choose to engage with partners and on programs that we believe have the potential to deliver first-in-class and best-in-class antibody therapeutics with strong commercial prospects.

Probability of success. For a drug development program to ultimately achieve commercial success, several conditions generally need to be met: the therapeutic hypothesis must be valid; the drug candidate must be optimal-for-purpose (*e.g.* effective, safe, manufacturable); the clinical trials must be designed and run appropriately; a significant medical need must be met; regulatory, logistical, and commercial matters must be handled well; and good organizational and financial support must be established and maintained throughout. Failure on any one factor often leads to program-failure overall. Historically, such failures have resulted in success rates for drug development programs estimated to be in the mid-single-digit percentage range.

Through our investments and engine-based approach, we aim to raise the probability of success of the programs in our portfolio. The investments we make in our engine are primarily driven by our goal of finding and developing optimal drug candidates and enhancing the likelihood that a program will succeed on this critical factor. Our investments include the technology development efforts we make to repeatedly deliver successful drug candidates in areas where particularly high technical challenges and high unmet medical needs exist, such as those associated with T-cell engagers, GPCRs, ion channels, and rapid pandemic response.

Information on the other success factors may be uncertain and limited (or unavailable to us) at the time of program inception. However, our approach to partner selection and program selection includes an evaluation of all available information with the aim of steering our work toward programs that do not raise concerns on these factors. As a result, we believe that we are enriching our portfolio for programs with an above-industry-average probability of success.

Timelines. Development of a commercialized drug from program start is estimated to commonly take from eight to fourteen years, followed by approximately over a decade of patent-protected potential sales. Within this overall time frame, drug discovery and preclinical development is estimated to typically take three to five years with the remainder taken up largely by clinical development.

With our ongoing investments in the integrated target-to-clinic capability of our engine we are aiming to substantially reduce the time required for discovery and development, with a stated goal of – in the future – repeatedly moving from target nomination to an IND filing in two years or less.

Accelerating drug development – beyond the obvious benefit for patients – positively impacts the value of an ultimately successful drug in two ways. First, it increases the therapeutic's chance of being first (or next) to market with a large and lasting impact on market share. Second, it brings forward all positive cash flows from a program with a corresponding impact on their net present value.

Notably, some programs in our portfolio may progress faster than average for reasons beyond the speed of our engine. This can be the case for therapeutics against rare disease; those with breakthrough designation; drugs that are best-in-class and following a well-understood development path; in a pandemic response situation (as demonstrated by bamlanivimab and bebtelovimab); and in animal therapeutics.

Commercial sales. Today's antibody therapeutics generate average peak sales of approximately \$3 billion, following several years of ramping sales after commercialization. Substantial annual sales typically continue until the therapeutic patents expire. The average sales of therapeutics are derived from a long-tailed distribution of peak sales. This distribution includes some therapeutics with sustained annual sales of tens of billions of dollars and many with annual sales over \$1 billion (so-called "blockbusters"), as well as many that have more-limited commercial success.

We aim to position our portfolio with particular exposure to therapeutics with high and very high commercial potential. We believe that we can achieve this in three ways:

1. By achieving the technical breakthroughs that allow us to develop first-in-class or best-in-class drug candidates in high-value therapeutic applications where others have struggled or failed (*e.g.* based on T-cell engagers, GPCRs, ion channels);
2. By accelerating antibody discovery and preclinical development to increase chances of the resulting therapeutic being first- or next-to-market, with correspondingly large market share (as discussed above); and
3. By following an approach to partner selection and program selection that avoids programs with apparently low commercial potential.

Royalty rates. Royalties are the economic expression of our win-win approach to partnering, tying our financial success in a program to that of our partner and to the benefit that the commercialized drug brings to patients. Royalties on net sales are nearly 100%-margin revenue to the recipient, less volatile than a share of profits, and inherently protected against inflation.

The level of royalties to us which our partners agree to directionally depends on:

- The value we add to the program;
- Our partner's appreciation of the value we add to the program;
- Our investment in the program; and

- The degree to which we emphasize near-term and milestone payments in the agreement structure.

We add more value to a program when we overcome challenging obstacles, accelerate the program, avoid costs for our partner, and improve the program's chances of success, *e.g.* by providing superior drug candidates. The investments in the capabilities of our engine – including its forward integration along the value chain – all serve to enhance the opportunity and ability to add more value to programs.

A partner's recognition of the value we add to their program grows with each successful demonstration of our capabilities, either when we are able to show results from our work, particularly from pre-partnered programs, or during the inaugural programs we complete with them.

Our investments in programs depend on the program type. Investments are minimal in the case of partner-initiated discovery programs, where we typically cover the marginal cost of our work with near-term payments. For pre-partnered programs, the investments we make in the form of our initial technology development (and the subsequent advancement of development work for a particular program) are more substantial. When we enter into a partner-initiated co-development program, the initial investment we make during discovery and development is limited. However, the option to keep investing at cost in consecutive stages of development provides us with the opportunity to achieve a deeper royalty (or equivalent) position. All else equal, a greater investment by us generally translates into a higher royalty rate for a program.

For commercial reasons, we do not disclose the specific economic terms of each partnership agreement, which are generally bespoke. Instead, we report on the average and distribution of royalty rates in our portfolio.

Our average royalty rates reflect the increasing value we create for our industry

The range and progression of our royalty (and equivalent) positions reflect the value that we create and our ability to capture that value.

As of December 31, 2022, we had started 75 partner-initiated programs with downstream participation and partnered one pre-partnered program. These 76 programs have a mean royalty rate of 3.6%. The average negotiated rate for such programs has increased over time, reflecting the dynamics discussed above. Between 2015 and 2019, we agreed to a mean royalty rate of 2.4% across 37 partner-initiated programs with downstream participation contracted in the period; we note that contracts often include multiple program slots that represent potential future program starts. Between 2020 and 2022, we negotiated an increased mean royalty rate of 4.1% across the 111 partner-initiated programs with downstream participation signed in the period and our agreement to partner our COVID-19 antibody assets to Lilly. A quarter of these programs signed in the 2020 to 2022 period can achieve royalty rates above 5%.

Our position in a partner-initiated co-development program generally reflects our proportionate contribution to the program. The royalty (or equivalent) rates that apply at each point where we have the option to continue our co-investments depend on our cumulative contribution to the funding of the program. Even at an early point, the rates we stand to earn from such a program generally exceed the agreed-to royalty rates of our partner-initiated discovery programs. As of December 31, 2022, we continue to co-invest with our partners in all of the six co-development programs that we have started to date.

Other downstream economic stakes. In addition to royalty positions, we have included and expect to continue to include other downstream stakes in our agreements for programs.

As is customary in our industry, because drug development and testing spans many years, we typically negotiate clinical and commercial milestone payments as deferred compensation to recognize future value inflection points arising from our work. For our portfolio of programs under contract and not adjusted for the probability of success, as of December 31, 2022, the total hypothetical value of our clinical and commercial milestone payments was \$6.6 billion.

On a case-by-case basis, we may negotiate additional means of capturing value in addition to a reasonable royalty position, including equity or equity-like positions, options for deeper investment, or larger near-term payments.

OTHER MATTERS

Impact of COVID-19

Since the start of the COVID-19 pandemic, we have taken steps to protect our employees, business partners, vendors, and contractors. To address the multiple dimensions of the pandemic, we have been continuously monitoring the global situation, executing mitigation activities whenever and wherever required, following guidance from provincial and federal health authorities, and incorporating a hybrid working environment. We have not been required to stop research activities due to the COVID-19 pandemic and will adapt and apply new measures as required and as directed by local health authorities.

Intellectual Property

We strive to protect the proprietary technologies that we believe are important to our business, including seeking and maintaining patent protection intended to cover the compositions of matter of our product candidates, their methods of use, related technology, and other inventions that are important to our business.

Our success depends in part on our ability to obtain and maintain intellectual property protection for the components of our discovery and development engine and products arising from the same; to defend and enforce our patents, to preserve the confidentiality of our trade secrets, and to operate without infringing valid and enforceable patents and other proprietary rights of third parties; and to identify new opportunities for intellectual property protection.

As of December 31, 2022, we owned or exclusively licensed over 80 issued or allowed patents and over 80 pending patent applications worldwide, which includes over 40 issued U.S. patents and over 20 pending U.S. patent applications. We own registered trademarks and trademark applications for AbCellera, Celium, Trianni, and the Trianni Mouse in the U.S., Canada, Australia and Europe.

Obtaining patent protection is not the only method that we employ to protect our proprietary rights. We also utilize other forms of intellectual property protection, including trademark, copyright, internal know-how and trade secrets, when those other forms are better suited to protect a particular aspect of our intellectual property. Our belief is that our proprietary rights are strengthened by our comprehensive approach to intellectual property protection. It is our policy to require our employees, consultants, outside scientific collaborators, sponsored researchers and other advisors to execute confidentiality and invention assignment agreements upon accepting employment or consulting relationships with us. These agreements provide that all confidential information concerning our business or financial affairs developed or made known to the individual during the course of the individual's relationship with us is to be kept confidential and not disclosed to third parties except in specific circumstances. In the case of employees, the agreements provide that all inventions conceived by the individual, and which are related to our current or planned business or research and development or made during normal working hours, on our premises or using our equipment or proprietary information, are our exclusive property. We are diligent in taking precautions that our proprietary information is not released to third parties through the use of security measures. Our trade secrets encompass certain reagent compositions and concentrations, nucleic acid vector sequences and immunization protocols.

Data Rights

Our product to partners is data on the composition of matter of antibodies and their properties. We enter into contracts that allow us rights to use the data that we generate for the purpose of improving our discovery and development engine and fueling machine-learning algorithms. We maintain strict firewall protocols so target-specific data derived from a partner cannot be used to inform the discovery on another project by a different partner.

Patent Portfolio

We have developed an expansive patent portfolio with claims related to multiple aspects of our discovery and development engine, beginning with our first patent applications exclusively licensed from UBC, in 2013. We continuously assess new ways to improve our technology platform through license or acquisition of third-party patent portfolios, as was the case with our acquisitions of Lineage in 2017 and the OrthoMab platform from Dualogics LLC, or Dualogics, in 2020, our acquisition of Trianni, Inc., or Trianni, in 2020, our acquisition of TetraGenetics, Inc. in 2021, and our license agreements with Alloy Therapeutics LLC, or Alloy Therapeutics.

Our patent prosecution strategy encompasses the pursuit of protection for our discovery and development engine and tangentially related methods.

UBC License

In December 2013, we executed a license agreement with UBC, or the UBC License, to gain a worldwide, exclusive license to certain patents, or the UBC Patents, patented at UBC by Dr. Hansen and his team for the later of 20 years from the start date of the UBC License, or the expiry date of the last patent licensed under the UBC License. Under the terms of the UBC License, we have the right to sublicense a subset of the UBC Patents and a worldwide, exclusive license to UBC Improvements and/or Joint Improvements on these Patents solely in the antibody field of use. In addition, for a second subset of the UBC Patents, we have a worldwide, exclusive license to use and sublicense solely within the antibody field of use.

Under the terms of the UBC License, we paid a CAD \$0.1 million initial license fee and pay annual license fees to UBC during the term of the UBC License. We also pay UBC a low single-digit royalty on our revenue and a single-digit royalty of our sublicensing revenue during the term of the UBC License. UBC was also granted a single-digit percent equity position in our company.

Under the terms of the UBC License, in consultation with UBC we manage the filing, maintenance and prosecution of the licensed patents and we pay all costs associated with the same while we control all litigation associated with the licensed patents.

UBC may terminate the license under certain circumstances, including in the case of our insolvency, winding up or liquidation, if a court or similar process is levied on the rights under the agreement or on money due to UBC that is not released, if the subject technology becomes subject to a security interest that is not released, if we or any of our directors or officers have materially breached or failed to comply with securities laws, or in the event of certain breaches of, or failure to perform, our obligations under the license or other agreements between us and UBC. Either party may terminate the license for any breach which is not remedied within certain specified time periods.

The UBC Core Patents

The UBC Core Patent license includes a patent family directed toward certain systems, devices and methods for microfluidic cell culture. This patent family includes five issued U.S. patents and one pending U.S. non-provisional patent application. Issued patents from this family are expected to expire as early as July 2031, absent any disclaimers or extensions available.

The UBC Core Patent license also includes a patent family directed toward systems and methods for assaying binding interactions between a protein produced by a single cell, e.g., an antibody produced by a single B cell, and a second biomolecule (e.g., antigen) in microfluidic chambers and devices. This patent family includes thirteen issued U.S. patents and one pending U.S. non-provisional patent application. Issued patents from this family are expected to expire in July 2031, absent any disclaimers or extensions available.

A patent family directed toward methods for assaying functional properties exhibited by a protein produced by a single cell, e.g., an antibody produced by a single B cell, and a second biomolecule (e.g., antigen) in microfluidic chambers and devices is also included in the UBC Core Patent license. This patent family includes patents issued in the U.S. and Australia and granted in Europe, as well as one pending U.S. non-provisional patent application and nine pending foreign counterpart patent applications. Issued patents from this patent family are expected to expire in March 2034, absent any disclaimers or extensions available.

Lastly, the UBC Core Patent license includes a patent family directed toward methods for determining lymphocyte receptor chain pairs, for example, antibody heavy and light chain pairs. This patent family includes two issued U.S. patents and two granted patents in Europe, as well as one pending U.S. non-provisional patent application and two pending foreign counterpart patent applications. Issued patents from this patent family are expected to expire in May 2035, absent any disclaimers or extensions available.

Lineage

The Lineage patent portfolio complements our single-cell microfluidic intellectual property with downstream methods of sequencing reaction preparation, immune RepSeq and analysis. The immune repertoire patents and applications that we obtained from Lineage form the basis for the sequencing technologies that we currently use in our discovery and development engine.

Stanford License

Through our acquisition of Lineage, we obtained an exclusive license from Stanford University to patents and patent applications directed toward immune RepSeq. Our Stanford license includes one patent family directed toward methods of characterizing an immune repertoire. This patent family includes four issued U.S. patents, one issued in Canada, and one granted patent in Europe, as well as one pending U.S. non-provisional patent application. Issued patents from this patent family are expected to expire in May

2031, absent any disclaimers or extensions available. The Stanford license also includes another patent family directed toward methods of characterizing immune response and vaccine selection. This patent family includes two issued U.S. patents and one pending U.S. non-provisional patent application. Issued patents from this patent family are expected to expire in February 2034, absent any disclaimers or extensions available.

Under the terms of the Stanford license, we are required to pay Stanford a yearly license maintenance fee, as well as certain milestone payments in an aggregate amount not to exceed \$0.1 million. We are also required to pay Stanford low single-digit royalties on net sales of licensed products as well as a portion of non-royalty sublicensing revenues. The term of the Stanford license runs until the last licensed patent expires, and our obligation to pay royalties will continue so long as there is a valid claim of a licensed patent. Stanford may terminate the agreement governing the license if we are in material default in the provision of any report or payment of any amounts due to Stanford under the agreement, we do not use commercially reasonable efforts to develop or commercialize licensed products, we do not achieve certain diligence milestones, we are in material breach of any provision of the agreement, or if we provide any materially false report to Stanford. We may terminate the agreement at any time upon at least 30 days' notice to Stanford.

In addition to the Stanford license, the acquisition of Lineage included a patent portfolio comprising four patent families. One patent family is directed toward methods of determining the immune repertoire of a subject. This patent family includes three granted patents in Europe, one issued patent in China, and one issued patent in Hong Kong. This patent family also includes two pending foreign counterpart patent applications. Issued patents from this patent family are expected to expire in March 2034, absent any disclaimers or extensions available.

Another patent family is directed toward tagging target oligonucleotides. This patent family includes three issued U.S. patents, one issued patent in China, and two granted patents in Europe. This patent family also includes one pending U.S. non-provisional patent application and one pending foreign counterpart patent application. Issued patents from this patent family are expected to expire in March 2034, absent any disclaimers or extensions available.

An additional patent family is directed toward methods for detection of isotype profiles as signatures for disease. This patent family includes patents issued in Japan and China, as well as a patent granted in Europe and a patent issued in Canada. This patent family also includes one pending foreign counterpart patent application. Issued patents from this patent family are expected to expire in September 2032, absent any disclaimers or extensions available.

Lastly, the Lineage patent portfolio includes a patent family directed toward compositions and methods for analyzing heterogeneous samples. This patent family includes a granted patent in Europe and an issued patent in Hong Kong. This family also includes one pending foreign counterpart application. Issued patents from this patent family are expected to expire in September 2032, absent any disclaimers or extensions available.

OrthoMab

As part of our agreement to purchase certain assets from Dualogics related to its OrthoMab bispecific antibody platform, we were assigned Dualogics' interests and rights to that certain Exclusive License Agreement between Dualogics and the University of North Carolina at Chapel Hill, effective February 22, 2019, or the UNC Agreement. Under the UNC Agreement, we have an exclusive license to UNC's rights under three patent families.

One patent family is directed toward methods of producing an antigen-binding fragment, or Fab. This patent family includes three issued U.S. patents and one patent granted in Europe. Issued patents from this patent family are expected to expire in March 2034, absent any disclaimers or extensions available.

Another patent family is directed toward IgG bispecific antibodies and processes for preparation. This patent family includes one issued U.S. patent, one pending U.S. non-provisional patent application, and one foreign counterpart patent application. Any patents that issue from this patent family are expected to expire in January 2036, absent any disclaimers or extensions available.

The last patent family is directed toward methods for producing Fabs and IgG bispecific antibodies. This patent family includes one pending U.S. and one pending foreign counterpart patent applications. Any patents that issue from this patent family are expected to expire in December 2037, absent any disclaimers or extensions available.

Under the terms of the OrthoMab asset purchase, we granted Dualogics a sublicense under the three patent families to develop, market, sell and otherwise commercialize its existing programs related to the OrthoMab technology.

Under the terms of the UNC Agreement, we are required to pay UNC an annual license maintenance fee, low single-digit royalties on net sales of clinically approved and other products as well as sublicense fees. The term of the license and our obligation to pay

royalties runs until the last licensed patent expires. UNC may terminate the agreement governing the license if there is a material breach by us of the agreement and we fail to cure such breach, which breaches include but are not limited to our failure to deliver payment to UNC when due, to provide progress reports, to meet or achieve performance milestones or to possess and maintain insurance, or the execution of a sublicense that complies with the terms of the agreement. We may terminate the agreement at any time upon at least 60 days' notice to UNC.

Trianni

Through our acquisition of Trianni, we acquired all existing intellectual property including issued patents and pending applications worldwide relating to the flagship Trianni mouse and new platforms in development. We also acquired Trianni's trademarks including the terms "Trianni" and "Trianni Mouse", that have been issued in the United States and various other jurisdictions worldwide.

The Trianni intellectual property portfolio includes issued patents and pending applications in the U.S. and certain jurisdictions around the world.

In one patent family, the patents are directed to transgenic animals and methods of use. This patent family includes ten issued patents including in the U.S., Australia, the Russian Federation, Europe, India, Israel, Canada, China and Japan. There are two pending applications, one in the U.S. and one in Japan. Patents issuing from this family are expected to expire in July 2031, absent any disclaimers or extensions available.

Another patent family is directed to enhanced production of immunoglobulins. This patent family includes two issued patents including in the U.S. and Japan. There are seven pending applications including one in the U.S. and six in pending foreign counterparts, including Australia, Canada, Europe, Israel, Japan, and Korea. Any patents that issue from this family are expected to expire in February 2037, absent any disclaimers or extensions available.

Another patent family is also directed to enhanced production of immunoglobulins. This patent family includes eight pending applications, including one in the U.S. and seven in pending foreign counterparts including Australia, Canada, Europe, Israel, Japan, China, and Korea. Any patents that issue from this family are expected to expire in August 2035, absent any disclaimers or extensions available.

Another patent family is directed to enhanced immunoglobulin diversity. This patent family includes one issued patent in the U.S. and two pending applications, including one in the U.S. and one in Europe. Issued patents from this family are expected to expire in December 2035, absent any disclaimers or extensions available.

Another patent family is directed to transgenic mammals that express canine-based immunoglobulins. This patent family contains one issued U.S. patent and one pending application in the U.S. Issued patents from this family are expected to expire in July 2031, absent any disclaimers or extensions available.

Another patent family is directed to transgenic mammals that express bovine-based immunoglobulins. This patent family contains one issued U.S. patent. Issued patents from this family are expected to expire in July 2031, absent any disclaimers or extensions available.

Another patent family is directed to enhanced production of immunoglobulins. This patent family includes one pending application in the U.S. Any patents that issue from this family are expected to expire in August 2035, absent any disclaimers or extensions available.

Another patent family is directed to transgenic mammals that express canine-based immunoglobulins. This patent family contains eight pending applications, including in the U.S., Australia, Canada, China, Europe, Israel, Japan, and Korea. Issued patents from this family are expected to expire in July 2039, absent any disclaimers or extensions available.

Another patent family is directed to transgenic mammals that express bovine-based immunoglobulins. This patent family contains eight pending PCT applications, including in the U.S., Australia, Canada, China, Europe, Israel, Japan, and Korea. Issued patents from this family are expected to expire in July 2039, absent any disclaimers or extensions available.

Another patent family is directed to single chain VH and heavy chain antibodies. This patent family includes four issued patents including in the U.S., Australia, Europe, and Japan. There are four pending applications, including one in the U.S. and Canada, China, and Israel. Issued patents from this family are expected to expire in July 2037, absent any disclaimers or extensions available.

Another patent family is directed to long germline DH gene and long HCDR3 antibodies. This patent family contains one issued patent in Europe and one pending application in the U.S. Issued patents from this family are expected to expire in October 2037, absent any disclaimers or extensions available.

Another patent family is directed to transgenic mammals and methods of use. This patent family contains two pending applications including one in the U.S. and one in Europe. Issued patents from this family are expected to expire in August 2039, absent any disclaimers or extensions available.

Another patent family is directed to Adam6 knockin mice. This patent family contains one issued patent in Europe and one pending application in the U.S. Issued patents from this family are expected to expire in August 2039, absent any disclaimers or extensions available.

Another patent family is directed to heavy chain-only antibodies. This patent family contains one pending application in Europe. Issued patents from this family are expected to expire in September 2040, absent any disclaimers or extensions available.

AbCellera

We also aim to continue developing our product portfolio. We currently own several recently filed pending U.S. non-provisional patent applications directed toward methods for high throughput screening of multispecific antibody libraries and anti-coronavirus antibodies and methods of use.

The term of individual patents depends upon the legal term of the patents in the countries in which they are obtained. In the countries in which we file, the patent term is 20 years from the earliest non-provisional filing date, subject to any disclaimers or extensions. The term of a patent in the United States can be adjusted due to any failure of the United States Patent and Trademark Office following certain statutory and regulation deadlines for issuing a patent.

In the United States, the patent term of a patent that covers an FDA-approved drug may also be eligible for patent term extension, which permits patent term restoration as compensation for a portion of the patent term lost during the FDA regulatory review process. The Hatch-Waxman Act permits a patent term extension of up to five years beyond the original expiration of the patent. The protection provided by a patent varies from country to country, and is dependent on the type of patent granted, the scope of the patent claims, and the legal remedies available in a given country.

For a discussion of the risks we face relating to intellectual property, see “*Risk Factors—Risks Related to our Intellectual Property—If we are unable to obtain and maintain sufficient intellectual property protection for our technology, including our platform and Celium, our proprietary antibody visualization software, 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 data packages may be impaired.*”

Government Regulation

Our focus is on the discovery of antibodies that our partners use to improve the speed and success of their antibody discovery efforts; however, we ourselves are not currently involved in antibody discovery, do not manufacture any products and do not conduct any clinical trials. As such, while we are subject to a number of regulations, such as those governing our laboratory facilities as well as regulations that apply to businesses in the private sector generally, we are not subject to many of the types of regulations that ordinarily apply to companies in the life sciences, biotechnology and pharmaceutical sectors and industries. However, we believe that the long-term success of our business depends, in part, on our partners’ ability to successfully develop and sell products using the antibodies that we discover. The regulations that govern our pharmaceutical and biotechnology partners are those we therefore believe have the most significant impact on our business.

Government authorities in the United States, at the federal, state and local level, and in the European Union, or E.U., and other countries and jurisdictions, extensively regulate, among other things, the research, development, testing, manufacturing, quality control, approval, labeling, packaging, storage, record-keeping, promotion, advertising, distribution, post-approval monitoring and reporting, marketing and export and import of pharmaceutical products, including biological products such as those that our partners develop. The processes for obtaining marketing approvals in the United States and in foreign countries and jurisdictions, along with subsequent compliance with applicable statutes and regulations and other regulatory authorities, require the expenditure of substantial time and financial resources.

Our partners will be subject to a variety of regulations in applicable jurisdictions governing, among other things, clinical studies and any commercial sales and distribution of their products. Whether or not our partners obtain approval from the U.S. Food and Drug Administration, or FDA, or the European Commission for the E.U. for a product, they must obtain the requisite approvals from regulatory authorities in foreign countries prior to the commencement of clinical studies or marketing of the product in those countries. The requirements and process governing the conduct of clinical studies, product licensing, coverage, pricing and reimbursement vary from country to country.

One such regulatory authority that is applicable to certain of our partners is the United States Secretary of Health and Human Services' authority to authorize unapproved medical products to be marketed in the context of an actual or potential emergency that has been designated by government officials. The COVID-19 pandemic has been designated such an emergency. After an emergency has been announced, the Secretary of Health and Human Services may authorize the issuance of, and the FDA Commissioner may issue Emergency Use Authorizations, or EUAs, for the use of specific products based on criteria established by statute, including that the product at issue may be effective in diagnosing, treating, or preventing serious or life-threatening diseases when there are no adequate, approved, and available alternatives. An EUA is subject to additional conditions and restrictions and is product-specific. An EUA terminates when the emergency determination underlying the EUA terminates. An EUA is not a long-term alternative to obtaining FDA approval, licensure, or clearance for a product. The FDA may revoke an EUA where it is determined that the underlying health emergency no longer exists or warrants such authorization, so it is not possible to predict how long an EUA may remain in place.

Similar to the United States, Canada has developed a mechanism to authorize unapproved medical products to be marketed in the context of certain emergencies. In particular, under the Food and Drugs Act (Canada), the federal Minister of Health may make an Interim Order if the Minister believes that immediate action is required to deal with a significant risk to health, safety or the environment. The Minister has made various Interim Orders in the context of the COVID- 19 pandemic. These Interim Orders provide the Minister with the authority to permit the sale of a COVID-19 drug in Canada via multiple new mechanisms, including authorizing a COVID-19 indication for a new drug with a modified set of application requirements with the potential for additional terms and conditions, as well as the possibility of authorizing a drug based on certain elements already being authorized by a foreign regulatory authority. Each Interim Order is valid for no longer than a one-year term and an authorization for importation and sale issued under an Interim Order is only valid for as long as the Interim Order is in effect. As is the case with EUAs in the United States, authorizations issued under an Interim Order are not a long-term alternative to obtaining Health Canada licensure for a product. Health Canada is currently considering various options to minimize disruptions for the ongoing authorization of drugs upon the expiry of an Interim Order with the intent to implement transition as needed.

Additional Regulation

In addition to the foregoing, provincial, state and federal U.S. and Canadian laws regarding environmental protection and hazardous substances affect our business. These and other laws govern our use, handling and disposal of various biological, chemical and radioactive substances used in, and wastes generated by, our operations. If our operations result in contamination of the environment or expose individuals to hazardous substances, we could be liable for damages and governmental fines. We believe that we are in material compliance with applicable environmental laws and that continued compliance therewith will not have a material adverse effect on our business. We cannot predict, however, how changes in these laws may affect our future operations.

Anti-Corruption Laws

We are subject to the U.S. Foreign Corrupt Practices Act of 1977, as amended, or the FCPA, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT Act, the Canadian Corruption of Foreign Public Officials Act and possibly other state and national anti-bribery and anti-money laundering laws in countries in which we conduct activities, such as the UK Bribery Act 2010 and the UK Proceeds of Crime Act 2002, or collectively, Anti-Corruption Laws. Among other matters, such Anti-Corruption Laws prohibit corporations and individuals from directly or indirectly paying, offering to pay or authorizing the payment of money or anything of value to any foreign government official, government staff member, political party or political candidate, or certain other persons, in order to obtain, retain or direct business, regulatory approvals or some other advantage in an improper manner. We can also be held liable for the acts of our third party agents under the FCPA, the Canadian Corruption of Foreign Public Officials Act, the UK Bribery Act 2010 and possibly other Anti-Corruption Laws. In the healthcare sector, anti-corruption risk can also arise in the context of improper interactions with doctors, key opinion leaders and other healthcare professionals who work for state-affiliated hospitals, research institutions or other organizations.

Available Information

Our website address is www.abcellera.com. Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, including exhibits, proxy and information statements and amendments to those reports filed or furnished pursuant to Sections 13(a), 14, and 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, are available through the “Investors” portion of our website free of charge as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. Information on our website is not part of this Annual Report on Form 10-K or any of our other filings with the SEC unless specifically incorporated herein by reference. In addition, our filings with the SEC may be accessed through the SEC’s website at www.sec.gov. All statements made in any of our filings with the SEC or documents available on our website, including all forward-looking statements or information, are made as of the date of the document in which the statement is included, and we do not assume or undertake any obligation to update any of those statements or documents unless we are required to do so by law.

Our code of conduct, corporate governance guidelines and the charters of our Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee are available through the “Investors” portion of our website.

Item 1A. Risk Factors.

Risks Related to Our Business and Strategy

We have incurred losses in certain years since inception and we may not be able to generate sufficient revenue to maintain profitability.

We expect to continue investing in our business. We expect to experience fluctuations in revenue and expenses which makes it difficult to evaluate our business. We may incur losses that are materially larger than what we have previously incurred. We have incurred losses in certain years since our inception and anticipate that we may incur significant losses for the foreseeable future. We expect that our operating expenses will continue to increase significantly, including as we:

- invest in research and development activities to improve our discovery and development engine;
- market our solutions to new and existing partners;
- acquire businesses or technologies to support our business;
- attract, hire and retain qualified personnel;
- maintain, expand, enforce, protect and defend our intellectual property portfolio;
- prosecute and defend our ongoing and any future patent litigation;
- build our new GMP manufacturing facility;
- create additional infrastructure to support our operations, including expanding our sales and marketing organization;
- add operational, financial and management information systems and personnel to support our operations as a public company; and
- experience any delays or encounter issues with any of the above.

Our expenses could increase beyond expectations for a variety of reasons, including our growth strategy and the increase in our operations. Since our inception, we have financed our operations primarily from royalty revenue, revenue from upfront payments generated through our receipt of technology access fees and discovery research fees through the performance of service contracts with our partners, payments from partners upon the satisfaction of clinical milestones, government funding and one-off government grants, the incurrence of indebtedness, and from private placements of our common and convertible preferred shares. Given our strategy and plans to invest in enhancing and scaling our business, we will need to generate significant additional revenue to achieve and sustain future profitability. Even though we have achieved profitability, we cannot be sure that we will remain profitable for any sustained period of time. We may not be able to generate sufficient revenue to sustain profitability and our recent and historical growth should not be considered indicative of our future performance.

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.

During the years ended December 31, 2020, 2021, and 2022, we received payments from our partnership contracts generated upon the satisfaction of clinical milestones, licensing revenue derived from use of the Trianni platform, research fees for research performed for our partners, and royalty payments on sales of bamlanivimab and bebtelovimab. In 2022, we continued to receive royalty payments primarily on sales of bebtelovimab. Upfront technology access fees are generated upon execution of our partnership agreements. Research and discovery fees are generated by research activities that we perform for our partners, the timing and nature of which are dictated by the commencement of antibody discovery campaigns selected by our partners. Clinical milestone payments are generated upon the achievement of development milestones by our partners with respect to the antibodies that we deliver. We are also eligible to receive royalty payments upon net sales of antibodies that we have discovered for our partners. In 2020, 2021, and 2022, these royalty payments related to our partnership with Lilly upon sales of bamlanivimab and bebtelovimab, antibodies designed to treat and prevent COVID-19. Therefore, royalty payments that we have received in recent periods are derived from a compound developed in a single partnership, and there can be no assurance that the revenues we have generated in such periods will be replicated in future periods. For example, in November 2022, the FDA announced bebtelovimab was no longer authorized for emergency use in any U.S. region and, as a result, we do not expect to generate significant revenue from royalties associated with Lilly's sales of our COVID-19 antibodies. We currently do not generate significant recurring revenue and, until such time as we establish significant recurring revenue, if at all, we will be prone to regular fluctuations in our revenue dependent on the timing of our entry into partnership agreements, our partners initiating discovery programs, and our partners achieving development milestones or commercial sales with respect to drug candidates utilizing antibodies discovered using our discovery and development engine. We do not expect to generate significant recurring revenue unless and until such time as we secure additional programs under contract that, in the aggregate, result in regular and continuous execution of new partnership contracts, research discovery activities, achievement of

development milestones or commencement of commercial sales. However, we are unable to predict whether and the extent to which the minimum annual payments under our partnership agreements will be exceeded, or the timing of the achievement of any milestones under these agreements, if they are achieved at all. In some cases, the timing and likelihood of payments to us under these agreements is dependent on our partners' successful utilization of the antibodies discovered using our discovery and development engine, which is outside of our control. Because of these factors, our operating results could vary materially from quarter to quarter from our forecasts.

Our quarterly and annual operating results have fluctuated significantly in the past and may fluctuate significantly in the future, which makes our future operating results difficult to predict and could cause our operating results to fall below expectations.

Our quarterly and annual operating results have fluctuated in the past and may fluctuate in the future, 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 antibody discovery and development engine and solutions, which may vary significantly;
- royalty payments received from our partnership with Lilly upon sales of bamlanivimab or bebtelovimab, which may vary significantly and are dependent on obtaining emergency use authorization by the FDA;
- the timing and cost of, and level of investment in, research, development and commercialization activities relating to our discovery and development engine and technology, which may change from time to time;
- the start and completion of programs in which our discovery and development engine is utilized;
- the relative reliability and robustness of our discovery and development engine, including the data generation and computational tools within our discovery and development engine;
- 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 technologies;
- expenditures involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims, including costs related to our intellectual property litigation with Berkeley Lights, and the outcome of this and any other future patent litigation we may be involved in;
- costs related to our civil litigation with the Estate of John Schrader, or Schrader, and the outcome of this and any other future civil litigations we may be involved in;
- 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;
- natural disasters, outbreaks of disease or public health crises, such as the ongoing COVID-19 pandemic;
- the timing and nature of any future acquisitions or strategic partnerships;
- future accounting pronouncements or changes in our accounting policies; and
- general social, political and economic conditions and other factors, including inflationary pressures and factors unrelated to our operating performance or the operating performance of our competitors.

For example, 2020 was the first year in which we received payments from a partner beyond upfront fees. The antibody, bamlanivimab developed by Lilly, has undergone clinical testing and has received EUA from the FDA, and we have received associated milestone payments and royalties on net sales in 2020, 2021, and 2022. Lilly progressed into these clinical trials at a greatly accelerated pace as a result of the Coronavirus Treatment Acceleration Program, which is a special emergency program for possible coronavirus therapies created by the FDA in 2020 to expedite the development of potentially safe and effective life-saving treatments to combat the COVID-19 pandemic. With respect to other or future product candidates, there is no assurance that any of our partners or collaborators will be able to advance a product candidate through clinical development on this timeframe again in the future, or at all. We initiated our partnering program in 2015 and have only had three AbCellera discovery programs and three Trianni programs result in milestone or royalty payments to us to date, and we have not yet had a program receive marketing approval. There is no guarantee that we will continue to generate the levels of revenue, particularly milestone and royalty revenues, from our partnerships as we have experienced in recent periods. In addition, we have only recently begun to generate licensing revenue from our Trianni humanized rodent platform. There can be no assurance that we will continue to generate or expand our licensing revenue from this product offering in future periods.

The effect of one of the factors discussed above, or the cumulative effects of a combination of factors discussed above, could result in large fluctuations and unpredictability in our quarterly and annual operating results. As a result, comparing our operating results on a period-to-period basis may not be meaningful. Investors should not rely on our past results as an indication of our future performance.

We may need to raise additional capital to fund our existing operations, improve our discovery and development engine or expand our operations. If we are unable to raise additional capital on terms acceptable to us or at all or generate cash flows necessary to maintain or expand our operations, we may not be able to compete successfully, which would harm our business, operations, and financial condition.

Based on our current business plan, we believe our existing cash and cash equivalents, marketable securities, and anticipated cash flows from operations, will be sufficient to meet our working capital and capital expenditure needs over at least the next 36 months following the date of this report. If our available cash resources together with our anticipated cash flow from operations are insufficient to satisfy our liquidity requirements including because of lower demand for our antibody discovery and development engine, or the realization of other risks described in this annual report, we may be required to raise additional capital prior to such time through issuances of equity or convertible debt securities, entrance into a credit facility or another form of third party funding or seek other debt financing. 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, to take advantage of financing opportunities or for other reasons. For example, this may include reasons such as to:

- increase our sales and marketing efforts to drive market recognition of our discovery and development engine and address competitive developments;
- fund development and marketing efforts of our current and future programs;
- expand the capabilities of our discovery and development engine into adjacent therapeutic modalities, including vaccine development and cell therapy;
- acquire, license or invest in technologies;
- acquire or invest in complementary businesses or assets; and
- finance capital expenditures and general and administrative expenses.

Our present and future funding requirements will depend on many factors, including:

- our ability to achieve revenue growth;
- the cost of expanding our operations, including our sales and marketing efforts;
- our rate of progress in selling access to our discovery and development engine and marketing activities associated therewith;
- our rate of progress in, and cost of research and development activities associated with, antibody discovery;
- the effect of competing technological and market developments;
- the continued impact of the ongoing COVID-19 pandemic on global social, political and economic conditions;
- the economic and geopolitical impact of the ongoing conflict in the Ukraine;
- the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims, including costs related to our intellectual property litigation with Berkeley Lights, and the outcome of this and any other future patent litigation we may be involved in; and
- costs related to our civil litigation with Schrader, and the outcome of this and any other future civil litigations we may be involved in; and
- costs related to any domestic and international expansion.

The various ways we could raise additional capital carry potential risks. If we raise funds by issuing equity securities, dilution to our shareholders would result. Any preferred equity securities issued also would likely provide for rights, preferences or privileges senior to those of holders of our common shares. If we raise funds by issuing debt securities, those debt securities would have rights, preferences and privileges senior to those of holders of our common shares. Debt financing and preferred equity financing, if available, may also involve agreements that include covenants restricting our ability to take specific actions, such as incurring additional debt, selling or licensing our assets, making product acquisitions, making capital expenditures, or declaring dividends. For example, our agreement with the Strategic Innovation Fund, or SIF, requires us to obtain consent in the event that an individual or company (or two or more of them acting in concert) acquires the direct or indirect beneficial ownership of 20% or more of our voting securities. In the event consent is not obtained, the agreement may be terminated and we will be obligated to repay all or a portion of the contribution amounts from SIF.

If we are unable to obtain adequate financing or financing on terms satisfactory to us, if we require it, 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.

Unstable market and economic conditions 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, increases in unemployment rates and uncertainty about economic stability. 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 conflict between Russia and Ukraine, terrorism or other geopolitical events. Sanctions imposed by the United States and other countries in response to such conflicts, including the one in Ukraine, 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. If the current equity and credit markets deteriorate, it may make any necessary debt or equity financing more difficult, more costly 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, manufacturers and other partners may not survive an economic downturn, which could directly affect our ability to attain our operating goals on schedule and on budget.

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

We utilize our antibody discovery and development engine to identify antibodies for further development and potential commercialization by our partners. As a result, the quality and sophistication of our discovery and development engine is critical to our ability to conduct our research discovery activities and to deliver more promising molecules 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 discovery and development engine's ability to successfully identify therapeutic antibodies on the desired timeframes that can ultimately be used to prevent and treat diseases;
- our ability to execute on our strategy to enter into new partnerships with new or existing partners and establish a robust internal pipeline of antibody discovery programs;
- 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 discovery and development engine reliably provides advantages over legacy and other alternative technologies and is perceived by customers to be cost effective;
- the rate of adoption of our solutions by pharmaceutical companies, biotechnology companies of all sizes, government organizations and non-profit organizations and others;
- prices we charge for our data packages and the discoveries that we make;
- the relative reliability and robustness of our discovery and development engine;
- our ability to develop new solutions for partners;
- if competitors develop a platform that performs functional testing of cells at a greater throughput than us;
- the timing and scope of any approval that may be required by the FDA, or any other regulatory body for drugs that are developed based on antibodies discovered by us;
- the impact of our investments in innovation and commercial growth;
- negative publicity regarding our or our competitors' technologies resulting from defects or errors; 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 discovery and development engine. If we are unsuccessful in achieving and maintaining market acceptance of our discovery and development engine, our business, financial condition, results of operations and prospects could be adversely affected.

Failure to execute our business strategy could adversely impact our growth and profitability.

Our strategy is on the development of antibody-based drugs and improving the way these drugs are discovered and developed. Our strategy assumes a certain degree of capital and capacity growth development. Factors such as insufficient capital, inflation, supply chain interruptions, inadequate forecasting, increases in construction material costs, or labor shortages could interfere with the successful execution of our strategy and our ability to timely build infrastructure to satisfy capacity needs and support business growth. If we are unable to successfully execute on this strategy, this could negatively impact our future results of operations and market capitalization. For additional discussion of our business strategy, please see the section entitled “Item 1. Business” included elsewhere in this Form 10-K.

If we cannot maintain and expand current partnerships and agreements and enter new partnerships that generate discovery programs for antibodies, our business could be adversely affected.

Our primary focus is on the discovery of antibodies for targets that are selected by our partners. Our partners then use the data packages provided by us to develop their own drug candidates without our involvement. As a result, our success depends on our ability to 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 data packages, our partners’ ability to successfully develop, secure regulatory approval for and commercialize drug candidates using antibodies discovered using our discovery and development engine, 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.

In our partnership programs, we maintain rights to large unique data sets that connect information at the level of single-cell measurements, DNA sequence and protein function. We use this data to create an accelerating flywheel of learning: data generation from our partnership business provides the basis for AI modules that lead to expanded capabilities and faster data generation which supports our partnership business. As a result, in addition to reducing our revenue or delaying the development of our future solutions, the loss of one or more of these relationships may reduce our exposure to such information, thus hindering our efforts to further our technological differentiation and improve our discovery and development engine. In certain of our partnership programs, we may elect to make additional investments in certain partnership agreements at progressive stages of preclinical development, clinical development, and commercialization in exchange for an increased share of product sales. Because of the inherent uncertainties in drug development described elsewhere in these Risk Factors, there can be no assurance that any additional investments we may elect to make would yield meaningful return, if at all.

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 collaboration in the form of discovery research fees, milestone payments, royalties or otherwise. Speculation in the biotechnology industry about our existing or potential partnerships can be a catalyst for adverse speculation about us, or our data packages, which can adversely affect our reputation and our business.

A reduction in demand and research and development activities by current and prospective partners may adversely affect our business.

Our business could be adversely affected by any significant decrease in drug research and development expenditures by pharmaceutical and biotechnology companies, as well as by government agencies or private foundations. Similarly, economic factors and industry trends that affect our partners in these industries also affect their research and development budgets and, consequentially, our business as well.

Our partners include researchers at pharmaceutical and biotechnology companies. Our ability to continue to grow and win new business is dependent in large part upon the ability and willingness of the pharmaceutical and biotechnology industries to continue to spend on molecules in the non-clinical phases of research and development (and in particular discovery and development assessment) and to outsource the products and services we provide. Furthermore, our partners continue to search for ways to maximize the return on their investments with a focus on lowering research and development costs per drug candidate. Fluctuations in the expenditure

amounts in each phase of the research and development budgets of these researchers and their organizations could have a significant effect on the demand for our products and services. Research and development budgets fluctuate due to changes in available resources, mergers of pharmaceutical and biotechnology companies, spending priorities (including available resources of our biotechnology partners, particularly those that are cash-negative, who may be highly focused on rationing their liquid assets in a challenging funding environment), general economic conditions, institutional budgetary policies and the impact of government regulations, including potential drug pricing legislation. Available funding for biotechnology partners in particular may be affected by the capital markets, investment objectives of venture capital investors and priorities of biopharmaceutical industry sponsors.

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 partnerships accounted for a significant portion of our revenues. For example, royalty revenue for years ended December 31, 2020, 2021, and 2022, have come exclusively from our partnership with Lilly. Milestone payments and licensing revenue for the years ended December 31, 2020, 2021, and 2022, have come exclusively from our partnership with Lilly and use of the Trianni platform. Because a significant portion of our revenue in 2020, 2021, and 2022 was derived from sales of bamlanivimab and bebtelovimab, the reduction in sales of these compounds that we have experienced in recent periods have reduced our royalty revenues attributed to sales of this compound. If these reductions are not offset by increases in other sources of revenue, our results of operations for future periods may be materially and adversely affected.

Our existing partnerships cover a large number of current programs under contract, and therefore represent a large portion of potential downstream value. In addition, our partnership agreements are typically terminable at will with 90 days' notice prior to identification of a target, after which point they may only be terminated for cause. As a result, if we fail to maintain our relationships with our partners or if any of our partners discontinue their programs, our future results of operations could be materially and adversely affected.

Development of a biological molecule is inherently uncertain, and it is possible that none of the antibody-drug candidates discovered using our antibody discovery and development engine that are further developed by our partners will receive marketing approval or become viable commercial products, on a timely basis, or at all.

We use our discovery and development engine to offer antibodies to partners who are engaged in antibody discovery and development. These partners include large cap pharmaceutical companies, biotechnology companies of all sizes and non-profit and government organizations. While we receive upfront payments generated through our receipt of technology access fees and discovery research fees for performing research activities for our partners, we estimate that the vast majority of the economic value of the contracts that we enter into with our partners is in the downstream payments that are payable if certain milestones are met or approved products are sold. As a result, our future growth is dependent on the ability of our partnerships to successfully develop and commercialize therapies based on antibodies discovered using our discovery and development engine. 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 discovery and development engine is capable of identifying high quality antibodies, there can be no assurance that our partnerships will successfully develop, secure marketing approvals for and commercialize any drug candidates based on the antibodies that we discover. As a result, we may not realize the intended benefits of our partnerships. We initiated our partnering program in 2015 and have only had three AbCellera discovery programs and three Trianni programs result in milestone or royalty payments to us to date, and we have not yet had a program receive clinical marketing approval.

Due to the uncertain, time-consuming and costly clinical development and regulatory approval process, there may not be successful development of any drug candidates with the antibodies that we discover, or we and our partners may choose to discontinue the development of these drug 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 none of these drug candidates will ever receive regulatory approval and, even if approved, such drug candidates may never be successfully commercialized. For example, under our research agreement with Lilly, we are eligible to receive and have received payments upon the achievement of certain development milestones and are eligible to receive royalties resulting from sales of both COVID-19 and non-COVID-19 products that incorporate antibodies we discovered. While we have received milestone and royalty payments from this collaboration, there can be no assurance that we will receive additional milestone payments or any royalties in the future. Furthermore, there can be no assurance that Lilly will be successful in its further development of bebtelovimab.

In addition, even if these drug candidates receive regulatory approval in the United States, the drug candidates may never obtain approval or commercialize such drugs outside of the United States, which would limit their full market potential and therefore our ability to realize their potential downstream value. Furthermore, approved drugs 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, we or our partners have to make decisions about which clinical stage and preclinical drug candidates to develop and

advance, and we or our partners may not have the resources to invest in all of the drug candidates that contain antibodies discovered using our discovery and development engine, or clinical data and other development considerations may not support the advancement of one or more drug candidates. Decision-making about which drug 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 antibody that we have discovered. If one of our strategic partners terminates its agreement with us, we may find it more difficult to attract new partners.

We are also subject to industry-wide FDA and other regulatory risk. The number of new drug applications, or NDAs, and biologics license applications, or BLAs, approved by the FDA varies significantly over time and if there were to be an extended reduction in the number of NDAs and BLAs approved by the FDA, the biotechnology industry would contract and our business would be materially harmed.

The failure to effectively advance, market and sell suitable drug candidates with the antibodies that we discover could have a material adverse effect on our business, financial condition, results of operations and prospects, and cause the market price of our common shares to decline. In addition to the inherent uncertainty in drug development addresses above, our ability to forecast our future revenues may be limited.

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 to our standards, 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.

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

Since our inception in 2012, we have experienced rapid growth and anticipate further growth in our business operations. This growth requires managing complexities across all aspects of our business, including complexities associated with increased headcount, integration of acquisitions, expansion of international operations, expansion of facilities, including our new GMP facility, execution on new lines of business and implementations of appropriate systems and controls to grow the business. Our growth has required significant time and attention from our management, and placed strains on our operational systems and processes, financial systems and internal controls and other aspects of our business.

We expect to continue to increase headcount and to hire more specialized personnel in the future as we grow our business. We will need to continue to hire, train and manage additional qualified scientists, engineers, laboratory personnel, client and account services personnel and sales and marketing staff and improve and maintain our technology to properly manage our growth. We may also need to hire, train and manage individuals with expertise that is separate, supplemental or different from expertise that we currently have, and accordingly we may not be successful in hiring, training and managing such individuals. For example, if our new hires perform poorly, if we are unsuccessful in hiring, training, managing and integrating these new employees, or if we are not successful in retaining our existing employees, our business may be harmed. Improving our technology and processes have required us to hire and retain additional scientific, engineering, sales and marketing, software, manufacturing, distribution and quality assurance personnel. As a result, we have experienced rapid headcount growth, resulting in approximately 500 employees as of December 31, 2022. We currently serve partners around the world and plan to continue to expand to new international jurisdictions as part of our growth strategy, which will lead to increased dispersion of our employees. Moreover, we expect that we will need to hire additional accounting, finance and other personnel in connection with our efforts to comply with the requirements of being a public company. As

a public company, our management and other personnel need to devote a substantial amount of time towards maintaining compliance with these requirements. A risk associated with maintaining this rate of growth, for example, is that we may face challenges integrating, developing and motivating our rapidly growing and increasingly dispersed employee base.

We may not be able to maintain the quality, reliability or robustness of our discovery and development engine, or the expected turnaround times of our solutions and support, or to satisfy customer demand as we grow. Our ability to manage our growth properly will require us to continue to improve our operational, financial and management controls, as well as our reporting systems and procedures. If we are unable to manage our growth properly, we may experience future weaknesses in our internal controls, which we may not successfully remediate on a timely basis or at all. To effectively manage our growth, we must continue to improve our operational and manufacturing systems and processes, our financial systems and internal controls and other aspects of our business and continue to effectively expand, train and manage our personnel. The time and resources required to improve our existing systems and procedures, implement new systems and procedures and to adequately staff such existing and new systems and procedures is uncertain, and failure to complete this in a timely and efficient manner could adversely affect our operations and negatively impact our business and financial results.

We have invested, and expect to continue to invest, in research and development efforts that further enhance our antibody discovery and development engine. 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 use our discovery and development engine for the discovery of antibodies and, since our inception, we have dedicated a substantial portion of our resources on the development of our engine and the technology that we incorporate to further enhance our antibody discovery and development engine. 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 discovery and development engine 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 discovery and development engine is not able to accelerate the process of antibody discovery as quickly as we anticipate, our revenue and operating results may be adversely affected.

Our partners have significant discretion in determining when and whether to make announcements, if any, about the status of our partnerships, including about clinical developments and timelines for advancing collaborative programs, and the price of our common shares 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 discovery and development engine. We do not plan to disclose the development status and progress of individual drug 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 intend 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 research discovery fees in that quarter or even the following quarter, as such fees are not payable to us until our partner begins discovery activities. The price of our common shares 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 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 shares 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. Certain of our partners have also made public statements regarding their expectations for the development of programs under partnership with us and they and other partners may in the future make additional 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' antibody 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 drugs. 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 adversely affected and the price of our common shares could decline.

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 discovery and development engine 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 discovery and development engine. 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' preclinical studies or clinical trial results, including serious adverse events, or ongoing communications with the FDA or other regulatory authorities regarding our partners' development strategy, 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 discovery and development engine, or if they implement preclinical, clinical or regulatory strategies that ultimately do not result in the further development or approval of the therapeutic candidate, we will not receive the benefits of our partnerships, which may have a material and adverse effect on our operations.

The life sciences and biotechnology 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 life sciences technology market. Our technologies address antibody therapeutic discovery challenges that are addressed by other platform technologies controlled by companies that have a variety of business models, including the development of internal pipelines of therapeutics, technology licensing, and the sale of instruments and devices. Examples of technical competition at different steps of our discovery and development engine include:

- In the field of single-cell screening, companies that provide access to similar technologies such as Berkeley Lights, HiFiBio Inc., Ligand Pharmaceuticals Inc., and Sphere Fluidics Ltd.
- In antibody RepSeq, companies that provide access to similar technologies such as 10X Genomics Inc., Adaptive Biotechnologies Corp., Atreca Inc. and Distributed Bio Inc. (acquired by Charles River Laboratories in 2021)
- In bispecific antibody engineering, from companies that provide access to similar technologies such as Abbvie Inc., Genmab A/S, Merus N.V. and Zymeworks Inc.
- In discovery using genetically engineered rodents, companies that provide access to similar technologies such as Ablexis LLC, Crescendo Biologics Ltd., Harbour Antibodies BV, Kymab Ltd., Ligand Pharmaceuticals Inc., Alloy Therapeutics LLC, and RenBio Inc.

We also face direct business competition from companies that provide antibody discovery services using technologies such as hybridoma and display. Companies with discovery business models that include downstream payments include Adimab LLC, Distributed Bio Inc. (acquired by Charles River Laboratories in 2021) and WuXi Biologics Inc. 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 discovery and development engine. In addition, our partners may also elect to develop their workflows on legacy systems rather than rely on our discovery and development engine.

Our competitors and potential competitors may enjoy a number of competitive advantages over us. For example, these may include:

- 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
- better established, larger scale and lower cost manufacturing capabilities.

As a result, 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 discovery and development engine and solutions at prices designed to win significant levels of market share. In addition, we may encounter challenges in marketing our solutions with our pricing model, which is structured to capture the potential downstream revenues associated with drug candidates that were discovered using our discovery and development engine. 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, 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 discovery and development engine, which could prevent us from increasing our revenue or sustaining profitability.

Our antibody discovery and development engine may not meet the expectations of our partners, which means our business, financial condition, results of operations and prospects could suffer.

Our success depends on, among other things, the market's confidence that our discovery and development engine is capable of substantially shortening the amount of time necessary to perform certain research activities as compared to the use of legacy and other alternative technologies, and will enable more efficient or improved pharmaceutical and biotechnology product development. For example, while we have in the past been able to identify a potential drug candidate for human testing within 90 days, there is no assurance that we will be able to do so on this timeframe again in the future, or at all. To date, we have only had three AbCellera discovery programs and three Trianni programs result in milestone or royalty payments to us. While our partnership with Lilly has produced bamlanivimab and bebtelovimab, antibodies for which Lilly was granted two EUAs by the FDA, we have not yet had a program receive full marketing approval. We also believe that pharmaceutical and biotechnology companies are likely to be particularly sensitive to defects and errors in the use of our discovery and development engine, including if our engine 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 discovery and development engine will meet the expectations of pharmaceutical and biotechnology companies.

If we are unable to support demand for our antibody discovery and development engine, including ensuring that we have adequate teams and facilities to meet increased demand, or if we are unable to successfully manage our anticipated growth, our business could suffer.

We have experienced significant growth in the number of programs under contract in recent periods for which we are conducting research discovery activities. As we secure additional programs under contract and as our partners initiate discovery programs, our operational capacity to execute such research activities may become strained. We are also planning to devote significant resources to vertical integration into our discovery and development engine. As a result, our strategy requires us to successfully scale our teams and facilities to meet future demand for our solutions. Our ability to grow our capacity will depend on our ability to expand our workforce and our facilities and increase efficiency through automation and software solutions. We may also need to purchase additional equipment, some of which can take several months or more to procure and set up. There is no assurance that any of these increases in scale, expansion of personnel, equipment, software and computing capacities or process enhancements will be successfully implemented and in a timely manner. For example, we are currently expanding our facilities in Vancouver and internationally. Such facilities require purpose-built buildings often with rezoning requirements. Such projects are typically long in duration and subject to delays. Failure to manage this growth could result in delays, higher costs, declining quality, 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 data packages and could damage our reputation and the prospects for our business.

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

In addition to our consolidated financial results, our management regularly reviews a number of operating and financial metrics, including number of programs under contract, the trend of potential downstream revenue terms (milestones and royalties) of the portfolio, the performance of the portfolio in probability of success in achieving clinical milestones as compared to historical averages and the performance of the portfolio in the time taken to achieve clinical milestones, 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. If our management fails to review other relevant information or change or substitute the key business metrics they review as our business grows, 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.

The sizes of the markets and forecasts of market growth for the demand of our antibody discovery and development engine 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 discovery and development engine, data packages and technologies. 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, discovery research 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 discovery and development engine 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 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 solution 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 discovery and development engine 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. Though we believe partners in our markets display a significant amount of loyalty to their supplier of research or a particular product or service, we also believe that because of the initial time investment required by many of our partners to reach a decision about whether to partner with us, it may be difficult to regain that customer once the customer enters into a partnership or collaboration agreement with a competitor. 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 discovery and development. For example, 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 discovery and development engine, 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 implementations were expensive and required a significant effort in terms of both time and effort. In addition to the aforementioned business systems, we intend to extend the capabilities of both our preventative and detective security controls by augmenting the monitoring and alerting functions, the network design and the automatic countermeasure operations of our technical systems. These information technology and telecommunications systems support a variety of functions, including manufacturing operations, 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 and communication between separate IT 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. Moreover, despite network security and back-up measures, some of 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.

Upgrading and integrating our business systems could result in implementation issues and business disruptions.

In recent years, we have been and will continue updating and consolidating systems and automating processes in many parts of our business with a variety of systems, including in connection with the integration of acquired businesses. The expansion and ongoing implementation of operational systems may occur at a future date based on value to the business. In general, the process of planning and preparing for these types of integrated, wide-scale implementations is extremely complex and are required to address a number of challenges, including information security assessment and remediation, data conversion, network and system cutover, user training, and integration with existing processes or systems. Incongruities in any of these areas could cause operational problems during implementation including inconsistent practices, delayed report and/or data shipments, missed sales, billing errors and accounting errors.

Security breaches, loss of data and other disruptions could compromise sensitive information related to our business or protected health information 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 collect and store petabytes of sensitive data, including legally protected health information, personally identifiable information, intellectual property and proprietary business information owned or controlled by ourselves or our strategic partners. We manage and maintain our applications and data by utilizing a combination of on-site systems, managed data center systems and cloud-based data center systems. 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 four primary risks relative to protecting this critical information: loss of access risk, inappropriate disclosure risk, inappropriate modification risk and the risk of being unable to adequately monitor our controls over the first three risks.

Although we take measures to protect sensitive information from unauthorized access or disclosure, our information technology and infrastructure and that of any third-party provider we may utilize, may be vulnerable to attacks by hackers or viruses or breached due to employee error, malfeasance or other disruptions. Any such breach or interruption could compromise our networks and the information stored there could be accessed by unauthorized parties, publicly disclosed, lost or stolen. Any such access, disclosure or other loss of information could result in legal claims or proceedings, liability under laws that protect the privacy of personal information, such as the Health Insurance Portability and Accountability Act of 1996 (“HIPAA”), and regulatory penalties. Although we have implemented security measures and a formal enterprise security program to prevent unauthorized access to sensitive data, there is no guarantee that we can protect our systems from breach. Unauthorized access, loss or dissemination could also disrupt our operations (including our ability to conduct our analyses, pay providers, conduct research and development activities, collect, process and prepare company financial information, provide information about any future products, and manage the administrative aspects of our business) and damage our reputation, any of which could adversely affect our business.

HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act (“HITECH”), and its implementing regulations, impose certain requirements relating to the privacy, security, transmission and breach reporting of individually identifiable health information upon entities subject to the law, such as health plans, healthcare clearinghouses and healthcare providers and their respective business associates that perform services for them that involve individually identifiable health information. Mandatory penalties for HIPAA violations can be significant, and criminal and monetary penalties, as well as injunctive relief, may be imposed for HIPAA violations. Although drug manufacturers are not directly subject to HIPAA, prosecutors are increasingly using HIPAA-related theories of liability against drug manufacturers and their agents and we also could be subject to criminal penalties if we knowingly obtain individually identifiable health information from a HIPAA-covered entity in a manner that is not authorized or permitted by HIPAA.

Furthermore, in the event of a breach as defined by HIPAA, HIPAA regulations impose specific reporting requirements to regulators, individuals impacted by the breach and the media. Issuing such notifications can be costly, time and resource intensive, and can generate significant negative publicity. Breaches of HIPAA may also constitute contractual violations that could lead to contractual damages or terminations. In addition, U.S. states have enacted and are considering enacting laws relating to the protection of patient health and other data, which may be more rigorous than, or impose additional requirements beyond those required by, HIPAA. For example, the California Consumer Privacy Act (“CCPA”), which became effective on January 1, 2020, gives California residents expanded rights to access and delete their personal information, opt out of certain personal information sharing and receive detailed information about how their personal information is used by requiring covered companies to provide new disclosures to California consumers (as that term is broadly defined) and provide such consumers new ways to opt-out of certain sales of personal information. The CCPA provides for civil penalties for violations as well as a limited private right of action for data breaches, which

may increase the volume of data breach litigation. While limited CCPA exemptions may apply to portions of our business, the recency of the CCPA's implementing regulations and the California Attorney General's enforcement activity means our obligations under the CCPA could evolve in the future, which may increase our compliance costs and potential liability.

Further, a California ballot initiative, the California Privacy Rights Act, or CPRA, was passed by California voters on November 3, 2020. The CPRA, which became effective on January 1, 2023, creates additional obligations with respect to processing and storing personal information. Additionally, some observers have noted that the CCPA, as modified by the CPRA could mark the beginning of a trend toward more stringent privacy legislation in the U.S., which could increase our potential liability and adversely affect our business. Already, in the United States, we have witnessed significant developments at the state level. For example, Virginia, Utah, Colorado, and Connecticut have all enacted comprehensive consumer privacy laws. While these state laws incorporate many similar concepts of the CCPA and CPRA, there are also several key differences in the scope, application, and enforcement of the law that will change the operational practices of regulated businesses. The new laws will, among other things, impact how regulated businesses collect and process personal sensitive data, conduct data protection assessments, transfer personal data to affiliates, and respond to consumer rights requests.

A number of other states have proposed new privacy laws, some of which are similar to the above discussed recently passed laws. Such proposed legislation, if enacted, may add additional complexity, variation in requirements, restrictions and potential legal risk, require additional investment of resources in compliance programs, impact strategies and the availability of previously useful data and could result in increased compliance costs and/or changes in business practices and policies. The existence of comprehensive privacy laws in different states in the country would make our compliance obligations more complex and costly and may increase the likelihood that we may be subject to enforcement actions or otherwise incur liability for noncompliance.

We may also become subject to laws and regulations in non-U.S. countries covering data privacy and the protection of health-related and other personal information. In particular, the European Economic Area ("EEA") has adopted data protection laws and regulations that impose significant compliance obligations. Laws and regulations in these jurisdictions apply broadly to the collection, use, storage, disclosure, processing and security of personal information that identifies or may be used to identify an individual, such as names, contact information, and sensitive personal data such as health data. These laws and regulations are subject to frequent revisions and differing interpretations, and have generally become more stringent over time.

The collection, use, storage, disclosure, transfer, or other processing of personal data regarding individuals in the EEA including personal health data, is subject to the EU General Data Protection Regulation ("EU GDPR") and similarly, processing of personal data regarding individuals in the UK is subject to the UK General Data Protection Regulation and the UK Data Protection Act 2018 ("UK GDPR" and together with the EU GDPR "GDPR"). The GDPR is wide-ranging in scope and imposes numerous requirements on companies that process personal data, including requirements relating to processing health and other sensitive data, obtaining consent of the individuals to whom the personal data relates, providing information to individuals regarding data processing activities, implementing safeguards to protect the security and confidentiality of personal data, providing notification of data breaches, and taking certain measures when engaging third-party processors. The GDPR also imposes strict rules on the transfer of personal data to countries outside the EEA/UK, including the United States, and permits data protection authorities to impose large penalties for violations of the GDPR, including potential fines of up to €20 million ((£17.5 million under UK GDPR) or 4% of annual global revenues, whichever is greater. The GDPR also confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies, and obtain compensation for damages resulting from violations of the GDPR. In addition, the GDPR includes restrictions on cross-border data transfers of personal data to countries outside the EEA/UK that are not considered by the European Commission and UK government as providing "adequate" protection to personal data ("third countries"), including the United States. The GDPR may increase our responsibility and liability in relation to personal data that we process where such processing is subject to the GDPR, and we may be required to put in place additional mechanisms to ensure compliance with the GDPR, including as implemented by individual countries. Compliance with the GDPR is rigorous and time-intensive process that may increase our cost of doing business or require us to change our business practices, and despite those efforts, there is a risk that we may be subject to fines and penalties, litigation, and reputational harm in connection with our European activities.

To enable the transfer of personal data outside of the EEA or the UK, adequate safeguards (for example, the European Commission approved Standard Contractual Clauses ("SCCs")) must be implemented in compliance with European and UK data protection laws. In addition, transfers made pursuant to the SCCs (and other similar appropriate transfer safeguards) need to be assessed on a case-by-case basis taking into account the legal regime applicable in the destination country, in particular regarding applicable surveillance laws and relevant rights of individuals with respect to the transferred personal data, to ensure an "essentially equivalent" level of protection to that guaranteed in the EEA in the jurisdiction where the data importer is based ("Transfer Impact Assessment"). On June 4, 2021, the EC issued new forms of standard contractual clauses for data transfers from controllers or processors in the EU/EEA (or otherwise subject to the GDPR) to controllers or processors established outside the EU/EEA. The new standard contractual clauses replace the standard contractual clauses that were adopted previously under the EU Data Protection

Directive. The UK is not subject to the EC's new standard contractual clauses but has published its own transfer mechanism, the International Data Transfer Agreement and International Data Transfer Addendum ("IDTA"), which enable transfers from the UK, and has also implemented a similar Transfer Impact Assessment requirement. We will be required to implement these new safeguards and carry out Transfer Impact Assessments when conducting restricted data transfers under the GDPR and doing so will require significant effort and cost, and may result in us needing to make strategic considerations around where EEA or UK personal data is stored and transferred, and which service providers we can utilize for the processing of EEA/UK personal data.

Although the UK is regarded as a third country under the EU GDPR, the European Commission has issued a decision recognizing the UK as providing adequate protection under the EU GDPR ("Adequacy Decision") and, therefore, transfers of personal data originating in the EEA to the UK remain unrestricted. The UK government has confirmed that personal data transfers from the UK to the EEA remain free flowing. The UK Government has also now introduced a Data Protection and Digital Information Bill ("UK Bill") into the UK legislative process. The aim of the UK Bill is to reform the UK's data protection regime following Brexit. If passed, the final version of the UK Bill may have the effect of further altering the similarities between the UK and EEA data protection regime and threaten the UK Adequacy Decision from the EU Commission. This may lead to additional compliance costs and could increase our overall risk. The respective provisions and enforcement of the EU GDPR and UK GDPR may further diverge in the future and create additional regulatory challenges and uncertainties.

The interpretation and application of consumer, health-related and data protection laws in the United States, the EEA, and elsewhere are often uncertain, contradictory and in flux. Any failure or perceived failure to comply with federal, state or foreign laws or regulations, contractual or other legal obligations related to data privacy or data protection may result in claims, warnings, communications, requests or investigations from individuals, supervisory authorities or other legal or regulatory authorities in relation to our processing of personal data. It is possible that these laws may be interpreted and applied in a manner that is inconsistent with our practices. If so, this could result in government-imposed fines or orders requiring that we change our practices, which could adversely affect our business. In addition, these privacy regulations vary between states, may differ from country to country, and may vary based on whether testing is performed in the United States or in the local country. Complying with these various laws could cause us to incur substantial costs or require us to change our business practices and compliance procedures in a manner adverse to our business.

Furthermore, the loss of clinical trial data from completed or future clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. Likewise, we rely on other third parties for the manufacture of our product candidates and to conduct clinical trials, and similar events relating to their computer systems could also have a material adverse effect on our business.

We may be unable to adequately protect our information systems from cyberattacks, which could result in the disclosure of confidential or proprietary information, including personal data, damage our reputation, and subject us to significant financial and legal exposure.

We rely on information technology systems that we or our third-party providers operate to process, transmit and store electronic information in our day-to-day operations. In connection with our product discovery efforts, we may collect and use a variety of personal data, such as names, mailing addresses, email addresses, phone numbers and clinical trial information. A successful cyberattack could result in the theft or destruction of intellectual property, data, or other misappropriation of assets, or otherwise compromise our confidential or proprietary information and disrupt our operations. Cyberattacks are increasing in their frequency, sophistication and intensity, and have become increasingly difficult to detect. We may not be able to anticipate all types of security threats, and we may not be able to implement preventive measures effective against all such security threats. The techniques used by cyber criminals change frequently, may not be recognized until launched, and can originate from a wide variety of sources, including outside groups such as external service providers, organized crime affiliates, terrorist organizations or hostile foreign governments or agencies. Cyberattacks could include industrial espionage, wire fraud and other forms of cyber fraud, the deployment of harmful malware, including ransomware, denial-of-service, social engineering fraud or other means to threaten data security, confidentiality, integrity and availability. A successful cyberattack could cause serious negative consequences for us, including, without limitation, the disruption of operations, the misappropriation of confidential business information, including financial information, trade secrets, financial loss and the disclosure of corporate strategic plans. Although we devote resources to protect our information systems, we realize that cyberattacks are a threat, and there can be no assurance that our efforts will prevent information security breaches that would result in business, legal, financial, or reputational harm to us, or would have a material adverse effect on our results of operations and financial condition. If we were to experience an attempted or successful cybersecurity attack of our information systems or data, the costs associated with the investigation, remediation and potential notification of the attack to counterparties, data subjects, regulators or others, including costs to deploy additional personnel and protection technologies, train employees, and engage third-party experts and consultants, could be material. In addition, following any such attack, our remediation efforts may not be successful. Any failure to prevent or mitigate security breaches or improper access to, use of, or disclosure of our clinical data or

patients' personal data could result in significant liability under state, federal and international law and may cause a material adverse impact to our reputation, affect our ability to conduct new studies, and potentially disrupt our business.

Our marketing department is expanding, and if we are unable to continue this growth and effectively execute on our marketing strategy, our business may be adversely affected.

We continue to expand our commercial organization in order to effectively market our solutions to existing and new partners. Competition for employees capable of negotiating and entering into partnerships with pharmaceutical and biotechnology companies is intense. We may not be able to attract and retain personnel or be able to build an efficient and effective sales organization, which could negatively impact sales and market acceptance of our discovery and development engine and limit our revenue growth and potential profitability. In addition, the time and cost of establishing a specialized sales, marketing and service force for a particular service may be difficult to justify in light of the revenue generated or projected.

To perform sales, marketing, and partner support successfully, we will face a number of risks, including that our sales, marketing force may be unable to initiate and execute successful commercialization activities with respect to new products or markets we may seek to enter. If our sales and marketing efforts are not successful, our new technologies and products may not gain market acceptance, which could materially impact our business operations.

Our expected future growth will impose significant added responsibilities on members of management, including the need to identify, recruit, maintain and integrate additional employees. Our future financial performance and our ability to successfully sell our programs and to compete effectively will depend, in part, on our ability to manage this potential future growth effectively, without compromising quality.

The loss of any member of our senior management team or our ability to attract and retain talent across the Company, including senior management, could adversely affect our business.

We are highly dependent upon our senior management and other members of our management team as well as our senior scientists, software engineers and salespeople. Our success depends on the skills, experience and performance of key members of our senior management team, scientists, software engineers, salespeople and our other employees. The individual and collective efforts of our employees will be important as we continue to develop our discovery and development engine, and as we expand our commercial activities. The loss or incapacity of existing members of our executive management team could adversely affect our operations if we experience difficulties in hiring qualified successors. While certain of our executive officers are party to employment contracts with us, we cannot guarantee their retention for any period of time beyond the applicable notice period.

Our research and development programs and laboratory operations depend on our ability to attract and retain highly skilled scientists and engineers. 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 and other employees. 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 shareholders' ownership, increase our debt or cause us to incur significant expense.

We have made technology acquisitions and expect to pursue acquisitions of businesses and assets in the future. We also may pursue strategic alliances and joint ventures that leverage our technologies and industry experience to expand our offerings or distribution. Although we have acquired other businesses or assets in the past, 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 partners or acquisition candidates may be intense, and the negotiation process will be time-consuming and complex. If we make any 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. 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 shareholders. Additional funds may not be available on terms that are favorable to us, or at all. If the price of our common shares is low or volatile, we may not be able to acquire companies or assets using our securities as consideration.

Our business could become subject to government regulation and the regulatory approval and maintenance process may be expensive, time-consuming and uncertain both in timing and in outcome.

Our data packages are currently not subject to approval by the FDA. However, our business could in the future become subject to regulation by the FDA, or comparable international agencies. For example, in May 2020, we announced that we received a commitment from the Government of Canada under Innovation, Science and Economic Development's, or ISED, Strategic Innovation Fund, or SIF, of up to CAD \$175.6 million (\$129.7 million as of December 31, 2022), the proceeds of which are being used to build a GMP facility in Vancouver, British Columbia, which will house our manufacturing and manufacturing support infrastructure. This facility, once completed, will become subject to various regulations, which could include regular inspections, certifications and audits. Such regulatory approval processes or clearances may be expensive, time-consuming and uncertain, and our failure to obtain or comply with such approvals and clearances could have an adverse effect on our business, financial condition and operating results. In addition, changes to the current regulatory framework, including the imposition of additional or new regulations, including regulation of our data packages, could arise at any time, which may negatively affect our ability to obtain or maintain FDA or comparable regulatory approval of our data packages or future products, if required.

Our billing and collections processing activities are time-consuming, and any delay in transmitting invoices or failure to comply with applicable billing requirements, could have an adverse effect on our future revenue.

Billing for our data packages can be time-consuming, as many of our partners are large pharmaceutical or biotechnology companies and engage various models for their accounts payable matters, including outsourcing to third parties. We may face increased risk in our collection efforts, including long collection cycles and the risk that we may never collect at all, which could require to write-off significant accounts receivable and recognize bad debt expenses, which could adversely affect our business, financial condition, results of operations and prospects.

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

We currently derive the majority of our revenue based upon scientific and engineering research and development and testing conducted in Vancouver, British Columbia. 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 discovery and development engine, 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 suffers 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 new facilities 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 discovery and development engine to discover antibodies.

Operating as a public company makes 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, seek alternative insurance options 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 of directors, our board committees or as executive officers. 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 and 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. Further, to the extent our employees are working remotely, additional risks may arise as a result of depending on the networking and security put into place by the employees. 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, no security measures can be perfect and our information technology and infrastructure may be vulnerable to attacks by hackers or infections by viruses or other malware or breached due to employee erroneous actions or inactions by our employees or contractors, malfeasance or other malicious or inadvertent disruptions. Any such breach or interruption could compromise our networks and the information stored there could be accessed by unauthorized parties, publicly disclosed, lost or stolen. Any such access, breach, or other loss of information could result in legal claims or proceedings. Unauthorized access, loss or dissemination could also disrupt our operations and damage our reputation, any of which could adversely affect our business.

International expansion of our business exposes us to business, regulatory, political, operational, financial and economic risks associated with doing business outside of Canada and the United States.

We currently have operations in Canada, the United States, Australia and the United Kingdom and our business strategy incorporates future international expansion. Doing business internationally involves a number of risks including:

- multiple, conflicting and changing laws and regulations such as privacy regulations, tax laws, export and import restrictions, tariffs, economic sanctions and embargoes, employment laws, regulatory requirements and other governmental approvals, permits and licenses;
- failure by us or our distributors to obtain approvals to conduct our business in various countries;
- differing intellectual property rights;
- complexities and difficulties in obtaining intellectual property protection, enforcing our intellectual property and defending against third party intellectual property claims;
- difficulties in staffing and managing foreign operations;
- logistics and regulations associated with shipping systems and parts and components for systems, consumables and reagent kits, as well as transportation delays;
- travel restrictions that limit the ability of marketing, presales, sales, services and support teams to service partners;
- financial risks, such as longer payment cycles, difficulty collecting accounts receivable, the impact of local and regional financial crises on demand and payment for our data packages, and exposure to foreign currency exchange rate fluctuations;
- international trade disputes that could result in tariffs and other protective measures;

- natural disasters, political and economic instability, including wars, terrorism and political unrest, outbreak of disease, boycotts, curtailment of trade and other business restrictions; and
- regulatory and compliance risks that relate to maintaining accurate information and control over sales and distributors' activities that may fall within the purview of the Canadian Corruption of Foreign Public Officials Act, or CFPOA, or U.S. Foreign Corrupt Practices Act, or FCPA, its books and records provisions, or its anti-bribery provisions.

Any of these factors could significantly harm our future international expansion and operations and, consequently, our business, financial condition, results of operations and prospects. In addition, certain international markets are subject to significant political and economic uncertainty, including for example the effect of the withdrawal of the United Kingdom from the European Union. Significant political and economic developments in international markets for which we intend to operate, or the perception that any of them could occur, creates further challenges for operating in these markets in addition to creating instability in global economic conditions.

Our business is subject to risks relating to foreign currency exchange rates.

We currently have operations in Canada, the United States, Australia and the United Kingdom and our business strategy incorporates future international expansion. Substantially all of our revenue is paid in US dollars. We expect that our US dollar earned revenue will continue to account for a significant percentage of our total revenue for the foreseeable future.

Changes in foreign currency exchange rates, could materially adversely impact our results. Foreign currencies in which we record expenses could be subject to unfavorable exchange rates with the U.S. dollar, resulting in a reduction in the amount of cash flow (and an increase in the amount of expenses) that we recognize and causing fluctuations in reported financial results. We also carry foreign currency exposure associated with differences between where we conduct business, including receipt of government funding denominated in foreign currencies. For example, certain contracts are denominated in currencies other than the currency in which we incur expenses related to those contracts. Where expenses are incurred in currencies other than those in which contracts are priced, fluctuations in the relative value of those currencies could have a material adverse effect on our results of operations.

Our exposure to currency exchange rate fluctuations results from the currency translation exposure associated with the preparation of our consolidated financial statements, as well as from the exposure associated with transactions of our subsidiaries that are denominated in a currency other than the respective subsidiary's functional currency. While our financial results are reported in U.S. Dollars, the financial statements of certain of our equity method investments are prepared using the local currency as the functional currency. During consolidation, these results are translated into U.S. Dollars by applying appropriate exchange rates. As a result, fluctuations in the exchange rate of the U.S. Dollar relative to the local currencies in which our equity method investments report could cause significant fluctuations in our reported results. Moreover, as exchange rates vary, our operating results may differ materially from our expectations. Adjustments resulting from financial statement translations are included as a separate component of shareholders' equity.

Our business activities are subject to the FCPA and other anti-bribery and anti-corruption laws of the United States and other countries in which we operate, as well as U.S. and certain foreign export controls and trade sanctions. Violations of such legal requirements could subject us to liability.

We are subject to the FCPA, which among other things prohibits companies and their third-party intermediaries from offering, promising, giving or authorizing others to give anything of value, either directly or indirectly, to non-U.S. government officials for the purpose of obtaining or retaining business or securing any other improper advantage. The FCPA also requires public companies to make and keep books and records that accurately and fairly reflect the transactions of the corporation and to devise and maintain an adequate system of internal accounting controls. Companies in the biotechnology and pharmaceutical field are highly regulated and therefore involve interactions with public officials, including officials of non-U.S. governments. Additionally, in many other countries, hospitals are owned and operated by the government, and doctors and other hospital employees would be considered foreign officials under the FCPA. We are also subject to the Canadian equivalent to the FCPA, the CFPOA. These laws are complex and far-reaching in nature, and, as a result, there is no certainty that all of our employees, agents or contractors will comply with such laws and regulations. Any violations of these laws, or allegations of such violations, could disrupt our operations, involve significant management distraction, involve significant costs and expenses, including legal fees, and could result in a material adverse effect on our business, financial condition, results of operations and prospects. We could also suffer severe penalties, including criminal and civil penalties, disgorgement and other remedial measures.

In addition, our data packages may be subject to U.S. and foreign export controls and trade sanctions. Compliance with applicable regulatory requirements regarding the export of our data packages may create delays in us providing our data packages in international markets or, in some cases, prevent the export thereof to some countries altogether. Furthermore, U.S. export control laws and economic sanctions prohibit the shipment of certain products and services to countries, governments, and persons targeted by U.S.

sanctions. If we fail to comply with export regulations and such economic sanctions, penalties could be imposed, including fines and/or denial of certain export privileges. Moreover, any new export restrictions, new legislation or shifting approaches in the enforcement or scope of existing regulations, or in the countries, persons, or products targeted by such regulations, could result in decreased use of our data packages by, or in our decreased ability to export our data packages to, existing or potential customers with international operations. Any decreased use of our data packages or limitation on our ability to export or sell our data packages would likely adversely affect our business.

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 to provide certain consumables and equipment that we use in our operations, as well as reagents and other laboratory materials involved in the development of our technology. Fluctuations in the availability and price of materials and equipment could have an adverse effect on our ability to meet our development goals with our partners and thus our results from operations as well as future partnership opportunities. An interruption in the availability of raw materials or our laboratory operations 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 continue to secure and maintain sufficient and stable supplies of raw materials. Any shortage of raw materials or materials necessary for our operations may adversely affect our business.

Unexpected shortages in raw materials or other materials and other unanticipated events could adversely affect our business, prospects, financial condition and results of operation.

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

We historically have not entered into agreements with our suppliers but secure our raw materials and component parts we use in our equipment on a purchase order basis. Our suppliers may reduce or cease their supply of raw materials, component parts and outsourced services and products to us at any time in the future. If the supply of raw materials, component parts and the outsourced services and products is interrupted due to shortages or other reasons, our operations may be delayed. If any such event occurs, our operation and financial position may be adversely affected.

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, provincial, 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 Canadian provincial 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.

Our discovery and development engine 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 discovery and development engine 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, or those of the CRO that maintain our mouse 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 and development 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 discovery and development engine could be interrupted or delayed, our costs could increase and our reputation could be harmed.

Once completed, our manufacturing operations will be dependent upon third party suppliers, including single source suppliers, making us vulnerable to supply shortages and price fluctuations, which could harm our business.

We are building a GMP facility in Vancouver, British Columbia, to house our manufacturing and manufacturing support infrastructure. We anticipate that some of the suppliers of critical components or materials for our processes may be single or sole source suppliers and the replacement of these suppliers or the identification and qualification of suitable second sources may require significant time, effort and expense, and could result in delays in production, which could negatively impact our business operations and revenue. There can be no assurance that our supply of components necessary for the operation of this facility will not be limited, interrupted, or of satisfactory quality or continue to be available at acceptable prices. In addition, loss of any critical component provided by a single source supplier could require us to change the design of our manufacturing process based on the functions, limitations, features and specifications of the replacement components.

In addition, several other non-critical components and materials that comprise our systems are currently manufactured by a single supplier or a limited number of suppliers. In many of these cases, we have not yet qualified alternate suppliers and rely upon purchase orders, rather than long-term supply agreements. A supply interruption or an increase in demand beyond our current suppliers' capabilities could harm our ability to manufacture our systems unless and until new sources of supply are identified and qualified. Our reliance on these suppliers subjects us to a number of risks that could harm our business, including:

- interruption of supply resulting from modifications to or discontinuation of a supplier's operations;
- delays in product shipments resulting from uncorrected defects, reliability issues, or a supplier's variation in a component;
- a lack of long-term supply arrangements for key components with our suppliers;
- inability to obtain adequate supply in a timely manner, or to obtain adequate supply on commercially reasonable terms;
- difficulty and cost associated with locating and qualifying alternative suppliers for our components in a timely manner;
- a modification or change in a manufacturing process or part that unknowingly or unintentionally negatively impacts the operation of our systems;
- production delays related to the evaluation and testing of products from alternative suppliers, and corresponding regulatory qualifications;
- delay in delivery due to our suppliers prioritizing other customer orders over ours;
- damage to our brand reputation caused by defective components produced by our suppliers;
- increased cost of our warranty program due to product repair or replacement based upon defects in components produced by our suppliers; and
- fluctuation in delivery by our suppliers due to changes in demand from us or their other partners.

Any interruption in the supply of components or materials, or our inability to obtain substitute components or materials from alternate sources at acceptable prices in a timely manner, could impair our ability to meet the demand of our partners, which would have an adverse effect on our business.

Although we expect our recent business acquisitions will result in synergies and other benefits to us, we may not realize those benefits because of difficulties related to integration and uncertainties related to certain assets acquired as a result of the acquisitions.

In November 2020, we consummated the Trianni acquisition. In September 2021, we consummated the TetraGenetics acquisition. We expect that the integration process will require significant time and resources, and we may not be able to manage the process successfully.

Potential difficulties we may encounter as part of the integration process include (i) the challenge of integrating complex systems, operating procedures, regulatory compliance programs, technology, networks and other assets of the acquisitions in a seamless manner that minimizes any adverse impact on our employees, patients, suppliers and other business partners; and (ii) potential unknown liabilities, liabilities that are significantly larger than we currently anticipate and unforeseen increased expenses or delays associated with the acquisitions, including costs to integrate the businesses that may exceed the costs that we currently anticipate. As part of our ongoing research and development we may make changes in our planned use of in process research and development which could result in a future impairment of the corresponding intangible asset.

For instance, in connection with the acquisition, we acquired a suite of transgenic humanized rodent lines currently being validated and available for discovery projects in the near future. There can be no assurance that these rodent lines will ever be validated or available for use by us or our partners. Further, it is possible that we will experience disruption of either company's or both companies' ongoing businesses, including as we continue to service Trianni's existing contracts for the foreseeable future. In addition, we have only recently begun to generate licensing revenue from our Trianni humanized rodent platform. There can be no assurance that we will continue to generate or expand our licensing revenue from this product offering in future periods. Accordingly, the contemplated benefits of the Trianni acquisition may not be realized fully, or at all, or may take longer to realize than expected.

Risks Related to Our Intellectual Property

If we are unable to obtain and maintain sufficient intellectual property protection for our technology, including our discovery and development engine and Celium, our proprietary antibody visualization software, 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 data packages 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 of our competitors' products and services, 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, Canada and in other countries with respect to our discovery and development engine, 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 discovery and development engine and related technologies and uses thereof, as we deem appropriate. Our patents and patent applications in the United States, Canada 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 or selling our technology or technology that is 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.

As of December 31, 2022, we owned or exclusively licensed over 80 issued or allowed patents and over 80 pending patent applications worldwide. We own registered trademarks and trademark applications for AbCellera, AbCellera Australia Pty. Ltd. (formerly Channel Bio), Celium, Trianni, the Trianni Mouse, and AbCellera Boston (formerly TetraGenetics Inc.) in the U.S., Canada, Australia and Europe. 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. 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 and patent applications may be challenged at the United States Patent and Trademark Office, or 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 or freedom to operate, patent claims being narrowed, 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 increased competition to our business. We may have to challenge the patents or patent applications of third parties. The outcome of patent litigation or other proceeding can be uncertain, and any attempt by us to enforce our patent rights against others or to challenge the patent rights of others may not be successful, or, if successful, may take substantial time and result in 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, or the America Invents Act, enacted in September 16, 2011, the United States transitioned to a first inventor to file system in which, assuming that other requirements for patentability are met, the first inventor to file a patent application will be entitled to the patent on an invention regardless of whether a third-party was the first to invent the claimed invention. A third-party that files a patent application in the USPTO on or after March 16, 2013, but before us could therefore be awarded a patent covering an invention of ours even if we had made the invention before it was made by such third-party. This 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 will be 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.

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 covering our discovery and development engine could be found invalid or unenforceable if challenged.

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 they no longer cover our discovery and development engine, which may lead to increased competition to our business, which could harm our business. In addition, in patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace. The outcome following legal assertions of invalidity and unenforceability during patent litigation is unpredictable. If a defendant were to prevail on a legal assertion of invalidity or unenforceability, we would lose at least part, and perhaps all, of the patent protection on certain aspects of our discovery and development engine. 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 discovery and development engine. 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 covered by 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 adversely affected, our ability to develop improvements to our discovery and development engine 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 a royalty-bearing license agreement with the University of British Columbia that grants us exclusive rights to exploit certain patent rights that are related to our systems. Through our acquisition of Lineage, we obtained an exclusive license from Stanford University to patents and patent applications directed toward immune repertoire sequencing. 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 exclusive 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 under which we obtain certain intellectual property rights relating to our discovery and development engine. These engagements take the form of exclusive license or of actual ownership of intellectual property rights or technology from third parties. Our rights to use the technology we license are subject to the continuation of and compliance with the terms of those agreements. In some cases, we may not control the prosecution, maintenance or filing of the patents 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 collaborative development relationships;
- our diligence obligations under the license agreements and what activities satisfy those diligence obligations;
- the inventorship and ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and us and our partners; and
- the priority of invention of patented technology.

In spite of our efforts to comply with our obligations under our in-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 such license agreements, we may infringe the intellectual property rights that are the subject of those agreements, we may be subject to litigation by the licensor, and if such litigation by the licensor is successful we may be required to pay damages to our licensor, or we may be required to cease our development and commercialization activities which are deemed infringing, and in such event we may ultimately need to modify our activities or technologies to design around such infringement, which may be time- and resource-consuming, and which may not be ultimately successful. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations and prospects.

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

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 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 discovery and development engine. In addition, such licenses may be non-exclusive, which could give our competitors access to the same intellectual property licensed to us. We may also need to acquire or negotiate licenses to patents or patent applications before or after introducing a new service. The acquisition and licensing of third-party patent rights is a competitive area, and other companies may also be pursuing strategies to acquire or license third party patent rights that we may consider attractive. We may not be able to acquire or obtain necessary licenses to patents or patent applications. Even if we are able to obtain a license to patent rights of interest, we may not be able to secure exclusive rights, in which case others could use the same rights and compete with us.

In 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 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.

While we still face all of the risks described herein with respect to those 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 ability to further commercialize 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 products and technology. This could have a material adverse effect on our competitive position, business, financial conditions, 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 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 products, 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 discovery and development engine, 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 and Canada can be less extensive than those in the United States and Canada. 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 Canada, 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 and Canada, or from selling or importing products made using our inventions in and into the United States, Canada or other jurisdictions. For example, as a result of the Russia sanctions and the potential retaliatory acts from Russia, we may be unable to obtain patent rights to our Trianni and microfluidic platforms as well as bamlanivimab which are protected in other jurisdictions around the world. 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 and Canada. 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 Canada 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.

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 product candidates we may develop or utilize similar technology but that are not covered by the claims of the patents that we license or may own in the future;
- we, or our current or future collaborators, might not have been the first to make the inventions covered by the issued patents and pending patent applications that we license or may own in the future;
- we, or our current or future collaborators, 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 own 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 product candidates or will provide us with any competitive advantages;
- we cannot ensure that our commercial activities or product candidates will not infringe upon 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 own 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 adversely affected and our business could be harmed.

We rely heavily on trade secrets and confidentiality agreements to protect our unpatented know-how, technology and other proprietary information, including parts of our discovery and development engine, 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 and Canada may be less willing, or unwilling, to protect trade secrets.

We also seek to preserve the integrity and confidentiality of our confidential proprietary information by maintaining physical security of our premises and physical and electronic security of our information technology systems, but it is possible that these security measures could be breached. If any of our confidential proprietary information were to be lawfully obtained or independently developed by a competitor or other third party, absent patent protection, we would have no right to prevent such competitor from using that technology or information to compete with us, which could harm our competitive position. 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 discovery and development engine. 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, although we have registered AbCellera in the United States and Canada as well as certain of our trademarks outside of the United States and Canada. If we apply to register these trademarks in other countries, and/or other trademarks in the United States, Canada 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 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 owned or 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 and reagent kits. 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 are and in the future may be 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.

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

As we move into new markets and applications for our discovery and development engine, incumbent participants in such markets may assert their patents and other proprietary rights against us as a means of slowing our entry into such markets or as a means to extract substantial license and royalty payments from us. Our competitors and others may now and, in the future, have significantly larger and more mature patent portfolios than we currently have. In addition, future litigation may involve patent holding companies or other adverse patent owners who have no relevant product or service revenue and against whom our own patents may provide little or no deterrence or protection. Therefore, our commercial success may depend in part upon our ability to develop, manufacture, market and sell any products and services that we may develop and use without infringing, misappropriating or otherwise violating the intellectual property and proprietary rights of third parties, or the invalidity of such patents or proprietary rights.

Our research, development and commercialization activities may in the future be subject to claims that we infringe or otherwise violate patents or other intellectual property rights owned or controlled by third parties. There is a substantial amount of litigation and other patent challenges, both within and outside the United States and Canada, involving patent and other intellectual property rights in the biotechnology industry, including patent infringement lawsuits, interferences, oppositions and *inter partes* review proceedings before the USPTO, and corresponding foreign patent offices. Third parties may initiate legal proceedings against us or our licensor, and we or our licensor may initiate legal proceedings against third parties. The outcome of such proceedings would be uncertain and could have a material adverse effect on the success of our business. Numerous U.S., Canadian and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we are developing our discovery and development engine. As the biotechnology industry expands and more patents are issued, the risk increases that our technologies may be subject to claims of infringement of the patent rights of third parties.

Additionally, the risks of being involved in such litigation and proceedings may increase if our technology nears commercialization. Numerous significant intellectual property issues have been litigated, are being litigated and will likely continue to be litigated, between existing and new participants in our existing and targeted markets, and one or more third parties may assert that our technologies infringe their intellectual property rights as part of a business strategy to impede our successful entry into or growth in those markets.

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.

Third parties may assert that we are employing their proprietary technology without authorization. We are also aware of issued U.S. patents and patent applications with subject matter related to our discovery and development engine, systems, workflows and processes, and there may be other related third party patents or patent applications of which we are not aware.

It is possible that we are or may become aware of patents or pending patent applications that we think do not relate to our technology or that we believe are invalid or unenforceable, but that may nevertheless be interpreted to encompass our technology and to be valid and enforceable. Thus, we do not know with certainty that our technology, or our development and commercialization thereof, do not and will not infringe, misappropriate or otherwise violate any third party's intellectual property.

In addition, we may receive in the future, correspondence from third parties referring to the relevance of such third parties' intellectual property to our technology, our workflows or our advanced automated systems, and we are currently engaged in litigation with such third parties (i.e., Berkeley Lights and Schrader). Because patent applications can take many years to issue, there may be currently pending patent applications which may later result in issued patents that our current or future programs or technologies may infringe. 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 discovery and development engine, or the systems, workflows, consumables and reagent kits that comprise our discovery and development engine, infringes these patents. As to pending third party applications, we cannot predict with any certainty which claims will issue, if any, or the scope of such issued claims. Additionally, pending patent applications that have been published can, subject to certain limitations, be later amended in a manner that could cover our discovery and development engine, including our systems, workflows, consumables and reagent kits. Under the applicable law of certain jurisdictions, the scope of a patent claim is determined by an interpretation of the law, the written disclosure in a patent and the patent's prosecution history. Our interpretation of the relevance or the scope of a patent or a pending application may be incorrect, which may negatively impact our ability to market our technologies. We may incorrectly determine that our technologies are not covered by a third party patent or may incorrectly predict whether a third party's pending application will issue with claims of relevant scope. Our determination of the expiration date of any patent in the United States or abroad that we consider relevant may be incorrect, which may negatively impact our ability to develop and market our technologies.

There can be no assurance that we will prevail in any suit initiated against us by third parties, successfully settle or otherwise resolve patent infringement claims. A court of competent jurisdiction could hold that third party patents are valid, enforceable and infringed, which could materially and adversely affect our ability and the ability of our licensor to commercialize any technology we may develop and any other technologies covered by the asserted third-party patents. Third parties making claims against us may be able to obtain injunctive or other relief, which could block our ability to develop, commercialize and sell data packages, 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 and other third parties gaining access to the same intellectual property. In addition, we could encounter delays and incur significant costs in service introductions while we attempt to develop alternative processes, technologies or services, or redesign our technologies or services, to avoid infringing third party patents or proprietary rights. Defense of any lawsuit or failure to obtain any of these licenses or to develop a workaround could prevent us from commercializing products or services, and the prohibition of sale or the threat of the prohibition of sale of any of our data packages could materially affect our business and our ability to gain market acceptance for our technologies. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation or administrative proceedings, there is a risk that some of our confidential information could be compromised by disclosure.

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.

The outcome of our litigation with Berkeley Lights may adversely affect our business, financial condition, results of operations and prospects.

In July 2020, we filed a complaint against Berkeley Lights, in the United States District Court for the District of Delaware, alleging that Berkeley Lights infringed and continues to infringe, directly and indirectly, the following patents exclusively licensed by the Company, including U.S. Patent Nos. 10,107,812; 10,274,494; 10,466,241; 10,578,618; 10,697,962; 10,087,408; 10,421,936 and 10,704,018, by making, using, offering for sale, selling and/or importing Berkeley Lights' Beacon Optofluidic System. In August 2020, we filed an additional related complaint against Berkeley Lights in the United States District Court for the District of Delaware, alleging that Berkeley Lights infringed and continues to infringe, directly and indirectly, U.S. Patent Nos. 10,718,768; 10,738,270; 10,746,737 and 10,753,933. In September 2020, we filed another complaint against Berkeley Lights in the United States District Court for the District of Delaware, alleging that Berkeley Lights infringed and continues to infringe, directly and indirectly, U.S. Patent Nos. 10,775,376; 10,775,377 and 10,775,378. On December 3, 2020, the judge assigned to these three lawsuits ordered that they be transferred to the U.S. District Court for the Northern District of California. In these lawsuits, we are seeking, among other things, a judgment of infringement, a permanent injunction and damages (including lost profits, a reasonable royalty, reasonable costs and attorney's fees and treble damages for willful infringement). In February 2021, these lawsuits were consolidated and assigned to the Honorable Judge Lucy Koh. In February 2021, Berkeley Lights filed a motion seeking leave to amend its counterclaims to add the allegations of unfair competition (as plead in the case described below) against AbCellera only. In July 2021, the Court allowed Berkeley to amend its counterclaims to add the unfair competition claims subject to our right to seek dismissal with prejudice should the counterclaims not overcome objections previously presented by us to the court. The Company is continuing to oppose the unfounded counterclaim and we intend to seek dismissal with prejudice. In March 2021, the court set this matter down for a jury trial with a December 12, 2022 start date. In July 2021, Berkeley Lights filed a Petition for *inter partes* review of U.S. Patent No. 10,087,408 that we exclusively license from the University of British Columbia. In July 2021, Berkeley Lights filed a second Petition for *inter partes* review of U.S. Patent No. 10,421,936 that we exclusively license from the University of British Columbia. In August 2021, Berkeley Lights filed a third Petition for *inter partes* review of U.S. Patent No. 10,738,270 that we exclusively license from the University of British Columbia. In August 2021, the court stayed the patent litigation against Berkeley Lights in view of the Petitions for *inter partes* review filed by Berkeley Lights. In January 2022, the PTAB denied one petition and instituted one petition. In February 2022, the PTAB denied the final petition. Trial on the instituted petition occurred in November 2022. In January 2023, the PTAB issued its Final Written Decision with respect to our U.S. Patent No. 10,087,408 rejecting all of Berkeley Lights' grounds of unpatentability and determining that none of the challenged claims are unpatentable. Because the three aforementioned *inter partes* review matters have been resolved, we intend to seek relief from the Court to lift the pending stay and resume our patent infringement action against Berkeley Lights.

In August 2020, Berkeley Lights filed a complaint in the Northern District of California against us and our wholly-owned subsidiary Lineage Inc. The complaint includes two counts of unfair competition and one count of non-infringement of a U.S. patent: Patent No. 10,058,839 (the "'839 patent"). Berkeley Lights is seeking, among other things, damages and a declaratory judgment of non-infringement of the '839 patent. We filed a motion to dismiss the action for lack of jurisdiction and failure to state a claim upon which relief can be granted pursuant to Federal Rules of Civil Procedure 12(b) 1, 2, and 6. In January 2021, the Court determined that there was no jurisdiction over AbCellera or Lineage and dismissed the unfair competition claims but ordered jurisdictional discovery on a limited basis with respect to AbCellera only regarding Berkeley Lights' request for declaratory judgment on the '839 patent. In July 2021, Berkeley Lights voluntarily dismissed this lawsuit.

In the event that Berkeley Lights were to prevail in the litigation against us, as a result of which Berkeley Lights could continue to sell its products, it could reduce our competitive advantage and differentiation in the market place, impairing our ability to bring in new business. Furthermore, Berkeley Lights may seek to invalidate the asserted patents during the litigation. If Berkeley Lights succeeds in invalidating the asserted patents, the strength of our intellectual property portfolio could be adversely affected and our ability to protect our technology, business and reputation or to generate licensing revenue from our intellectual property would be adversely impacted.

The outcome of our civil litigation with Schrader may adversely affect our business, financial condition, results of operations and prospects.

The Company recently became aware of a civil lawsuit filed by the Estate of John Schrader and another corporate entity naming as co-defendants the Company, some of its affiliates and Dr. Carl Hansen, the Company's CEO. The lawsuit was filed in October 2022, in the Supreme Court of British Columbia (Vancouver). The complaint alleges breach of an implied partnership or joint venture between Dr. John Schrader and Dr. Hansen and further alleges patent infringement of an issued Canadian patent (No. 2,655,511). The complaint seeks financial damages as well as other declarations. The Company believes that the claims are meritless and frivolous in all respects and intends to defend itself appropriately.

Intellectual property litigation could cause us to spend substantial resources and distract our personnel from their normal responsibilities.

Litigation or other legal proceedings relating to intellectual property claims, even if resolved in our favor, may cause us to incur substantial costs and divert the attention of our management and technical personnel from their normal responsibilities in defending against any of these claims. 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. Such litigation or proceedings could substantially increase our operating costs and reduce the resources available for development activities or any future sales, marketing, or distribution activities. We may not have sufficient financial or other resources to conduct such litigation or proceedings adequately. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources and more mature and developed intellectual property portfolios. Uncertainties resulting from the initiation and continuation of intellectual property proceedings could harm our ability to compete in the marketplace. In addition, 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. Any of the foregoing could harm our business, financial condition, results of operations and prospects.

We may become involved in lawsuits to protect or enforce our intellectual property, which could be expensive, time consuming and unsuccessful and have a material adverse effect on the success of our business.

Third parties, including our competitors, could be infringing, misappropriating or otherwise violating our intellectual property rights. Monitoring unauthorized use of our intellectual property is difficult and costly. From time to time, we seek to analyze our competitors' products and services, and may in the future seek to enforce our rights against potential infringement, misappropriation or violation of our intellectual property. However, the steps we have taken to protect our proprietary rights may not be adequate to enforce our rights as against such infringement, misappropriation or violation of our intellectual property. We may not be able to detect unauthorized use of, or take appropriate steps to enforce, our intellectual property rights. Any inability to meaningfully enforce our intellectual property rights could harm our ability to compete and reduce demand for our data packages.

Litigation may be necessary for us to enforce our patent and proprietary rights or to determine the scope, coverage and validity of the proprietary rights of others. We are currently engaged in a lawsuit with Berkeley Lights based upon our allegations of its infringement of our intellectual property rights and we may become involved in additional lawsuits in the future. We are also engaged in a civil lawsuit with Schrader based upon allegations of, among other things, infringement of their intellectual property. If we do not prevail in such legal proceedings, we may be required to pay damages, we may lose significant intellectual property protection for our technologies, such that competitors could copy our technologies and we could be forced to cease selling certain of our data packages. Any litigation that may be necessary in the future could result in substantial costs and diversion of resources and could have a material adverse effect on our business, financial condition, results of operations and prospects. In any lawsuit we bring to enforce our intellectual property rights, a court may refuse to stop the other party from using the technology at issue on grounds that our intellectual property rights do not cover the technology in question. Further, in such proceedings, the defendant could counterclaim that our intellectual property is invalid or unenforceable and the court may agree, in which case we could lose valuable intellectual property rights. The outcome in any such lawsuits are unpredictable. Even if we do prevail in any future litigation related to intellectual property rights, the cost and time requirements of the litigation could negatively impact our financial results.

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 our outside

counsel to pay these fees due to non-U.S. patent agencies. The USPTO and various non-U.S. governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. We employ reputable law firms and other professionals to help us comply, and in 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 products and technology our competitors may be able to enter the market with similar or identical products or technology without infringing our patents and this circumstance would have a material adverse effect on our business.

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. Various extensions may be available, but the life of a patent, and the protection it affords, is limited. Even if patents covering our discovery and development engine or technology are obtained, once the patent life has expired, we may be open to competition from others. If our discovery and development engine or technologies require extended development and/or regulatory review, patents protecting our discovery and development engine 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, Celium. 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 intellectual property that we have in-licensed 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, or 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 have recently been changed by regulation, and 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. To date, only our work in helping develop bamlanivimab may be subject to government funding or "march-in" rights. 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.

Risks Related to Ownership of Our Common Shares

If we fail to maintain proper and effective internal control over financial reporting, our operating results and our ability to operate our business could be harmed.

Ensuring that we have effective internal financial and accounting controls and procedures in place so that we can produce financial statements that are, in all material respects, in conformity with accounting principles generally accepted in the United States of America, on a timely basis is a costly and time-consuming effort that needs to be re-evaluated annually. We are also subject to the reporting and compliance requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended, or the Sarbanes-Oxley Act, which require annual management assessment of the effectiveness of our internal control over financial reporting. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with generally accepted accounting principles.

Implementing any appropriate changes to our internal controls may distract our officers and employees, entail substantial costs to modify our existing processes, and take significant time to complete. These changes may not, however, be effective in maintaining the adequacy of our internal controls, and any failure to maintain that adequacy, or consequent inability to produce accurate financial statements on a timely basis, could increase our operating costs and harm our business. In our efforts to maintain proper and effective internal control over financial reporting, we may discover significant deficiencies or material weaknesses in our internal control over financial reporting, which we may not successfully remediate on a timely basis or at all. Any failure to remediate any significant deficiencies or material weaknesses identified by us or to implement required new or improved controls, or difficulties encountered in their implementation, could cause us to fail to meet our reporting obligations or result in material misstatements in our financial statements. If we identify one or more material weaknesses in the future, it could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements, which may harm the market price of our shares.

Future sales and issuances of our common shares or rights to purchase common shares, including pursuant to our Employee Share Option and Incentive Plan, or EIP, could result in additional dilution of the percentage ownership of our shareholders and could cause our share price to fall.

We expect that significant additional capital will be needed in the future to continue our planned operations, including expanded research and development activities, and costs associated with operating as a public company. To raise capital, we may sell common shares, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time. If we sell common shares, convertible securities or other equity securities, investors may be materially diluted by subsequent sales. Such sales may also result in material dilution to our existing shareholders, and new investors could gain rights, preferences, and privileges senior to the holders of our common shares, including common shares sold in our IPO.

Pursuant to our incentive plan, that we adopted in connection with our IPO, our management is authorized to grant equity incentive awards to our employees, directors and consultants.

Initially, the aggregate number of our common shares that may be issued pursuant to share awards under the EIP was 21,280,000 shares. The number of common shares reserved for issuance under the EIP shall be cumulatively increased on January 1, 2022 and each January 1 thereafter by 5% of the total number of common shares outstanding on December 31 of the preceding calendar year or a lesser number of shares determined by our board of directors. Unless our board of directors elects not to increase the number of shares available for future grant each year, our shareholders may experience additional dilution, which could cause our share price to fall.

Raising additional capital may cause dilution to our existing shareholders, restrict our operations or require us to relinquish rights to our technologies.

We may seek additional capital through a combination of public and private equity offerings, debt financings, strategic partnerships and alliances and licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms may include liquidation or other preferences that adversely affect your rights as a shareholder. The incurrence of indebtedness would result in increased fixed payment obligations and could involve certain restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to

acquire or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. If we raise additional funds through strategic partnerships and alliances and licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies or grant licenses on terms unfavorable to us.

We do not intend to pay dividends on our common shares, so any returns will be limited to the value of our common shares.

We currently anticipate that we will retain future earnings for the development, operation, expansion and continued investment into our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. In addition, we may enter into agreements that prohibit us from paying cash dividends without prior written consent from our contracting parties, or which other terms prohibiting or limiting the amount of dividends that may be declared or paid on our common shares. Any return to shareholders will therefore be limited to the appreciation of their common shares, which may never occur.

Our principal shareholders and management own a significant percentage of our shares and will be able to exert significant influence over matters subject to shareholder approval.

Our executive officers, directors, and 5% shareholders beneficially currently own over twenty percent of our common shares in the aggregate, based on ownership information filed by such holders. Therefore, these shareholders have the ability to influence us through this ownership position. These shareholders may be able to determine all matters requiring shareholder approval. For example, these shareholders may be able to control elections of directors, amendments of our organizational documents or approval of any merger, sale of assets or other major corporate transaction. This may prevent or discourage unsolicited acquisition proposals or offers for our common shares that you may feel are in your best interest as one of our shareholders.

Sales of a substantial number of our common shares in the public market could cause our share price to fall significantly, even if our business is doing well.

Sales of a substantial number of our common shares in the public market could occur at any time. If our shareholders sell, or the market perceived that our shareholders intend to sell, substantial amounts of our common shares in the public market, the market price of our common shares could decline significantly.

We have filed registration statements on Form S-3 and on Form S-8 to register our common shares that are issuable pursuant to our equity incentive plans. Shares registered under Form S-8 will be available for sale in the public market subject to vesting arrangements and exercise of options.

Additionally, certain holders of our common shares have rights, subject to some conditions, to require us to file one or more registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other shareholders. If we were to register the resale of these shares, they could be freely sold in the public market. If these additional shares are sold, or if it is perceived that they will be sold, in the public market, the trading price of our common shares could decline.

We are governed by the corporate laws of Canada which in some cases have a different effect on shareholders than the corporate laws of the United States.

We are governed by the Business Corporations Act (British Columbia), or BCBCA, and other relevant laws, which may affect the rights of shareholders differently than those of a company governed by the laws of a U.S. jurisdiction, and may, together with our charter documents, have the effect of delaying, deferring or discouraging another party from acquiring control of our company by means of a tender offer, a proxy contest or otherwise, or may affect the price an acquiring party would be willing to offer in such an instance. The material differences between the BCBCA and Delaware General Corporation Law, or DGCL, that may have the greatest such effect include, but are not limited to, the following: (i) for certain corporate transactions (such as mergers and amalgamations or amendments to our articles) the BCBCA generally requires the voting threshold to be a special resolution approved by 66 2/3% of shareholders, or as set out in the articles, as applicable, whereas DGCL generally only requires a majority vote; and (ii) under the BCBCA a holder of 5% or more of our common shares can requisition a special meeting of shareholders, whereas such right does not exist under the DGCL. We cannot predict whether investors will find our company and our common shares less attractive because we are governed by foreign laws.

Our articles and certain Canadian legislation contain provisions that may have the effect of delaying, preventing or making undesirable an acquisition of all or a significant portion of our shares or assets or preventing a change in control.

Certain provisions of our articles and certain provisions under the BCBCA, together or separately, could discourage, delay or prevent a merger, acquisition or other change in control of us that shareholders may consider favorable, including transactions in which they might otherwise receive a premium for their common shares. These provisions include the establishment of a staggered

board of directors, which divides the board into three groups, with directors in each group serving a three-year term. The existence of a staggered board can make it more difficult for shareholders to replace or remove incumbent members of our board of directors. As such, these provisions could also limit the price that investors might be willing to pay in the future for our common shares, thereby depressing the market price of our common shares. In addition, because our board of directors is responsible for appointing the members of our management team, these provisions may frustrate or prevent any attempts by our shareholders to replace or remove our current management by making it more difficult for shareholders to replace members of our board of directors. Among other things, these provisions include the following:

- shareholders cannot amend our articles unless such amendment is approved by shareholders holding at least 66 2/3% of the shares entitled to vote on such approval;
- our board of directors may, without shareholder approval, issue preferred shares in one or more series having any terms, conditions, rights, preferences and privileges as the board of directors may determine; and
- shareholders must give advance notice to nominate directors or to submit proposals for consideration at shareholders' meetings.

A non-Canadian must file an application for review with the Minister responsible for the Investment Canada Act and obtain approval of the Minister prior to acquiring control of a “Canadian business” within the meaning of the Investment Canada Act, where prescribed financial thresholds are exceeded. A reviewable acquisition may not proceed unless the Minister is satisfied that the investment is likely to be of net benefit to Canada. If the applicable financial thresholds were exceeded such that a net benefit to Canada review would be required, this could prevent or delay a change of control and may eliminate or limit strategic opportunities for shareholders to sell their common shares. Furthermore, limitations on the ability to acquire and hold our common shares may be imposed by the Competition Act (Canada). This legislation has a pre-merger notification regime and mandatory waiting period that applies to certain types of transactions that meet specified financial thresholds, and permits the Commissioner of Competition to review any acquisition or establishment, directly or indirectly, including through the acquisition of shares, of control over or of a significant interest in us.

Our articles designate specific courts in Canada and the United States as the exclusive forum for certain litigation that may be initiated by our shareholders, which could limit our shareholders' ability to obtain a favorable judicial forum for disputes with us.

Pursuant to our articles, unless we consent in writing to the selection of an alternative forum, the courts of the Province of British Columbia and the appellate courts therefrom shall, to the fullest extent permitted by law, be the sole and exclusive forum for: (a) any derivative action or proceeding brought on our behalf; (b) any action or proceeding asserting a claim of breach of fiduciary duty owed by any director, officer or other employee of ours to us; (c) any action or proceeding asserting a claim arising out of any provision of the BCBCA or our articles (as either may be amended from time to time); or (d) any action or proceeding asserting a claim or otherwise related to our affairs, or the Canadian Forum Provision. The Canadian Forum Provision will not apply to any causes of action arising under the Securities Act or the Exchange Act. In addition, our articles further provide that unless we consent in writing to the selection of an alternative forum, the United States District Court for the District of Delaware shall be the sole and exclusive forum for resolving any complaint filed in the United States asserting a cause of action arising under the Securities Act, or the U.S. Federal Forum Provision. In addition, our articles provide that any person or entity purchasing or otherwise acquiring any interest in our common shares is deemed to have notice of and consented to the Canadian Forum Provision and the U.S. Federal Forum Provision; provided, however, that shareholders cannot and will not be deemed to have waived our compliance with the U.S. federal securities laws and the rules and regulations thereunder.

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

Because we are a Canadian company, it may be difficult to serve legal process or enforce judgments against us.

We are incorporated and maintain operations in Canada. In addition, while certain of our directors and officers reside in the United States, many of them reside outside of the United States. Accordingly, service of process upon us may be difficult to obtain within the United States. Furthermore, because substantially all of our assets are located outside the United States, any judgment obtained in the United States against us, including one predicated on the civil liability provisions of the U.S. federal securities laws, may not be collectible within the United States. Therefore, it may not be possible to enforce those actions against us.

In addition, it may be difficult to assert U.S. securities law claims in original actions instituted in Canada. Canadian courts may refuse to hear a claim based on an alleged violation of U.S. securities laws against us or these persons on the grounds that Canada is not the most appropriate forum in which to bring such a claim. Even if a Canadian court agrees to hear a claim, it may determine that Canadian law and not U.S. law is applicable to the claim. If U.S. law is found to be applicable, the content of applicable U.S. law must be proved as a fact, which can be a time-consuming and costly process. Certain matters of procedure will also be governed by Canadian law. Furthermore, it may not be possible to subject foreign persons or entities to the jurisdiction of the courts in Canada. Similarly, to the extent that our assets are located in Canada, investors may have difficulty collecting from us any judgments obtained in the U.S. courts and predicated on the civil liability provisions of U.S. securities provisions.

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, or U.S. GAAP, requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. We 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. 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 shares.

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

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.

If we or our non-U.S. subsidiary is a CFC there could be materially adverse U.S. federal income tax consequences to certain U.S. Holders of our common shares.

Each “Ten Percent Shareholder” (as defined below) in a non-U.S. corporation that is classified as a controlled foreign corporation, or a CFC, for U.S. federal income tax purposes generally is required to include in income for U.S. federal tax purposes such Ten Percent Shareholder’s pro rata share of the CFC’s “Subpart F income,” global intangible low taxed income, and investment of earnings in U.S. property, even if the CFC has made no distributions to its shareholders. Subpart F income generally includes dividends, interest, rents, royalties, gains from the sale of securities and income from certain transactions with related parties. In addition, a Ten Percent Shareholder that realizes gain from the sale or exchange of shares in a CFC may be required to classify a portion of such gain as dividend income rather than capital gain. An individual that is a Ten Percent Shareholder with respect to a CFC generally would not be allowed certain tax deductions or foreign tax credits that would be allowed to a Ten Percent Shareholder that is

a U.S. corporation. Failure to comply with these reporting obligations may subject a Ten Percent Shareholder to significant monetary penalties and may prevent the statute of limitations with respect to such Ten Percent Shareholder's U.S. federal income tax return for the year for which reporting was due from starting.

A non-U.S. corporation generally will be classified as a CFC for U.S. federal income tax purposes if Ten Percent Shareholders own, directly, indirectly, or constructively, more than 50% of either the total combined voting power of all classes of stock of such corporation entitled to vote or of the total value of the stock of such corporation. A "Ten Percent Shareholder" is a United States person (as defined by the Code) who owns or is considered to own 10% or more of the total combined voting power of all classes of stock entitled to vote or 10% or more of the total value of all classes of stock of such corporation.

The determination of CFC status is complex and includes attribution rules, the application of which is not entirely certain. In addition, recent changes to the attribution rules relating to the determination of CFC status may make it difficult to determine our CFC status for any taxable year. In addition, those changes to the attribution rules may result in ownership of the stock of our non-U.S. subsidiaries being attributed to our U.S. subsidiaries, which could result in our non-U.S. subsidiaries being treated as CFCs and certain U.S. Holders of our common shares being treated as Ten Percent Shareholders of such non-U.S. subsidiary CFCs. In addition, it is possible that a shareholder treated as a U.S. person for U.S. federal income tax purposes will acquire, directly or indirectly, enough of our common shares to be treated as a Ten Percent Shareholder. We believe that we and our non-U.S. subsidiaries will not be treated as CFCs in the 2022 taxable year solely by virtue of direct or indirect ownership by Ten Percent Shareholders. However, we believe that our non-U.S. subsidiaries may be treated as CFCs in the 2022 taxable year due to attribution rules that deem constructive ownership by our U.S. subsidiaries. It is unclear whether we would be treated as a CFC in a subsequent taxable year. We cannot provide any assurances that we will assist holders of our common shares in determining whether we or any of our non-U.S. subsidiaries are treated as a CFC or whether any holder of the common shares is treated as a Ten Percent Shareholder with respect to any such CFC or furnish to any Ten Percent Shareholders information that may be necessary to comply with the aforementioned reporting and tax paying obligations.

U.S. Holders should consult their tax advisors with respect to the potential adverse U.S. tax consequences of becoming a Ten Percent Shareholder in a CFC, including the possibility and consequences of becoming a Ten Percent Shareholder in our non-U.S. subsidiaries that may be treated as CFCs due to the changes to the attribution rules. If we are classified as both a CFC and a PFIC (as defined below), we generally will not be treated as a PFIC with respect to those U.S. Holders that meet the definition of a Ten Percent Shareholder during the period in which we are a CFC (referred to as the "CFC/PFIC overlap rule"). A "U.S. Holder" is a holder who, for U.S. federal income tax purposes, is a beneficial owner of our common shares and is (i) an individual who is a citizen or resident of the United States, (ii) a corporation, or other entity taxable as a corporation, created or organized in or under the laws of the United States, any state therein or the District of Columbia, (iii) an estate the income of which is subject to U.S. federal income taxation regardless of its source or (iv) a trust if (1) a U.S. court is able to exercise primary supervision over the administration of the trust and one or more U.S. persons have authority to control all substantial decisions of the trust or (2) the trust has a valid election to be treated as a U.S. person under applicable U.S. Treasury Regulations. Recent proposed changes to PFIC regulations, if adopted, would expand the definition of "U.S. Holder" for purposes of the CFC/PFIC overlap rule and other PFIC rules, elections, and reporting requirements discussed below. The proposed regulations would require domestic partnerships and S-corporations to be treated as an aggregate of their partners or shareholders rather than as entities, which may result in such partners and shareholders to now be subject to the PFIC rules where they previously were not. It is unclear whether these proposed regulations may be adopted or if they will undergo further modifications before they are finalized. If adopted, it is also unclear when will be the effective date of the final regulations.

Our U.S. shareholders may suffer adverse tax consequences if we are characterized as a PFIC.

The rules governing passive foreign investment companies, or PFICs, can have adverse effects on U.S. Holders for U.S. federal income tax purposes. Generally, if, for any taxable year, at least 75% of our gross income is passive income (such as interest income), or at least 50% of the gross value of our assets (determined on the basis of a weighted quarterly average) is attributable to assets that produce passive income or are held for the production of passive income (including cash), we would be characterized as a PFIC for U.S. federal income tax purposes. The determination of whether we are a PFIC, which must be made annually after the close of each taxable year, depends on the particular facts and circumstances and may also be affected by the application of the PFIC rules, which are subject to differing interpretations. Our status as a PFIC will depend on the composition of our income and the composition and value of our assets (including goodwill and other intangible assets), which will be affected by how, and how quickly, we utilize any cash that was raised in any of our financing transactions. If we were a publicly traded CFC or not a CFC for any part of such year, the value of our assets generally may be determined by reference to the fair market value of our common shares, which may be volatile. Moreover, our ability to earn specific types of income that will be treated as non-passive for purposes of the PFIC rules is uncertain with respect to future years. We believe we were not classified as a PFIC during the taxable year ended December 31, 2022. The determination of whether we are a PFIC is a fact-intensive determination made on an annual basis applying principles and methodologies that in some circumstances are unclear and subject to varying interpretation. Accordingly, we cannot provide any assurances regarding our PFIC status for any current or future taxable years.

If we are classified as a PFIC, a U.S. Holder would be subject to adverse U.S. federal income tax consequences, such as ineligibility for certain preferred tax rates on capital gains or on actual or deemed dividends, interest charges on certain taxes treated as deferred, and additional reporting requirements under U.S. federal income tax laws and regulations. A U.S. Holder may in certain circumstances mitigate adverse tax consequences of the PFIC rules by filing an election to treat the PFIC as a qualified electing fund, or QEF, or, if shares of the PFIC are “marketable stock” for purposes of the PFIC rules, by making a mark-to-market election with respect to the shares of the PFIC. U.S. Holders are urged to consult their own tax advisors regarding the potential consequences if we were or were to become classified as a PFIC, including the availability, and advisability, of, and procedure for, making QEF or mark-to-market elections.

Tax authorities may disagree with our positions and conclusions regarding certain tax positions, resulting in unanticipated costs, taxes or non-realization of expected benefits.

A tax authority may disagree with tax positions that we have taken, which could result in increased tax liabilities. For example, the U.S. Internal Revenue Service or another tax authority could challenge our allocation of income by tax jurisdiction and the amounts paid between our affiliated companies pursuant to our intercompany arrangements and transfer pricing policies, including amounts paid with respect to our intellectual property development. Similarly, a tax authority could assert that we are subject to tax in a jurisdiction where we believe we have not established a taxable connection, often referred to as a “permanent establishment” under international tax treaties, and such an assertion, if successful, could increase our expected tax liability in one or more jurisdictions. A tax authority may take the position that material income tax liabilities, interest and penalties are payable by us, in which case, we expect that we might contest such assessment. Contesting such an assessment may be lengthy and costly and if we were unsuccessful in disputing the assessment, the implications could increase our anticipated effective tax rate, where applicable.

Changes in tax law could adversely affect our business and financial condition.

The rules dealing with U.S. federal, state, and local and non-U.S. taxation are constantly under review by persons involved in the legislative process, the Internal Revenue Service, the U.S. Treasury Department and other taxing authorities. Changes to tax laws or tax rulings, or changes in interpretations of existing laws (which changes may have retroactive application), could adversely affect us or holders of our common stock. These changes could subject us to additional income-based taxes and non-income taxes (such as payroll, sales, use, value-added, digital tax, net worth, property, and goods and services taxes), which in turn could materially affect our financial position and results of operations. Additionally, new, changed, modified, or newly interpreted or applied tax laws could increase our customers’ and our compliance, operating and other costs, as well as the costs of our products. In recent years, many such changes have been made, and changes are likely to continue to occur in the future. As we expand the scale of our business activities, any changes in the U.S. and non-U.S. taxation of such activities may increase our effective tax rate and harm our business, financial condition, and results of operations.

General Risk Factors

Our business has been and may continue to be adversely affected by the ongoing COVID-19 pandemic.

In late 2019, a novel strain of coronavirus, SARS-CoV-2, which resulted in the evolving COVID-19 pandemic, surfaced in Wuhan, China. Since then, COVID-19 has spread across the globe and to multiple regions within the United States and Canada, including British Columbia, where our primary office and laboratory space is located. The COVID-19 pandemic to date has led to the implementation of various responses, including government imposed shelter-in-place orders, quarantines, travel restrictions and other public health safety measures, as well as reported adverse impacts on healthcare resources, facilities and providers, in Canada, across the United States and in other countries. In the event that government authorities were to further modify current restrictions, our employees conducting research and development or manufacturing activities may not be able to access our laboratory and manufacturing space, and our core activities may be significantly limited or curtailed, possibly for an extended period of time.

As a result of the ongoing COVID-19 pandemic, or similar pandemics and outbreaks, we have experienced and may continue to experience severe delays and disruptions, including, for example:

- interruption of or delays in receiving products and supplies from third parties;
- limitations on our business operations by local, state, provincial and/or federal governments that could impact our ability to sell our data packages;
- delays in negotiations with partners and potential partners;
- increases in facilities costs to comply with physical distancing guidance;

- business disruptions caused by workplace, laboratory and office closures and an increased reliance on employees working from home, travel limitations, cyber-security and data accessibility, or communication or mass transit disruptions; and
- limitations on employee resources that would otherwise be focused on the conduct of our activities, including because of sickness of employees or their families or the desire of employees to avoid contact with large groups of people.

Any of these factors could severely impact our research and development activities, business operations and sales, or delay necessary interactions with local regulators, manufacturing sites and other important contractors and partners. These and other factors arising from the COVID-19 pandemic could worsen in countries that are already afflicted with COVID-19, could continue to spread to additional countries, or could return to countries where the pandemic has been partially contained, and could further adversely impact our ability to conduct our business generally and have a material adverse impact on our operations and financial condition and results.

The extent to which the COVID-19 pandemic may negatively impact our operations and results of operations or those of our stakeholders will depend on future developments, which are highly uncertain and cannot be predicted with confidence.

The ongoing military action between Russia and Ukraine and related sanctions could adversely affect our business, financial condition, and patent administration.

In February of 2022, Russian military forces invaded Ukraine, and sustained conflict and disruption in the region is likely. Although the length, impact and outcome of the ongoing military conflict in Ukraine is highly unpredictable, this conflict could lead to significant market disruptions, including significant volatility in commodity prices and supply of energy resources, instability in financial markets, higher inflation, supply chain interruptions, political and social instability, cyber attacks and cybersecurity threats, and could also aggravate the other risk factors that we identify herein.

In addition, the impact of sanctions against Russia and the potential retaliatory acts from Russia, could have a material adverse effect on our business and intellectual property rights. For example, we may be unable to obtain patent rights to our Trianni and microfluidic platforms as well as bamlanivimab which are protected in other jurisdictions around the world.

Impairment charges pertaining to goodwill, identifiable intangible assets or other long-lived assets from our mergers and acquisitions could have an adverse impact on our results of operations and the market value of our common stock.

The total purchase price pertaining to our acquisitions in recent years have been allocated to net tangible assets, identifiable intangible assets, in-process research and development and goodwill. Refer to Note 20 of our consolidated financial statements for additional information. To the extent the value of goodwill or identifiable intangible assets or other long-lived assets become impaired, we will be required to incur material charges relating to the impairment. Any impairment charges could have a material adverse impact on our results of operations and the market value of our common stock.

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

We are exposed to the risk of fraud or other misconduct by our employees, consultants and commercial partners. Misconduct by these parties could include intentional failures to comply with the applicable laws and regulations in the United States, Canada 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.

The market price of our common shares may be volatile, and you could lose all or part of your investment.

The trading price of our common shares is highly volatile and subject to wide fluctuations in response to various factors, some of which are beyond our control, including limited trading volume. These factors include:

- actual or anticipated fluctuations in our financial condition and operating results, including fluctuations in our quarterly and annual results;
- the introduction of new technologies or enhancements to existing technology by us or others in our industry;
- our inability to establish additional collaborations;
- 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 we may otherwise provide to the public;
- publication of research reports about us or our 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 shares by us or our shareholders in the future;
- trading volume of our common shares;
- 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 shareholder litigation;
- the impact of the ongoing COVID-19 pandemic on our business;
- general political and economic conditions, including those resulting from the conflict between Russia and Ukraine and the attendant sanctions; and
- other events or factors, many of which are beyond our control.

In addition, the stock market in general, and The Nasdaq Global Select Market and technology and life sciences companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors may negatively affect the market price of our common shares, regardless of our actual operating performance. In the past, securities class action litigation has often been instituted against companies following periods of volatility in the market price of a company's securities. This type of litigation, if instituted, could result in substantial costs and a diversion of management's attention and resources, which would harm our business, financial condition and results of operations.

Requirements associated with being a public company will increase our costs significantly, as well as divert significant company resources and management attention.

As of this report, we are subject to the reporting requirements of the Exchange Act or the other rules and regulations of the SEC and any securities exchange relating to public companies. Sarbanes-Oxley, as well as rules subsequently adopted by the SEC and The Nasdaq Stock Market LLC, or 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 apply to us since we ceased to be an emerging growth company. Stockholder activism, the current political environment and the current high level of government intervention and regulatory reform may lead to substantial new regulations and disclosure obligations, which may lead to additional compliance costs and impact the manner in which we operate our business in ways we cannot currently anticipate. Compliance with the various reporting and other requirements applicable to public companies requires considerable time and attention of management. We cannot assure you that we will satisfy our obligations as a public company on a timely basis.

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. In addition, as a public company, it may be more difficult or more costly for us to obtain certain types of insurance, including directors' and officers' liability insurance, and we may be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. The impact of these events could also make it more difficult for us to attract and retain qualified personnel to serve on our board of directors, our board committees or as executive officers.

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

The trading market for our common shares will depend in part on the research and reports that securities or industry analysts publish about us or our business. If one or more of these analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our shares could decrease, which might cause our share price and trading volume to decline.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

Our corporate headquarters and research and development facilities are located in Vancouver, British Columbia, where we lease approximately 130,000 square feet of space under leases expiring between 2024 and 2031. In 2021, through our Dayhu and Beedie joint ventures, we began building out a new, dedicated corporate headquarters currently under construction that will provide us with 378,000 square feet of additional lab and office space under a lease expiring in 2037. AbCellera Australia Pty. Ltd., our wholly owned subsidiary, occupies approximately 40,000 square feet of office and laboratory space in Sydney, Australia, with a lease that expires in 2031. In 2022, we purchased land that will provide us with an additional 123,000 square feet for our GMP facility. We also lease an additional 30,000 square feet of office and laboratory space across the other jurisdictions in which we operate, and 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.

We are currently involved in the following litigation matters:

Patent Infringement Litigation

In July 2020, we filed a complaint against Berkeley Lights, in the United States District Court for the District of Delaware, alleging that Berkeley Lights infringed and continues to infringe, directly and indirectly, the following patents exclusively licensed by the Company, including U.S. Patent Nos. 10,107,812; 10,274,494; 10,466,241; 10,578,618; 10,697,962; 10,087,408; 10,421,936 and 10,704,018, by making, using, offering for sale, selling and/or importing Berkeley Lights' Beacon Optofluidic System. In August 2020, we filed an additional related complaint against Berkeley Lights in the United States District Court for the District of Delaware, alleging that Berkeley Lights infringed and continues to infringe, directly and indirectly, U.S. Patent Nos. 10,718,768; 10,738,270; 10,746,737 and 10,753,933. In September 2020, we filed another complaint against Berkeley Lights in the United States District Court for the District of Delaware, alleging that Berkeley Lights infringed and continues to infringe, directly and indirectly, U.S. Patent Nos. 10,775,376; 10,775,377 and 10,775,378. On December 3, 2020, the judge assigned to these three lawsuits ordered that they be transferred to the U.S. District Court for the Northern District of California. In these lawsuits, we are seeking, among other things, a judgment of infringement, a permanent injunction and damages (including lost profits, a reasonable royalty, reasonable costs and attorney's fees and treble damages for willful infringement). In February 2021, these lawsuits were consolidated and assigned to the Honorable Judge Lucy Koh. In February 2021, Berkeley Lights filed a motion seeking leave to amend its counterclaims to add the allegations of unfair competition (as plead in the case described below) against AbCellera only. In July 2021, the Court allowed Berkeley to amend its counterclaims to add the unfair competition claims subject to our right to seek dismissal with prejudice should the counterclaims not overcome objections previously presented by us to the court. The Company is continuing to oppose the unfounded counterclaim and we intend to seek dismissal with prejudice. In March 2021, the court set this matter down for a jury trial with a December 12, 2022 start date. In July 2021, Berkeley Lights filed a Petition for *inter partes* review of U.S. Patent No. 10,087,408 that we exclusively license from the University of British Columbia. In July 2021, Berkeley Lights filed a second Petition for *inter partes* review of U.S. Patent No. 10,421,936 that we exclusively license from the University of British Columbia. In August 2021, Berkeley Lights filed a third Petition for *inter partes* review of U.S. Patent No. 10,738,270 that we exclusively license from the University of British Columbia. In August 2021, the court stayed the patent litigation against Berkeley Lights in view of the Petitions for *inter partes* Review filed by Berkeley Lights. In January 2022, the PTAB denied one petition and instituted one petition. In February 2022, the PTAB denied the final petition. Trial on the instituted petition occurred in November 2022. In January 2023, the PTAB issued its Final Written Decision with respect to our U.S. Patent No. 10,087,408 rejecting all of Berkeley Lights' grounds of unpatentability and determining that none of the challenged claims are unpatentable. Because the three aforementioned *inter partes* review matters have been resolved, we intend to seek relief from the Court to lift the pending stay and resume our patent infringement action against Berkeley Lights.

Unfair Competition and Declaratory Judgment of Non-Infringement

In August 2020, Berkeley Lights filed a complaint in the Northern District of California against us and our wholly-owned subsidiary Lineage Inc. The complaint includes two counts of unfair competition and one count of non-infringement of a U.S. patent: Patent No. 10,058,839 (the “‘839 patent”). Berkeley Lights is seeking, among other things, damages and a declaratory judgment of non-infringement of the ‘839 patent. We filed a motion to dismiss the action for lack of jurisdiction and failure to state a claim upon which relief can be granted pursuant to Federal Rules of Civil Procedure 12(b) 1, 2, and 6. In January 2021, the Court determined that there was no jurisdiction over AbCellera or Lineage and dismissed the unfair competition claims but ordered jurisdictional discovery on a limited basis with respect to AbCellera only regarding Berkeley Lights’ request for declaratory judgment on the ‘839 patent. In July 2021, Berkeley voluntarily dismissed this lawsuit.

Civil Lawsuit

The Company recently became aware of a civil lawsuit filed by the Estate of John Schrader and another corporate entity naming as co-defendants the Company, some of its affiliates and Dr. Carl Hansen, the Company's CEO. The lawsuit was filed October 14, 2022, in the Supreme Court of British Columbia (Vancouver). The complaint alleges breach of an implied partnership or joint venture between Dr. John Schrader and Dr. Hansen and further alleges patent infringement of an issued Canadian patent (No. 2,655,511). The complaint seeks financial damages as well as other declarations. The Company believes that the claim is meritless and frivolous in all respects and intends to defend itself appropriately.

Item 4. Mine Safety Disclosures.

None.

PART II

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

Market Information

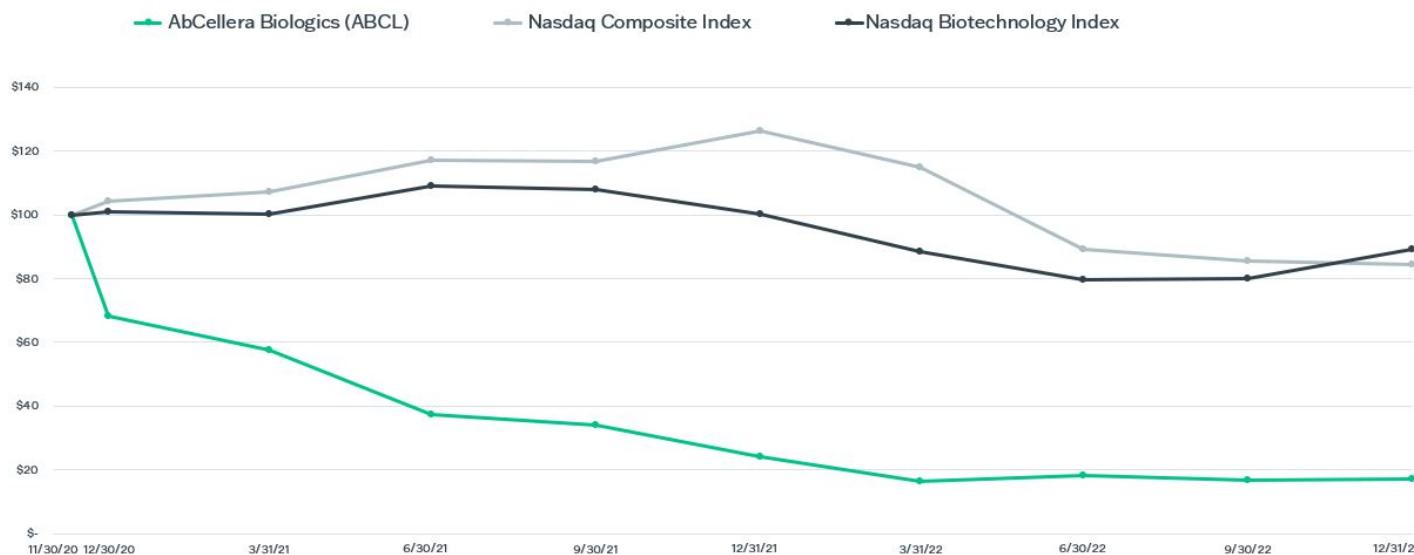
Our common shares have been listed on The Nasdaq Global Select Market under the symbol “ABCL” since December 11, 2020. Prior to that date, there was no public trading market for our common shares.

Performance Graph

This graph is not “soliciting material” or subject to Regulation 14A, deemed “filed” with the SEC for purposes of Section 18 of the Exchange Act, or otherwise subject to liabilities under that section, and shall not be deemed incorporated by reference into any filing of the Company under the Securities Act or the Exchange Act, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

The following graph compares the cumulative total return to shareholder return on our common shares relative to the cumulative total returns of the Nasdaq Composite Index and the Nasdaq Biotechnology Index. An investment of \$100 is assumed to have been made in our common share and each index on December 11, 2020 (the first day of trading of our common share) and its relative performance is tracked through December 31, 2022. Pursuant to applicable SEC rules, all values assume reinvestment of the full amount of all dividends, however no dividends have been declared on our common share to date. The shareholder returns shown on the graph below are based on historical results and are not necessarily indicative of future performance, and we do not make or endorse any predictions as to future shareholder returns.

Comparison of Cumulative Total Return Among



Holders of Common Shares

As of February 17, 2023, the latest practicable date prior to the date of this Annual Report on Form 10-K, there were approximately 71 holders of record of our common shares.

Dividend Policy

We have not declared nor paid any cash dividends on our share capital. We currently intend to retain any future earnings to fund the development and expansion of our business, and, therefore, we do not anticipate paying cash dividends on our share capital in the foreseeable future. Any future determination to pay dividends will be at the discretion of our board of directors and will depend on our results of operations, financial condition, capital requirements, contractual restrictions and other factors deemed relevant by our board of directors.

Recent Sales of Unregistered Equity Securities

None.

Use of Proceeds from Initial Public Offering

On December 15, 2020, we completed the initial public offering, or IPO, of our common shares pursuant to which we issued and sold 27,772,500 common shares at a price to the public of \$20.00 per share, which included the exercise in full of the underwriters' option to purchase additional common shares.

The offer and sale of all shares of our common shares in our IPO were registered under the Securities Act pursuant to a registration statement on Form S-1, as amended (File No. 333-250838), which was declared effective by the SEC on December 10, 2020. Credit Suisse Securities (USA) LLC, Stifel, Nicolaus & Company, Incorporated, Berenberg Capital Markets LLC, SVB Leerink LLC and BMO Capital Markets Corp. acted as the underwriters of our IPO.

We received aggregate gross proceeds from our IPO of \$555.5 million, or aggregate net proceeds of \$522.8 million after deducting underwriting discounts and commissions and other offering costs. None of the underwriting discounts and commissions or offering expenses were incurred or paid, directly or indirectly, to any of our directors or officers or their associates or to persons owning 10% or more of our common shares or to any of our affiliates.

Cash used since the IPO is described elsewhere in the "Management's Discussion and Analysis of Financial Condition and Results of Operations" section of our periodic reports filed with the SEC. There has been no material change in our planned use of the net proceeds from the IPO as described in the final prospectus for our IPO.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

None.

Equity Compensation Plans

The information required by Item 5 of Form 10-K regarding equity compensation plans is incorporated herein by reference to Item 11 of Part III of this Annual Report.

Item 6. Selected Financial Data.

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 consolidated financial statements and the related notes thereto included elsewhere in this annual report. Some of the information contained in this discussion and analysis or set forth in other parts of this annual report contain forward-looking statements that involve risks, uncertainties and assumptions. As a result of many factors, including those factors set forth in Part I, Item 1A, Risk Factors, our actual results could differ materially from those discussed in or implied by these forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in Part I, Item 1A, Risk Factors. Please also see the section titled "Cautionary Note Regarding Forward-Looking Statements."

Overview

We are a team of scientists, engineers, creatives, and business professionals addressing the barriers of conventional antibody drug development. We believe investments in technology will improve the quality, speed, and success of drug development and that long-term value creation begins with building a great company that can create multiple products, repeatedly and successfully.

We focus on the development of antibody-based drugs and are committed to improving discovery and development. We aim to be the best in the world in bringing antibody therapeutics from target to target to the start of clinical testing by combining expertise, technologies, and infrastructure to build an integrated engine for antibody drug discovery and development. We think deeply about capital allocation and strive to maximize long-term value while mitigating the risks that are inherent in drug development and in scaling a company. We look for opportunities where we believe low-risk investments in building technology and operational efficiency can create a sustained competitive advantage and drive long-term value by making biologics drug development faster and more efficient.

We structure our agreements in a way that is designed to align our partners' economic interests with our own. We partner with companies of all sizes and government organizations to propel programs to the clinic, together. We enable discovery against targets that have traditionally been intractable, and we accelerate programs against less difficult targets.

Our deals emphasize participation in the success and upside of future antibody therapeutic candidates. Our partnership agreements include near-term payments for technology access, research and intellectual property rights, and downstream payments in the form of clinical and commercial milestones, and royalties on net sales. We also participate in alternative investment opportunities including equity in our business partners and various rights for deeper involvement in moving molecules forward. Longer-term we are eligible to receive additional payments upon satisfaction of clinical and commercial milestones, which we refer to as milestone payments, as well as royalties on sales of approved products derived from antibodies that we discover for our partners. Our discovery partnerships generally include royalty payments on net sales in the single-digit to low-double digit range.

We focus a substantial portion of our resources on research and development efforts towards strengthening our discovery and development engine and we expect to continue to make significant investments in this area for the foreseeable future. We expect to continue to incur significant expenses, and we expect such expenses to increase substantially in connection with our ongoing activities, including as we:

- invest in research and development activities to improve our antibody discovery and development engine including investments in building our new headquarters through our joint ventures and building a new small-scale manufacturing facility;
- market and sell our solutions to existing and new partners;
- expand and enhance operations to deliver programs, including investments in manufacturing;
- acquire businesses or technologies to support the growth of our business;
- attract, hire and retain qualified personnel; and
- continue to establish, protect and defend our intellectual property and patent portfolio, including our ongoing litigation

2022 Highlights

\$485 million Total Revenue	\$159 million Net Income	\$0.56 & \$0.50 Basic & Diluted EPS	\$886 million Cash, cash equivalents, and marketable securities
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To date, we have financed our operations primarily from revenue from our antibody discovery partnerships in the form of royalty revenue, government funding from grants, and from the issuance and sale of convertible preferred shares and notes, and common shares.

We have grown the number of programs that we have under contract with our partners, as illustrated by the following chart. In 2022, we added 18 new programs under contract, started 23 programs, and advanced three molecules in the clinic. As of December 31, 2022, we had 174 discovery programs that are either completed, in progress or under contract with 40 partners.



Results of Operations

The following table summarizes our key operating results for the years ended December 31, 2020, 2021, and 2022. All figures are in U.S. dollars and amounts are expressed in thousands, except share data:

	Year Ended December 31,		
	2020	2021	2022
Revenue:			
Research fees	\$ 19,848	\$ 19,076	\$ 40,802
Licensing revenue	-	20,778	696
Milestone payments	15,000	8,000	900
Royalty revenue	<u>198,307</u>	<u>327,349</u>	<u>443,026</u>
Total Revenue	233,155	375,203	485,424
Operating expenses:			
Royalty fees	27,143	45,516	66,436
Research and development expense(1)	29,393	62,062	107,879
Other operating expenses	<u>20,588</u>	<u>63,212</u>	<u>94,598</u>
Total operating expenses	77,124	170,790	268,913
Income from operations	156,031	204,413	216,511
Total other (income)	(1,802)	(14,736)	(22,588)
Net earnings before income tax	157,833	219,149	239,099
Net earnings	\$ 118,918	\$ 153,464	\$ 158,519

(1)Exclusive of depreciation, amortization, and impairment.

Operating expenses include stock-based compensation as follows:

	Year Ended December 31,		
	2020	2021	2022
Research and development expenses	\$ 5,365	\$ 15,663	\$ 24,327
Other operating expenses	3,032	14,983	25,154
Total stock-based compensation	<u>\$ 8,397</u>	<u>\$ 30,646</u>	<u>\$ 49,481</u>

Recent Developments

In February 2022, we announced that bebtelovimab (LY-CoV1404), the second antibody developed through our collaboration with Lilly, received an EUA from the FDA for the treatment of mild-to-moderate COVID-19. Lilly announced in February 2022 that it entered into a purchase agreement with the U.S. government to supply up to 600,000 doses of bebtelovimab no later than March 31, 2022, with an option of 500,000 additional doses no later than July 31, 2022, for at least \$720 million.

In June 2022, we announced that Lilly modified its purchase agreement with the U.S. government to supply an additional 150,000 doses of bebtelovimab for consideration of approximately \$275 million. Lilly shipped and we recognized royalty revenue on approximately half of these doses in the quarter ended June 30, 2022. In collaboration with the U.S. government, the requirement that bebtelovimab distribution be controlled by the U.S. government was removed in August 2022, making bebtelovimab commercially available for purchase by U.S. states/territories, hospitals, and a broad set of other providers. In November 2022, the FDA announced bebtelovimab is no longer authorized for emergency use in any U.S. region. Lilly and its authorized distributors have paused commercial distribution until further notice by the FDA.

Key Factors Affecting Our Results of Operations and Future Performance

We believe that our financial performance has been, and in the foreseeable future will continue to be, primarily driven by multiple factors as described below, each of which presents growth opportunities for our business. These factors also pose important

challenges that we must successfully address to sustain our growth and improve our results of operations. Our ability to successfully address these challenges is subject to various risks and uncertainties, including those described in Part I, Item 1A, Risk Factors.

- **Securing additional programs under contract.** Our potential to grow revenue, in both the near and long term, is dependent on our ability to secure additional programs under contract from new and existing partners. For existing partners, we seek to expand our relationships with them to cover multi-year, multi-target programs. Since our first commercial partnership in 2015, as of December 31, 2022, we had 174 discovery programs that are either completed, in progress or under contract with 40 partners. We are building our business development team across the major biotechnology geographic hubs to bring in new partners and new programs under contract, and we believe that we have a significant opportunity to continue to increase the number of partners who have programs based on our discovery and development engine. Our ability to continue to grow our number of programs under contract is dependent upon our ability to educate the market and support the business through investment in our sales and marketing efforts and through further research and development to enhance our discovery differentiation.
- **Our partners successfully developing and commercializing the antibodies that we discover.** We estimate that, based on the terms of our existing contracts and estimates of historical rates of success of antibody drug development, the vast majority of the potential value for each program under contract is represented by potential future milestone payments and royalties rather than research fees. As a result, we believe our business and our future results of operations will be highly reliant on the degree to which our partners successfully develop and commercialize the antibodies that we discover based on contracts with our partners. As our partners continue to advance development of the antibodies that we have discovered, we expect to start receiving additional milestone payments and royalties if any partners commence commercial sales of such antibodies.
- **Rate and timing of selecting and initiating discovery projects by our partners.** Once programs are secured under contract, partners must select targets and agree on a detailed statement of work before we commence discovery research on any antibodies. The rate and timing of such selection and initiation differs from partner to partner. Research fees that we recognize under our partnerships depend on our delivery of antibodies for development by our partners and delays by our partners in selecting targets and agreeing on statements of work will impact revenue recognition.
- **Investing in enhancements to our discovery and development engine.** Our ability to maintain and expand our partnerships is dependent on the advantages our discovery and development engine delivers to our partners. We intend to maintain our leading position through investments in research and development to refine and add capabilities in areas such as computation, protein engineering, immunization technologies, genetically engineered rodents and cell line selection. We have successfully executed and will continue to look for strategic technology acquisitions to improve, broaden and deepen our capabilities and expertise in antibody discovery and development, or those that offer opportunities to expand our partnership business into adjacent therapeutic modalities. We intend to devote substantial resources to continue to improve our discovery differentiation which will impact our financial performance.
- **Scaling our operations to execute on discovery programs.** As we secure additional programs under contract and as our partners initiate discovery programs, our operational capacity to execute such research activities may become strained. We are making significant investments in capital and time to increase our ability to address future growth, including building new headquarters through our Dayhu and Beedie joint ventures, building a new small-scale manufacturing facility, investing in research and development, and continuing to hire talented personnel across functions. We have new facilities under development scheduled to take occupancy in 2024 that are intended to materially expand capacity. As we expand our workforce, we expect a significant increase in our operating expenses, including stock-based compensation.

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 understand our current business. These metrics may change or may be substituted for additional or different metrics as our business develops.

Cumulative Metrics	Year Ended December 31,		Change %
	2021	2022	
Number of discovery partners	36	40	11%
Programs under contract	156	174	12%
Partnered program starts	78	101	29%
Molecules in the clinic	5	8	60%

The table below outlines the details of molecules in the clinic as of December 31, 2022:

Molecule	Most advanced stage	Partner	Therapy areas	Program type
Bamlanivimab (LY-CoV555)	Marketed, EUA	Eli Lilly and Company	Infectious disease – COVID-19	AbCellera Pre-partnered Program - Partnered
Bebtelovimab (LY-CoV1404)	Marketed, EUA	Eli Lilly and Company	Infectious disease – COVID-19	AbCellera Pre-partnered Program - Partnered
TAK-920/DNL919	Phase 1	Denali Therapeutics Inc.	Neurology - Alzheimer's Disease	AbCellera Partner-initiated Discovery
NBL-012	Phase 1	NovaRock Biotherapeutics Inc.	Dermatology, gastrointestinal, immunology	Trianni license
NBL-015/FL-301	Phase 1	NovaRock Biotherapeutics Inc.	Oncology	Trianni license
NBL-020	IND/CTA authorized	NovaRock Biotherapeutics Inc.	Oncology	Trianni license
Undisclosed	Phase 1	Undisclosed	Undisclosed	Trianni license
IVX-01	Clinical field study	Invetx Inc.	Animal health	AbCellera Partner-initiated Discovery

Number of discovery partners represents the unique number of partners with whom we have executed partnership contracts. We view this metric as an indication of the competitiveness of our engine and our level of market penetration. The metric also relates to our opportunities to secure programs under contract.

Programs under contract represent the number of antibody development programs that are under contract for delivery of discovery research activities. A program under contract is counted when a contract is executed with a partner under which we commit to discover or deliver antibodies against one selected target. A target is any relevant antigen for which a partner seeks our support in developing binding antibodies. We view this metric as an indication of commercial success and technological competitiveness. It further relates to revenue from access fees. The cumulative number of programs under contract with downstream participation is related to our ability to generate future revenue from milestone payments and royalties.

Partnered program starts represent the number of unique programs under contract for which we have commenced the discovery effort. The discovery effort commences on the later of (i) the day on which we receive sufficient reagents to start discovery of antibodies against a target and (ii) the day on which the kick-off meeting for the program is held. We view this metric as an indication of our operational capacity to execute on programs under contract. It is also an indication of the selection and initiation of discovery projects by our partners and the resulting potential for near-term payments. Cumulatively, partnered program starts with downstream participation indicate our total opportunities to earn downstream revenue from milestone fees and royalties in the mid-to long-term.

Molecules in the clinic represent the count of unique molecules for which an Investigational New Drug, or IND, New Animal Drug, or equivalent under other regulatory regimes, application has been approved based on an antibody that was discovered either by us or by a partner using licensed AbCellera technology. Where the date of such application approval is not known to us, the date of the first public announcement of a clinical trial will be used for the purpose of this metric. 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.

Summary partnership agreements with pharmaceutical and biotechnology companies that include downstream participation from 2016 to December 31, 2022:

Partner	# of Targets & Duration	Therapeutic Indication or Modality	Date Announced
AbbVie Inc.	Up to 5 targets, multi-year	Undisclosed	December 15, 2022
Rallybio Corporation	Up to 5 targets, multi-year	Rare metabolic disorder and undisclosed	December 1, 2022
Atlas Ventures - stealth stage company	Up to 3 targets, multi-year	Undisclosed	August 3, 2022*
Undisclosed biotechnology company	Up to 3 targets, multi-year	Undisclosed	June 29, 2022
Empirico Inc.	2 additional targets	Undisclosed	May 3, 2022
Everest Medicines Ltd.	Up to 10 targets, multi-year	Oncology and undisclosed	September 22, 2021
Moderna, Inc.	Up to 6 targets, multi-year	RNA-encoded antibodies	September 15, 2021
EQRx, Inc.	Multi-target, multi-year	Oncology and immunology (initially)	August 4, 2021
Tachyon Inc.	Single target	Oncology	August 3, 2021
Undisclosed biotechnology company	Up to 4 targets, multi-year	Undisclosed	June 30, 2021*
Angios GmbH	Multi-target, multi-year	Ophthalmology	May 6, 2021
Undisclosed biotechnology company	Multi-target, multi-year	Oncology	May 6, 2021
Empirico Inc.	5 targets, multi-year	Undisclosed	April 14, 2021
Gilead Sciences, Inc.	8 targets, multi-year	Undisclosed	April 1, 2021
Abdera Therapeutics Inc.	9 targets, multi-year	Oncology	January 14, 2021
Invetx, Inc.	Multi-target, multi-year	Animal Health	November 19, 2020
Kodiak Sciences Inc.	Multi-target, multi-year	Ophthalmology	October 29, 2020
IGM Biosciences, Inc.	Multi-target, multi-year	Oncology and immunology	September 24, 2020
Undisclosed	Single target	Bispecific	June 3, 2020*
Eli Lilly and Company	Up to 9 targets, multi-year	COVID-19 program and additional indications	May 22, 2020*
Regeneron Pharmaceuticals, Inc.	Multi-target, multi-year	Multiple undisclosed	* March 16, 2020
Invetx, Inc.	Multi-target, multi-year	Animal health	February 23, 2020
Undisclosed	Multi-target, multi-year	Cell therapy	September 25, 2019*
Gilead Sciences, Inc.	Single target	Infectious disease	June 13, 2019
Denali Therapeutics, Inc.	8 targets, multi-year	Neurological diseases	February 28, 2019
Novartis AG	Up to 10 targets, multi-year	Undisclosed	February 14, 2019
Autolus Therapeutics plc	Single target	Cell therapy (CAR-T)	November 29, 2018
Denali Therapeutics, Inc.	Single target	Neurological diseases	June 12, 2018
Undisclosed mid-cap biopharmaceutical company	Undisclosed	Undisclosed	January 25, 2018
Teva Pharmaceuticals Industries Ltd.	Single target	Membrane protein	June 13, 2017
Pfizer Inc.	Multi-target, multi-year	Membrane protein	January 5, 2017
Undisclosed global biotechnology company	Multi-target, multi-year	Undisclosed	November 4, 2016
Kodiak Sciences Inc.	Single target	Ophthalmology	August 24, 2016
Teva Pharmaceuticals Industries Ltd.	Undisclosed	Undisclosed	February 2, 2016

* Effective date of agreement

Components of Results of Operations

Revenue

Our revenue is comprised of partnership research fees, licensing revenue, development milestones, and royalty payments from commercial products. Research fees consist primarily of technology access fees, which are generally generated upon execution of our

partnership agreements, and discovery research fees, which are generated through our performance of antibody discovery research for our partners. Licensing revenue is primarily from our licensing of our humanized rodent platform, Trianni™. Our partnership agreements also entitle us to receive payments upon the satisfaction of clinical, approval, and commercial milestones as well as royalties on our partners' commercial sales of the molecules that we discover.

We expect that our revenue, particularly revenue arising from royalties of antibodies sold by our partners, will fluctuate from period to period due to variances in demand for such antibodies and the status of regulatory approvals or emergency use authorizations for such antibodies. For example, in November 2022, the FDA announced bebtelovimab is no longer authorized for emergency use in the U.S. Lilly and its authorized distributors have paused commercial distribution until further notice by the FDA. We expect that our overall revenue will fluctuate from period to period due to the timing of securing additional programs under contract, the inherently uncertain nature of the timing of milestone achievement, our dependence on the program decisions of our partners and uncertainty in sales of our antibodies by our partners that generate royalty revenue.

Operating Expenses

Royalty fees. Royalty fees consist of certain contractual royalty payments to our strategic partners upon receipt of royalty revenue based on our customers third-party net sales. Royalty fees are not included in every program. For royalties received from Lilly for commercial sales of bamlanivimab and bebtelovimab, royalty fees were due to collaboration partners in AbCellera's DARPA P3 (Pandemic Preparedness Program) project focused on rapid pandemic response. Royalty fees are recorded when the third-party sale occurs.

Research and development expenses. Research and development expenses primarily consist of salaries, benefits, incentive compensation, stock-based compensation, laboratory supplies and materials expenses for employees and contractors engaged in research and product development. These expenses are exclusive of depreciation, amortization, and impairment. Research and development activities consist of discovery research for partners as well as internal development of our discovery and development engine. We derive improvements to our discovery and development engine from both types of activities. We have not historically tracked our research and development expenses on a partner-by-partner basis or on a product candidate-by-product candidate basis.

We expect to continue to incur substantial research and development expenses as we conduct discovery research for our partners and our internal programs. In addition, we plan to continue to invest in research and development to enhance our solutions and offerings to our partners, including continuing to hire additional employees and continuing research and development projects obtained through strategic technology acquisitions. As a result, we expect that our research and development expenses will continue to increase in absolute dollars in future periods and vary from period to period as a percentage of revenue.

Sales and marketing expenses. Our sales and marketing expenses consist primarily of salaries, benefits, incentive compensation and stock-based compensation costs for employees within our commercial sales functions, as well as marketing, travel expenses, and information technology costs that are directly associated with sales and marketing efforts, such as client relationship management tools and other information technology data tools to provide insight into market segments and trends. We expect our sales and marketing expenses to increase in absolute dollars as we expand our commercial sales, marketing and business development teams; increase our presence globally; and increase marketing activities to drive awareness and adoption of our discovery and development engine. While these expenses may vary from period to period as a percentage of revenue, we expect these expenses to increase as a percentage of sales in the short term as we continue to grow our commercial organization to drive anticipated growth in the business.

General and administrative expenses. General and administrative expenses primarily consist of salaries, benefits, incentive compensation and stock-based compensation costs for employees in our executive, accounting and finance, office administration, legal and human resources functions as well as professional services fees, such as consulting, audit, tax and legal fees, general corporate costs and allocated overhead expenses. General and administrative expenses also include all rent and facilities expenses for all employees, regardless of department or function. We expect that our general and administrative expenses will continue to increase in absolute dollars in future periods, primarily due to increased headcount to support continued growth in the business. We expect these expenses to vary from period to period as a percentage of revenue.

Depreciation, amortization, and impairment. Depreciation expense consists of the depreciation of property and equipment used actively in the business. Amortization expense and impairment includes the amortization of intangible assets over their respective useful lives and impairment of certain IPR&D as further described in our notes to the consolidated financial statements.

Other (Income) Expense

Interest income. Interest income consists primarily of interest earned on cash, cash equivalent, and marketable securities balances.

Interest and other. Interest and other consists primarily of financing fees, fair value adjustments of contingent consideration and marketable securities, and includes foreign exchange gains or losses due to fluctuations in exchange rates from the jurisdictions that we operate in against the U.S. dollar.

Grants and incentives. Grants and incentives include cost recovery on activities that qualified for approved projects supported by grant funding or tax credits. Grants primarily include the benefit from programs administered by the Canadian government's Ministry of Innovation, Science and Economic Development, and Strategic Innovation Fund. To the extent that grant funding covers capital expenditures, a deferred credit is recorded on the balance sheet and recognized ratably over the benefit period of the related expenditure for which the grant was intended to compensate.

Tax credits include benefits from the Canadian Scientific Research and Experimental Development, or SR&ED, program, the Australian R&D Tax Incentive program and U.S. federal and state research and experimentation tax credits. Where we qualify for refundable tax credits, these are included in grants and incentives in the year the qualifying expenditure is made. Non-refundable tax credits are recognized as a reduction to income tax expense in the year they are earned and are included in a note in the consolidated financial statements. We expect to continue to benefit from these tax programs in the future.

Results of Operations

Comparison of the Years Ended December 31, 2021 and 2022

Revenue

	Year Ended December 31,		Change	
	2021	2022	Amount	%
Revenue				
Research fees	\$ 19,076	\$ 40,802	\$ 21,726	114%
Licensing revenue	20,778	696	(20,082)	(97)%
Milestone payments	8,000	900	(7,100)	(89)%
Royalty revenue	327,349	443,026	115,677	35%
Total revenue	\$ 375,203	\$ 485,424	\$ 110,221	29%

Revenue increased by \$110.2 million from the year ended December 31, 2021, compared to the year ended December 31, 2022. The increase was driven primarily by a \$115.7 million increase in royalty revenue that is directly associated with the specified percentage of proceeds that Lilly received from the sales of bebtelovimab to the U.S. Government and commercially. Further, significant growth in partnered program starts and a continued increase in programs under contract contributed to an increase of \$21.7 million in non-COVID discovery programs. The increase in revenue was partially offset by a decrease of \$20.1 million in licensing revenue related to the Trianni platform and reduced milestone achievements within the year.

Operating Expenses

Royalty fees

	Year Ended December 31,		Change	
	2021	2022	Amount	%
Royalty fees	\$ 45,516	\$ 66,436	\$ 20,920	46%

Royalty fees were \$45.5 million and \$66.4 million for the years ended December 31, 2021, and December 31, 2022, respectively. Royalty fees were attributable to the royalty revenues received by the Company from sales of bamlanivimab and bebtelovimab by Lilly due to AbCellera's collaborations in pandemic response.

Research and Development

	Year Ended December 31,		Change	
	2021	2022	Amount	%
Research and development	\$ 62,062	\$ 107,879	\$ 45,817	74%

Research and development expenses increased by \$45.8 million, or 74%, from the year ended December 31, 2021, compared to the year ended December 31, 2022, reflecting continuing strong investments in the capacity and capabilities of AbCellera's discovery and development engine. \$17.0 million of the increase is due to the increase in compensation expense consistent with increased

headcount and \$8.8 million of the increase relates to stock-based compensation expense. \$20.0 million of the increase is attributed to an increase in research materials, supplies, software, facilities, and services used to execute on our research and development activities and strengthen our discovery and development engine.

Sales and Marketing

	Year Ended December 31,		Change	
	2021	2022	Amount	%
Sales and marketing	\$ 6,913	\$ 11,270	\$ 4,357	63%

Sales and marketing expenses increased by \$4.4 million, or 63%, from the year ended December 31, 2021, compared to the year ended December 31, 2022. The increase was primarily driven by \$4.0 million in total compensation expenses related to an increased headcount in business development and marketing teams and \$1.4 million in increased travel, advertising, and consulting costs. The increase was partially offset by \$0.8 million for a donation made in 2021 to Surrey Hospital to fund a study related to bamlanivimab in Canada.

General and Administrative

	Year Ended December 31,		Change	
	2021	2022	Amount	%
General and administrative	\$ 41,848	\$ 55,485	\$ 13,637	33%

General and administrative expenses increased by \$13.6 million, or 33%, from the year ended December 31, 2021, compared to the year ended December 31, 2022. \$9.1 million of the increase in general and administrative expense is related exclusively to the increase in stock-based compensation expense and a further \$5.3 million is related to increased compensation expense which was driven by increased headcount within the general and administrative function. \$2.6 million of the increase in general and administrative expense is due to increased expenditures related to rent and facilities expense, software, insurance premiums, and increased general office and expenses to support the growth of the Company. The increase was partially offset by a decrease of \$3.4 million in legal and accounting fees.

Depreciation, Amortization, and Impairment

	Year Ended December 31,		Change	
	2021	2022	Amount	%
Depreciation, amortization, and impairment	\$ 14,451	\$ 27,843	\$ 13,392	93%

Depreciation, amortization, and impairment expense increased by \$13.4 million, or 93%, from the year ended December 31, 2021, compared to the year ended December 31, 2022. An increase of \$8.4 million (or \$6.3 million, net of deferred income tax) relates to a full impairment charge of the carrying value of one distinct program from our suite of next-generation mice acquired through our 2020 Trianni acquisition. The discontinuance of this specific mouse program does not have an impact on the validity and continued development of our remaining suite of next-generation transgenic humanized mice and does not impact our business model and ability to deliver on our antibody discovery and development engine. The remaining \$5.0 million increase relates to additions of \$14.3 million of property and equipment and intangible assets purchased in the year, depreciating and amortizing over their respective useful lives.

Other (Income) Expense

Interest (Income)

	Year Ended December 31,		Change	
	2021	2022	Amount	%
Interest (income)	\$ (3,330)	\$ (16,079)	\$ (12,749)	383%

Interest income increased by \$12.7 million, or 383%, from the year ended December 31, 2021, compared to the year ended December 31, 2022. The increase was primarily driven by an increase in interest rates, a larger average cash and cash equivalents and marketable securities balances maintained in the year ended December 31, 2022, compared to the prior period.

Interest and Other

	Year Ended December 31,		Change	
	2021	2022	Amount	%
Interest and other	\$ 6,080	\$ 4,045	\$ (2,035)	(33)%

Interest and other decreased by \$2.0 million, or 33% from the year ended December 31, 2021, compared to the year ended December 31, 2022. The \$1.9 million decrease was attributed to a decrease in other expenses and an increase in other income. Foreign exchange gains due to fluctuations in the Canadian and U.S. dollar exchange rate was offset by fair value adjustments related to contingent consideration and held-for-trading marketable securities due to an increase in interest rates in the period.

Grants and Incentives

	Year Ended December 31,		Change	
	2021	2022	Amount	%
Grants and incentives	\$ (17,486)	\$ (10,554)	\$ 6,932	(40)%

Grants and incentives decreased by \$6.9 million, or 40%, from the year ended December 31, 2021, compared to the year ended December 31, 2022. The decrease was primarily driven by a decrease in activity relating to research and development expenditures that are eligible for the SIF project.

Income Tax Expense

	Year Ended December 31,		Change	
	2021	2022	Amount	%
Income tax expense	\$ 65,685	\$ 80,580	\$ 14,895	23%

Income taxes increased by \$14.9 million, or 23%, from the year ended December 31, 2021, compared to the year ended December 31, 2022. For the year ended December 31, 2022, our provision for income taxes is \$80.6 million primarily relating to current net earnings and partly offset by deferred income taxes due to timing of differences between accounting net income and taxable income.

Comparison of the Years Ended December 31, 2020 and 2021

Revenue

	Year Ended December 31,		Change	
	2020	2021	Amount	%
Revenue				
Research fees	\$ 19,848	\$ 19,076	\$ (772)	(4)%
Licensing revenue	-	20,778	20,778	N/A
Milestone payments	15,000	8,000	(7,000)	(47)%
Royalty revenue	198,307	327,349	129,042	65%
Total revenue	\$ 233,155	\$ 375,203	\$ 142,048	61%

Revenue increased by \$142.0 million from the year ended December 31, 2020 to the year ended December 31, 2021. In 2021, we received milestone revenue upon the first commercial sale in Europe by Lilly relating to molecule bamlanivimab for treatment of COVID-19 in the amount of \$7.0 million and \$1.0 million in milestone payments from Trianni licenses. Royalty revenue of \$327.3 million for the year ended December 31, 2021 are directly associated with the specified percentage of proceeds that Lilly received from the sales of bamlanivimab. We earned \$20.8 million in licensing revenue related to the Trianni humanized rodent platform business. The significant growth we delivered in partnered program starts drove higher research fees in the year on non-COVID-19 discovery programs, offset by fees earned last year against our COVID-19 discovery program leading to a net decrease in research fees of \$0.8 million.

Operating Expenses

Royalty fees

	Year Ended December 31,		Change	
	2020	2021	Amount	%
Royalty fees	\$ 27,143	\$ 45,516	\$ 18,373	68%

Royalty fees increased by \$18.4 million from the year ended December 31, 2020 to the year ended December 31, 2021. Royalty fees are directly attributable to the royalty revenues received by the Company from sales of bamlanivimab by Lilly due to AbCellera's collaborators in pandemic response.

Research and Development, Exclusive of Depreciation, Amortization, and Impairment

	Year Ended December 31,		Change	
	2020	2021	Amount	%
Research and development	\$ 29,393	\$ 62,062	\$ 32,669	111%

Research and development expenses increased by \$32.7 million, or 111%, from the year ended December 31, 2020 to the year ended December 31, 2021 reflecting continuing strong investments in the capacity and capabilities of AbCellera's antibody discovery and development engine. \$13.2 million of the increase is due to the increase in compensation expense consistent with increased headcount. \$10.2 million of the increase relates to stock-based compensation expense. \$13.6 million of the increase is attributed to an increase in facilities, research materials, supplies and services consistent with the overall increase in research and development activities. The overall increase was partly offset by the decrease in IPR&D expense of \$4.2 million attributable to the 2020 purchase of the OrthoMab bispecific platform, and licensing fees incurred during the prior period.

Sales and Marketing

	Year Ended December 31,		Change	
	2020	2021	Amount	%
Sales and marketing	\$ 3,842	\$ 6,913	\$ 3,071	80%

Sales and marketing expenses increased by \$3.1 million, or 80%, from the year ended December 31, 2020 to the year ended December 31, 2021. The increase was primarily driven by increased headcount in business development and marketing staff which resulted in an increase of \$1.5 million in compensation expenses. \$0.8 million of the increase is attributable to a donation made to Surrey Hospital to fund a study related to bamlanivimab in Canada. The remaining increase of \$0.5 million is attributable to increased recruiting and consulting fees.

General and Administrative

	Year Ended December 31,		Change	
	2020	2021	Amount	%
General and administrative	\$ 11,910	\$ 41,848	\$ 29,938	251%

General and administrative expenses increased by \$29.9 million, or 251%, from the year ended December 31, 2020 to the year ended December 31, 2021. \$11.7 million of the increase in general and administrative expense is related to the increased impact of non-cash stock-based compensation expense. \$4.1 million of the increase is related to increased compensation expense, excluding stock-based compensation, which was driven by increased headcount within the general and administrative function. \$7.3 million is attributable to legal fees and other corporate matters relating to being a public company and protecting our intellectual property. \$6.7 million of the increase in general and administrative expense is due to increased expenditures related to rent and facilities expense, software, insurance premiums, and increased general office and expenses to support the growth of the Company.

Depreciation and Amortization

	Year Ended December 31,		Change	
	2020	2021	Amount	%
Depreciation and amortization	\$ 4,836	\$ 14,451	\$ 9,615	199%

Depreciation and amortization expense increased by \$9.6 million, or 199%, from the year ended December 31, 2020 to the year ended December 31, 2021. Depreciation expense increased by \$2.1 million due to the depreciation of equipment and facilities related to capital equipment purchases of \$8.4 million in the year. Amortization expense increased by \$7.5 million due to the amortization of acquired intangible assets over their respective useful lives.

Other (Income) Expense

Interest (Income)

	Year Ended December 31,		Change	
	2020	2021	Amount	%
Interest income	\$ (293)	\$ (3,330)	\$ (3,037)	1037%

Interest income increased by \$3.0 million, or 1037%, from the year ended December 31, 2020 to the year ended December 31, 2021. The increase was primarily driven by a larger average cash and cash equivalents balances maintained in the year ended December 31, 2021 compared to the prior period.

Interest and Other Expense

	Year Ended December 31,		Change	
	2020	2021	Amount	%
Interest and other	\$ 6,811	\$ 6,080	\$ (731)	(11)%

Interest and other expense decreased by \$0.7 million, or 11% from the year ended December 31, 2020, to the year ended December 31, 2021. \$4.9 million of the decrease relates to combined interest, and cancellation fees and legal fees on early retirement of the OrbiMed credit agreement in July 2020, in addition to interest expense on the credit facility for the period before retirement. This was offset by a \$3.4 million increase in fair value adjustments of contingent consideration and investments and \$0.6 million foreign exchange (gain) loss driven primarily by foreign denominated cash balances that we maintain and the relative exchange rates against the U.S. dollar.

Grants and Incentives

	Year Ended December 31,		Change	
	2020	2021	Amount	%
Grants and incentives	\$ (8,320)	\$ (17,486)	\$ (9,166)	110%

Grants and incentives increased by \$9.2 million, or 110%, from the year ended December 31, 2020 to the year ended December 31, 2021. The increase was primarily driven by an increase in activity relating to research and development expenditures that are eligible for the SIF project.

Income Tax Expense

	Year Ended December 31,		Change	
	2020	2021	Amount	%
Income taxes	\$ 38,915	\$ 65,685	\$ 26,770	69%

Income taxes increased by \$26.8 million, or 69%, from the year ended December 31, 2020, to the year ended December 31, 2021. For the year ended December 31, 2021, our provision for income taxes is \$65.7 million primarily relating to current net earnings and partly offset by deferred income taxes due to timing of differences between accounting net income and taxable income.

Liquidity and Capital Resources

As of December 31, 2022, we had \$886.5 million of cash, cash equivalents, and marketable securities, comprised of \$386.5 million in cash and cash equivalents and \$500.0 million in marketable securities. The increase of \$163.5 million since December 30, 2021, was primarily from cash flow from operations and driven by the receipt of accounts receivable relating to royalties from bamlanivimab and bebtelovimab in the year ended December 31, 2022.

We have generated positive operating cash flow cumulatively since our inception in 2012 and in every year since 2018. We intend to significantly invest in our business, and as a result may incur operating losses in future periods. We will continue to invest in research and development efforts towards expanding our capabilities and expertise along our discovery and development engine, the building of our business development team and marketing our solutions to new and existing partners, and the expansion of our future office headquarters, and related infrastructure, including execution of long-term office-lease arrangements. Based on our current business plan, we believe that our existing cash, cash equivalents, marketable securities, and anticipated cash flows from operations, will be sufficient to meet our working capital and capital expenditure needs and do not anticipate the need of external funding over at least the next 36 months following the date of this report.

Sources of Liquidity

Since our inception, we have financed our operations primarily from revenue in the form of research fees, milestone payments, and royalty payments from partners, government grants, and debt and equity financings.

Government of Canada's Strategic Innovation Fund

In 2020, we entered into a multi-year agreement with the Canadian government's Strategic Innovation Fund, or SIF. Under this agreement, up to CAD \$175.6 million (\$129.7 million as of December 31, 2022) was committed by the Government of Canada to be directed towards two key stages of a project.

The first stage will provide financial support to our operations during the work that we perform for the discovery of antibodies against COVID-19. The funding supports investment into equipment, teams and physical space to advance our discovery and development engine for future pandemic preparedness. The Canadian government has committed up to CAD \$63.9 million (\$47.2 million as of December 31, 2022) towards this stage of the project, based on costs incurred and paid and such funding is non-repayable. As of December 31, 2022, we have claimed a total of \$46.1 million under this first stage of the project.

The second stage of the project is intended to fund the expansion of research and development; building out process development and chemistry, manufacturing and control, or CMC, capabilities; constructing a facility for GMP manufacturing; and all related supporting laboratory and office requirements. The project related budget includes project costs for the land and building, the fit out for offices, labs, GMP cleanrooms as well as the equipment required to develop fully functional CMC and GMP capabilities as required to support clinical trials. The Canadian government has committed up to CAD \$111.7 million (\$82.5 million as of December 31, 2022) for this project, contingent upon costs incurred and paid, with the rest to be co-funded by us through partnering with a developer and taking a co-ownership position in the resulting facilities. SIF funding for this project started in 2021 and is expected to continue through to 2025. Repayment is conditional on achieving certain revenue threshold over a seven year period from the time of completion of the funded project and is calculated as a percentage rate of the Company's revenue, with payment made to the Government of Canada on an annual basis during the repayment period of fifteen years. If the revenue threshold is not met, the SIF funding contribution will be non-repayable. This funding and its associated conditional repayment is not secured by any of our assets or that of the project, and includes certain non-financial covenants and restrictive covenants on dividend payments or other shareholder distributions that would prevent the Company in satisfying its obligations under the arrangement. As of December 31, 2022, we have claimed a total of \$33.2 million under this second stage of the project. No amounts have been accrued related to the repayment terms as the conditions are estimated to be non-probable as of December 31, 2022.

We conduct work, incur expenses, and fund all costs from our own cash resources. On a quarterly basis, we submit claims to the SIF for eligible reimbursable expenses. For the year ended December 31, 2022, we claimed a total of \$18.9 million under SIF.

Cash Flows

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

	Year Ended December 31,		
	2020	2021	2022
Net cash provided by (used in):			
Operating activities	\$ 22,690	\$ 244,584	\$ 277,360
Investing activities	(119,780)	(332,247)	(352,625)
Financing activities	683,653	(3,886)	(1,628)
Effect of exchange rate changes on cash and cash equivalents	—	(1,425)	(9,599)
Net increase (decrease) in cash and cash equivalents, and restricted cash	\$ 586,563	\$ (92,974)	\$ (86,492)

Operating Activities

Net cash provided by operating activities increased from \$244.6 million in the year ended December 31, 2021, to \$277.4 million in the year ended December 31, 2022. The increase resulted primarily from increased royalty revenues and receipt of accrued royalties receivable in the period, partially offset by an increase in expenditures that reflect AbCellera's investment in research and development and growth of the Company, in addition to payment for the Company's income taxes liability.

Net cash provided by operating activities increased from \$22.7 million in the year ended December 31, 2020, to \$244.6 million in the year ended December 31, 2021. The increase resulted primarily from increased revenue from royalty and licensing streams, satisfaction of clinical milestones under our partnership with Lilly, and continued discovery research activities, as well as upfront payments from securing new multi-year, multi-target contracts with partners.

Investing Activities

Net cash used in investing activities increased from \$332.2 million in the year ended December 31, 2021, to \$352.6 million in the year ended December 31, 2022. The increase in investing activities in 2022 was attributed to the purchase of property and equipment to facilitate the growth of the Company, including the purchase of land related to our future GMP facility, in addition to the purchase of intangible assets and marketable securities. There were no acquisitions in the period and a decrease in the total receipt of grant funding in the 2022 from the prior year due to a decrease in SIF-eligible research and development activities performed in the period.

Net cash used in investing activities increased from \$119.8 million in the year ended December 31, 2020, to \$332.2 million in the year ended December 31, 2021. The increase in investing activities during 2021 were directly attributed to our investment in marketable securities in addition to real estate, particularly our land purchase related to our future GMP facility. Additional investing activities during the period were related to facilities and equipment expenditures in our Vancouver offices, the acquisition of TetraGenetics, and investment in equity accounted investees, offset by grant funding received in the period.

Financing Activities

Net cash used in financing activities decreased from \$3.9 million for the year ended December 31, 2021, to net cash used in financing activities of \$1.6 million for the year ended December 31, 2022. This was primarily due to no contingent consideration payments made or long-term debt repaid in 2022.

Net cash provided by financing activities decreased from \$683.7 million for the year ended December 31, 2020, to net cash used by financing activities of \$3.9 million for the year ended December 31, 2021. This was primarily due to proceeds from Series A2 financing, convertible debentures, and common stock from the IPO in 2020.

Contractual Obligations and Commitments

The following table summarizes our commitments to settle contractual obligations as of December 31, 2022, other than leases which are recognized as operating lease liabilities in our consolidated balance sheets:

	Total	Payments Due by Period			
		Less than 1 year	1 to 3 Years	3 to 5 Years	More than 5 years
Commitments(1)	163,225	-	6,761	13,522	142,942
Royalty fees payable	19,347	19,347	-	-	-
Contingent consideration payable(2)	60,265	44,211	10,832	2,240	2,982
Total	\$ 242,837	\$ 63,558	\$ 17,593	\$ 15,762	\$ 145,924

(1) Includes leased facility where the lease commencement date is subsequent to December 31, 2022.

(2) As of December 31, 2022, the contingent consideration payable had an estimated fair value of approximately \$60.3 million, which has been included as a liability on our consolidated balance sheets.

(3) Excludes financial arrangements disclosed in Note 9 and Note 13 to our audited consolidated financial statements.

The commitment amounts in the table above are associated with contracts that are enforceable and legally binding and that specify all significant terms, including fixed or minimum services to be used, fixed, minimum or variable price provisions, and the approximate timing of the actions under the contracts.

Purchase and Other Obligations

In the normal course of business, we enter into contracts with third parties for research and development supplies and other services. These contracts generally do not contain minimum purchase commitments and are cancellable contracts. These payments are not included in the table above as the amount and timing of such payments are not known as of December 31, 2022.

The Company may enter into certain agreements with strategic partners in the ordinary course of operations that may include contractual milestone payments related to the achievement of pre-specified research, development, regulatory and commercialization events and indemnification provisions, which are common in such agreements. Pursuant to the agreements, the Company may be obligated to make research and development and regulatory milestone payments upon the occurrence of certain events and upon receipt of royalty payments in the low single-digits to mid-twenties based on certain net sales targets. Other than the amounts included in the above table, these contingent future payments are not included in the table above as they entail uncertainties in relation to the amount and timing of such payments as they are contingent upon future events, such as achieving certain commercial milestones or generating future product sales.

Berkeley Lights Litigation

See Item 3 “Legal Proceedings” for detailed information. The timing of the incurrence of legal expenses relating to pending litigation is difficult to predict and the outcome of litigation is inherently uncertain. Related costs and outcomes could materially affect our financial condition and operating results in future periods.

Critical Accounting Policies and Estimates

We have prepared our consolidated financial statements in accordance with U.S. GAAP. Our preparation of these consolidated financial statements requires us to make estimates, assumptions and judgments that affect the reported amounts of assets, liabilities, revenue, expenses and related disclosures. We evaluate our estimates and judgments on an ongoing basis. We base our estimates on historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results could therefore differ materially from these estimates under different assumptions or conditions.

While our significant accounting policies are described in more detail in Note 3 to our audited consolidated financial statements, we believe the following accounting policies to be critical to the judgments and estimates used in the preparation of our consolidated financial statements.

Revenue Recognition

Our revenue primarily consists of research fees, licensing revenue, milestone payments and royalty revenue, which are generated through our performance of antibody discovery research for our partners, and licensing revenue, which we generated from our Trianni humanized rodent platform. Promised deliverables to our global partners include research and development and licenses. The Company applied ASC 606 to all arrangements to date.

We recognize revenue when we satisfy the performance obligations under the terms of a contract and control of our services is transferred to our customers in an amount that reflects the consideration we expect to receive from our customers in exchange for those services.

When applying the revenue recognition criteria of ASC 606 to research fees and milestone payments, management may apply significant judgment when evaluating whether contractual obligations represent distinct performance obligations, including whether options for additional goods or services represent a material right; allocating the transaction price to performance obligations within a contract; and assessing the recognition and possible future reversal of variable consideration.

Research Fees. The transaction price generally includes fixed fees due at contract inception as well as fixed fees payable at the beginning and end of different phases of the discovery research services performed. Revenue is recognized based on the amount of the transaction price that is allocated to each respective performance obligation when or as the performance obligation is satisfied by transferring a promised good and/or service to the customer. We allocate the transaction price to each distinct performance obligation identified in the contract based on relative observable standalone selling prices.

Licensing Revenue. For the licenses of our intellectual property the Company recognizes revenue from non-refundable, upfront fees when the license is transferred to the customer and the customer is able to use and benefit from the license.

Milestone Payments. At the inception of the arrangement and at each reporting date thereafter, we evaluate whether the associated event is considered probable of achievement and estimate the amount to be included in the transaction price using the most likely amount method. Whether the criteria for achieving the milestone payments will be met in the future is highly uncertain. Consequently, there is a significant risk that we may not earn all of the milestone payments from each of our arrangements. This uncertainty is considered resolved when the associated event giving rise to the milestone payment occurs.

Royalty Revenue. Royalty revenue is recognized in the period in which the obligation is satisfied and the corresponding sales by our corporate partners occur. The sales are based on sales data reported by our partners. Differences between actual and estimated royalty revenue will be adjusted for in the period in which they become known, which is generally expected to be the following quarter.

Business Combination, Goodwill and Intangible Assets

Acquisitions of businesses are accounted for using the acquisition method. The consideration of a business combination is measured, at the date of the exchange, as the aggregate of the fair value of assets given, liabilities incurred or assumed and equity instruments issued by us to the former owners of the acquiree in exchange for control of the acquiree. Acquisition related costs incurred for the business combination are expensed. The acquiree's identifiable assets, liabilities and contingent liabilities are recognized at their fair value at the acquisition date.

Goodwill arising on acquisition is recognized as an asset and initially measured at cost, being the excess of the consideration of the acquisition over our interest in the fair value of the net identifiable assets, liabilities and contingent liabilities recognized. If our interest in the fair value of the acquiree's net identifiable assets, liabilities and contingent liabilities exceeds the cost of the acquisition, the excess is recognized in earnings or loss immediately. Goodwill, which is not amortized, will be evaluated for impairment on an annual basis on October 1 or more frequently if an indicator of impairment is present.

As part of our acquisitions of Trianni in 2020, and TetraGenetics in 2021, Goodwill, License, Technology and In-Process Research and Development Intangible ("IPR&D") intangible assets were recognized. IPR&D is classified as indefinite-lived, is not amortized, and is evaluated for impairment on an annual basis on October 1 or more frequently if an indicator of impairment is present. IPR&D becomes definite-lived upon the completion or abandonment of the associated research and development efforts. To test our IPR&D for impairment we first perform a qualitative assessment to determine if it is more likely than not that the carrying amount of our indefinite-lived intangible assets exceeds its fair value. If it is, a quantitative assessment is required. Based on our qualitative assessment, other than for an impairment associated to one of our IPR&D assets as described in the notes to the consolidated financial statements, we determined there were no potential indicators of impairment of our remaining indefinite-lived intangible assets as of October 1, 2022 and during the remainder of 2022.

For our annual goodwill impairment test, we begin with a qualitative assessment to determine whether a quantitative impairment test is necessary. If we determine, after performing an assessment based on the qualitative factors, that the fair value of the reporting unit is more likely than not less than the carrying amount, or that a fair value of the reporting unit substantially in excess of the carrying amount cannot be assured, then a quantitative impairment test would be performed. The quantitative test for impairment requires us to make judgments relating to future cash flows, growth rates and economic and market conditions. These evaluations are based on determining the fair value of the reporting unit using a valuation method such as discounted cash flow or a relative, market-based approach. At October 1, 2022, we performed a qualitative assessment for our annual impairment test of goodwill after concluding that it was not more likely than not that the fair value of the reporting unit was less than its carrying value. Consequently, the quantitative impairment test was not required. The Company concluded that there were no impairment indicators related to goodwill during the remainder of 2022.

As part of our ongoing planned research and development and execution of our programs under contract, changes to our plans due to internal and external factors out of our control could impact the amount and timing of projected future cash flows. As a result, these unplanned changes could result in us performing a quantitative impairment test in the future, which could result in a potential non-cash impairment charge associated with our goodwill or intangible assets, which would reduce our future earnings.

In connection with our acquisition of Trianni, we may be required to make future payments to former shareholders of Trianni upon the achievement of certain earn-out provisions related to a specific customer license ending on April 9, 2024. As of December 31, 2022, the contingent consideration payable had an estimated fair value of approximately \$23.5 million, of which \$12.9 million is a short-term liability and 10.6 million is a long-term liability on our consolidated balance sheets. In connection with our acquisition of TetraGenetics, contingent consideration payable at December 31, 2022, is \$36.8 million, of which \$31.3 million is a short-term liability and \$5.5 million is a long-term liability on our consolidated balance sheets. Contingent consideration payable is a

financial liability and measured at its fair value at each reporting period, with any changes in fair value from the previous reporting period recorded in the statements of income and comprehensive income.

In estimating the fair value of the intangible assets and contingent consideration, we applied an income approach based on the present value of the relevant future estimated after-tax cash flows. The key assumptions include the amount and timing of revenues, success probability, and discount rates. A 10% change in these key assumptions associated with the recognition of intangible assets and contingent consideration would not have a material impact on the amounts recognized.

See Note 20 to our consolidated financial statements for further information related to the accounting for the above acquisitions.

Stock-Based Compensation

We measure stock-based compensation based on the grant date fair value of the stock-based awards and recognize stock-based compensation expense on a straight-line basis over the requisite service period of the awards, which is generally the vesting period of the respective award. For non-employee awards, compensation expense is recognized as the services are provided, which is generally ratably over the vesting period. Awards with an exercise price which is not denominated in: (a) the currency of a market in which a substantial portion of our equity securities are traded, (b) the currency in which the individual's pay is denominated, or (c) our functional currency, are classified as liabilities, and are subsequently re-measured to fair value at each balance sheet date until exercised or cancelled, with changes in fair value recognized as compensation cost for the period. As of December 31, 2021, and 2022, there were no liability classified options outstanding.

Stock-based compensation expense is classified in our consolidated statements of income and comprehensive income based on the function to which the related services are provided. We recognize stock-based compensation expense for the portion of awards that have vested. Forfeitures are accounted for as they occur.

The fair value of each option grant is estimated on the date of grant using the Black-Scholes option-pricing model, which requires inputs based on certain subjective assumptions, including the expected share price volatility, the expected term of the option, the risk-free interest rate for a period that approximates the expected term of the option, and our expected dividend yield.

Prior to our IPO, as there was no public market for our common shares, we determined the volatility for awards granted with reference to an analysis of reported data for a group of guideline companies that issued options with substantially similar terms. We expect to continue to do so until we have adequate historical data regarding the volatility of the trading price of our common shares on the Nasdaq Stock Market. The risk-free interest rate is determined by reference to government treasury yield curves in effect at the time of grant of the award for time periods approximately equal to the expected term of the award. The expected term represents the period that the stock-based awards are expected to be outstanding. We use the simplified method to determine the expected term, which is based on the average of the time-to-vesting and the contractual life of the options. We have not paid, and do not anticipate paying, dividends on our common shares; therefore, the expected dividend yield is assumed to be zero.

As there had been no public market for our common shares prior to our IPO, the historical estimated fair value of our common shares has been approved by our board of directors. Our board of directors determined the per-share fair value of our common shares in connection with option grants as equal to the per-share issuance price of our common shares in the then-most recent arms' length financing transaction, and when appropriate, considered our most recently available independent third-party valuations of common shares and our operating results and financial performance.

In accordance with the guidance outlined in the American Institute of Certified Public Accountants' Accounting and Valuation Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*, third-party valuation firms prepared valuations of our common shares. From November 2019 until March 2020, such valuations used a discounted cash flow, or DCF, analysis, which is based on management's projection of future revenues and costs. The future cash flows are adjusted to arrive at a risk-adjusted present-day value of the future cash flows and fair value of equity. From March 2020 to July 2020, such valuations used a methodology that calculated the implied total value of an enterprise by accounting for all share class rights and preferences, as of the date of the latest financing. The total equity value implied by this transaction was then applied in the context of an option pricing model to determine the value of each class of our shares. The analysis used an option pricing method, or OPM, which treats common shares and preferred shares as call options on the total equity value of a company, with exercise prices based on the value thresholds at which the allocation among the various holders of a company's securities changes. The OPM considers the preferred shareholders' liquidation preferences, participation rights, dividend policy and conversion rights to determine how proceeds from a liquidity event will be distributed among various ownership classes at a future date. A discount for lack of marketability of the common shares is then applied to arrive at an indication of value for the common shares. After July 2020, but prior to our IPO, such valuations estimated the enterprise value of our business using a hybrid approach in determining the fair value of our common shares that includes a probability-weighted expected return method, or PWERM and the OPM. Under a PWERM, the fair market value of our common shares is estimated based upon an analysis of future values for the enterprise assuming various future outcomes. Based on the timing

and nature of an assumed liquidity event in each scenario, a discount for lack of marketability would be applied to each scenario, as appropriate. The probability-weighted value of each expected outcome would then be used to arrive at an estimate of fair value per common share.

Our third-party valuation reports estimated a valuation of our common shares of \$1.24 per share as of June 30, 2020, \$2.37 per share as of September 30, 2020, and \$2.71 per share as of October 31, 2020. No third-party valuation report was prepared for any period after October 31, 2020.

In addition to considering the results of the third-party valuations, our board of directors considered various objective and subjective factors to determine the fair value of our common shares as of each grant date, which may be a date other than the most recent third-party valuation date, including:

- the prices at which we most-recently sold preferred shares and the superior rights and preferences of the preferred shares relative to our common shares at the time of each grant;
- the lack of liquidity of our equity as a private company;
- our stage of development and business strategy and the material risks related to our business and industry;
- our financial condition and operating results, including our levels of available capital resources and forecasted results;
- developments in our business, including the achievement of milestones such as entering into partnering agreements;
- the valuation of publicly traded companies in the life sciences, biopharmaceutical and healthcare technology sectors, as well as recently completed mergers and acquisitions of peer companies;
- any external market conditions affecting our industry, and trends within our industry;
- the likelihood of achieving a liquidity event for the holders of our preferred shares and holders of our common shares, such as an initial public offering, or IPO, or a sale of our company, given prevailing market conditions; and
- the analysis of IPOs and the market performance of similar companies in our industry.

For purposes of determining the fair value of our common shares for the awards granted in October 2020, we also considered the applicability of the following factors and determined not to assign probability weightings to the potential occurrence of such events for the reasons discussed below:

- The application by Lilly on October 7, 2020, of the EUA for the bamlanivimab single agent therapy to the FDA was not assigned a probability weighting due to the significant general risks and uncertainties in drug therapy applications with the FDA, in addition to the binary nature and outcome of the EUA application assessment. While we were aware that an EUA application was submitted to the FDA, we were not a party to the application, nor did we have control over its contents. In addition, we were not involved in any interactions with the FDA in relation to this application and therefore had little insight into the status of the application, the nature of any questions or comments raised by the agency in its review or any likelihood of the grant of the EUA.
- The October 28, 2020 announcement by Lilly of an agreement with the U.S. government to supply 300,000 vials of bamlanivimab for \$375.0 million for which we are eligible to receive royalties in the low- to mid-twenties was not assigned a probability weighting due to the substantial uncertainty as to the likelihood of receipt of the EUA that is a precondition for any sales of the antibody to occur and upon which our eligibility to receive royalties depends.
- The process of acquiring Trianni, Inc. was not assigned a probability weighting because the proposed acquisition was to be made at fair value of the net assets acquired, the acquisition was not completed until November 3, 2020, and not publicly announced until November 18, 2020. Until such announcement, we had no insight into market reaction to this acquisition and its perceived impact on our valuation.

The assumptions underlying these valuations represented management's best estimates, which involved inherent uncertainties and the application of management's judgment. As a result, if factors or expected outcomes change and we use significantly different assumptions or estimates, the fair value of our common shares and our stock-based compensation expense could be materially different.

- Stock options granted after October 2020 and prior to our IPO, had a per-share exercise price based on the factors described above. The EUA application for the bamlanivimab single agent therapy was granted by the FDA on November 9, 2020, and on December 2, 2020, the U.S. government announced the purchase of an additional 650,000 doses of bamlanivimab for \$812.5 million.

Following the completion of our IPO, the fair value of our common shares is determined based on the quoted market price of our common shares.

See Note 11 to our consolidated financial statements concerning additional stock-based compensation expense and certain specific assumptions we used in applying the Black-Scholes option pricing model to determine the estimated fair value of our stock options granted in the years ended December 31, 2020, 2021 and 2022.

Recent Accounting Pronouncements

See Note 4 to our annual consolidated financial statements appearing elsewhere in this Annual Report for a description of recent accounting pronouncements applicable to our consolidated financial statements.

Impact of COVID-19

Since the start of the COVID-19 pandemic, we have taken steps to protect our employees, business partners, vendors, and contractors. To address the multiple dimensions of the pandemic, we have been continuously monitoring the global situation, executing mitigation activities whenever and wherever required, and following guidance from provincial and federal health authorities.

The full extent to which the ongoing COVID-19 pandemic and related developments may affect the Company's future financial results and operations will depend on future developments which are difficult to predict. As of the date of these consolidated financial statements, the Company is not aware of any specific event or circumstance that would require the Company to update its estimates, assumptions and judgments or revise the carrying value of its assets or liabilities. Actual results could differ from these estimates, and any such differences may be material to the Company's consolidated financial statements.

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

Interest Rate Risk

As of December 31, 2022, we had cash and cash equivalents of \$386.5 million, restricted cash of \$28.1 million, and marketable securities of \$500.0 million, a majority of which was maintained in high credit quality and liquid held for trading marketable securities, bank accounts and term deposits. Our interest rate risk is affected by changes in the general level of interest rates, particularly because the majority of our investments are short-term in nature. Due to the short-term duration of our cash and cash equivalent holdings and marketable securities and the low risk profile of the marketable securities, a 10% change in interest rates would not have a material effect on the fair market value of cash, cash equivalents, restricted cash, and marketable securities. We also have the ability to hold the marketable securities until maturity, and therefore, the Company would not expect the Company's operating results or cash flows to be affected to any significant degree by the effect of a sudden change in market interest rates.

We are further exposed to the risk that the fair value of the contingent consideration payable, and operating lease liability will vary as a result of changes in market interest rates. In order to manage funding needs or capital structure goals, the Company may enter into arrangements that are subject to either fixed market interest rates set at the time of issue or floating rates determined by ongoing market conditions. Debt subject to variable interest rates exposes the Company to variability in interest expense, while debt subject to fixed interest rates exposes the Company to variability in the fair value of debt. To manage interest rate exposure, the Company accesses various sources of financing and manages borrowings in line with debt ratings, liquidity needs, maturity schedule, and currency and interest rate profiles.

Foreign Currency Risk

We are exposed to financial risks as a result of exchange rate fluctuations between the U.S. dollar and the Canadian dollar and the volatility of these rates. In the normal course of business, we earn revenue denominated in U.S. dollars and we incur expenses primarily in Canadian denominated, U.S. denominated and Australian denominated dollars. Our reporting currency is the U.S. dollar. We hold a majority of our cash in U.S. dollars. To date, we have not entered into any hedging arrangements with respect to foreign currency risk. As our international operations grow, we will continue to reassess our approach to manage our risk relating to fluctuations in currency exchange rates.

Inflation Risk

Inflation generally affects us by increasing our cost of labor, raw materials and supplies, and costs associated with the construction and purchases of equipment for our research and development facilities. We include assumptions of anticipated cost growth in the development of our cost of estimates, but if inflationary conditions continue over the long-term, our cost assumptions may not be sufficient to cover all cost escalation or may impact the availability of resources to execute on our operating goals on budget. If inflationary conditions continue to persist, our inability or failure to manage our costs could harm our business, financial condition, results of operations and cash flows. To the extent possible, we mitigate some inflation risk by negotiating longer-term agreements with our suppliers and contractors.

Item 8. Financial Statements and Supplementary Data.

The financial statements required to be filed pursuant to this Item 8 are appended to this report. An index of those financial statements is found in Item 15.

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

None.

Item 9A. Controls and Procedures.

Disclosure Controls and Procedures

Our “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, are designed to ensure that information required to be disclosed by an issuer in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures are designed to ensure that information required to be disclosed is accumulated and communicated to the issuer’s management, including its principal executive and principal financial officers, to allow timely decisions regarding required disclosure. The Chief Executive Officer (CEO) and the Chief Financial Officer (CFO), with assistance from other members of management, have reviewed the effectiveness of our disclosure controls and procedures as of December 31, 2022, and, based on their evaluation, have concluded that the disclosure controls and procedures were effective as of such date.

Management’s Annual Report on Internal Control Over Financial Reporting

Management of the Company is responsible for establishing and maintaining adequate internal controls over financial reporting for the Company as defined in Rule 13a-15(f) under the Exchange Act. The Company’s internal control over financial reporting is a process designed under the supervision of the Company’s CEO and CFO, overseen by the Company’s Board of Directors and implemented by the Company’s management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the financial statements for external purposes in accordance with U.S. generally accepted accounting principles, and the requirements of the SEC.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions or that the degree of compliance with policies and procedures may deteriorate.

Under the supervision of and with the participation of our management, we assessed the effectiveness of our internal control over financial reporting as of December 31, 2022, using the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control—Integrated Framework (2013). Based on this assessment, our management concluded that our internal control over financial reporting was effective as of December 31, 2022.

Attestation Report of Independent Registered Public Accounting Firm

The effectiveness of our internal control over financial reporting as of December 31, 2022, has been audited by KPMG LLP, an independent registered public accounting firm, as stated in their report included elsewhere in this Annual Report on Form 10-K.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting during the fourth quarter of 2022 that materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

Item 9B. Other Information.

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections.

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

The information required by this item will be included in our definitive proxy statement with respect to our 2023 Annual Meeting of Shareholders to be filed with the SEC and is incorporated herein by reference.

Item 11. Executive Compensation.

The information required by this item will be included in our definitive proxy statement with respect to our 2023 Annual Meeting of Shareholders to be filed with the SEC and is incorporated herein by reference.

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

The information required by this item will be included in our definitive proxy statement with respect to our 2023 Annual Meeting of Shareholders to be filed with the SEC and is incorporated herein by reference.

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

The information required by this item will be included in our definitive proxy statement with respect to our 2023 Annual Meeting of Shareholders to be filed with the SEC and is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services.

Our independent registered public accounting firm is KPMG LLP, Vancouver, BC, Canada, PCAOB Auditor ID 85.

The information required by this item will be included in our definitive proxy statement with respect to our 2023 Annual Meeting of Shareholders to be filed with the SEC and is incorporated herein by reference.

PART IV

Item 15. Exhibits, Financial Statement Schedules.

- (a) The following documents are filed as part of this Annual Report on Form 10-K:
 - 1) The consolidated financial statements filed as part of this Annual Report on Form 10-K are listed in the “Index to Consolidated Financial Statements” under Part II, Item 8 of this Annual Report on Form 10-K.
 - 2) No schedules are submitted because they are not applicable, not required or because information is included in the consolidated financial statements or the notes thereto.
 - 3) The exhibits required by Item 601 of Regulation S-K and Item 15(b) of this Annual Report on Form 10-K are listed in the Exhibit Index immediately preceding the signature page of this Annual Report on Form 10-K. The exhibits listed in the Exhibit Index are incorporated by reference herein.

Item 16. Form 10-K Summary

None.

Exhibit Index.

Exhibit No.	Description
3.1	Articles of the Registrant, as currently in effect (incorporated by reference to Exhibit 3.1 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2020 filed on March 30, 2021).
4.1	Amended and Restated Investors Rights Agreement among the Registrant and certain of its shareholders, dated March 23, 2020 (incorporated by reference to Exhibit 4.1 of the Registrant's Registration Statement on Form S-1, as amended (File No. 333-250838) filed on November 20, 2020).
4.2	Form of Specimen Common Share Certificate (incorporated by reference to Exhibit 4.2 of the Registrant's Registration Statement on Form S-1, as amended (File No. 333-250838) filed on December 7, 2020).
4.3	Description of Securities (incorporated by reference to Exhibit 4.3 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2020 filed on March 30, 2021).
10.1	Lease between 0775021 BC Ltd. and the Registrant dated June 2, 2017, as amended (incorporated by reference to Exhibit 10.1 of the Registrant's Registration Statement on Form S-1, as amended (File No. 333-250838) filed on November 20, 2020).
10.2†	Research Collaboration and License Agreement between the Registrant and Eli Lilly and Company, dated March 11, 2020 (incorporated by reference to Exhibit 10.2 of the Registrant's Registration Statement on Form S-1, as amended (File No. 333-250838) filed on November 20, 2020).
10.3†	Patent License Agreement between the U.S. Department of Health and Human Services, as represented by National Institute of Allergy and Infectious Diseases and the Registrant, dated May 4, 2020 (incorporated by reference to Exhibit 10.3 of the Registrant's Registration Statement on Form S-1, as amended (File No. 333-250838) filed on November 20, 2020).
10.4†	License Agreement between the Board of Trustees of the Leland Stanford Junior University and Lineage Biosciences Inc., dated February 11, 2015 (incorporated by reference to Exhibit 10.4 of the Registrant's Registration Statement on Form S-1, as amended (File No. 333-250838) filed on November 20, 2020).
10.5†	Amendment No. 1 to License Agreement between the Board of Trustees of the Leland Stanford Junior University and Lineage Biosciences Inc., dated March 22, 2017 (incorporated by reference to Exhibit 10.5 of the Registrant's Registration Statement on Form S-1, as amended (File No. 333-250838) filed on November 20, 2020).
10.6†	License Agreement between the University of British Columbia and the Registrant dated December 16, 2013 (incorporated by reference to Exhibit 10.6 of the Registrant's Registration Statement on Form S-1, as amended (File No. 333-250838) filed on November 20, 2020).
10.7†	Strategic Innovation Fund Agreement between the Registrant and her Majesty the Queen in right of Canada as represented by the Minister of Industry, dated April 11, 2020 (incorporated by reference to Exhibit 10.7 of the Registrant's Registration Statement on Form S-1, as amended (File No. 333-250838) filed on November 20, 2020).

- 10.8# [Employment Agreement between the Registrant and Carl L. G. Hansen, Ph.D., dated August 1, 2019, as amended \(incorporated by reference to Exhibit 10.8 of the Registrant's Registration Statement on Form S-1, as amended \(File No. 333-250838\) filed on December 7, 2020\).](#)
- 10.9# [Employment Agreement between the Registrant and Andrew Booth, dated April 12, 2019 \(incorporated by reference to Exhibit 10.9 of the Registrant's Registration Statement on Form S-1, as amended \(File No. 333-250838\) filed on December 7, 2020\).](#)
- 10.10# [Employment Agreement between the Registrant and Tryn Stimart, dated July 10, 2019 \(incorporated by reference to Exhibit 10.10 of the Registrant's Registration Statement on Form S-1, as amended \(File No. 333-250838\) filed on December 7, 2020\).](#)
- 10.11# [Employment Agreement between the Registrant and Véronique Lecault, Ph.D., dated December 20, 2016, as amended \(incorporated by reference to Exhibit 10.11 of the Registrant's Registration Statement on Form S-1, as amended \(File No. 333-250838\) filed on December 7, 2020\).](#)
- 10.12# [Separation Agreement and Release among the Registrant, Neil Berkley and Lineage Biosciences, Inc. \(incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K, filed on July 19, 2022\).](#)
- 10.13# [Sixth Amended and Restated Stock Option Plan, and form of award agreement thereunder \(incorporated by reference to Exhibit 10.12 of the Registrant's Registration Statement on Form S-1, as amended \(File No. 333-250838\) filed on December 7, 2020\).](#)
- 10.14# [2020 Share Option and Incentive Plan and forms of award agreements thereunder \(incorporated by reference to Exhibit 10.13 of the Registrant's Registration Statement on Form S-1, as amended \(File No. 333-250838\) filed on December 7, 2020\).](#)
- 10.15# [Senior Executive Cash Incentive Bonus Plan \(incorporated by reference to Exhibit 10.14 of the Registrant's Registration Statement on Form S-1, as amended \(File No. 333-250838\) filed on December 7, 2020\).](#)
- 10.16# [2020 Employee Share Purchase Plan \(incorporated by reference to Exhibit 10.15 of the Registrant's Registration Statement on Form S-1 \(File No. 333-250838\) filed on December 7, 2020\).](#)
- 10.17# [Executive Severance Plan \(incorporated by reference to Exhibit 10.16 of the Registrant's Registration Statement on Form S-1, as amended \(File No. 333-250838\) filed on December 7, 2020\).](#)
- 10.18# [Form of Director and Officer Indemnification Agreement \(incorporated by reference to Exhibit 10.17 of the Registrant's Registration Statement on Form S-1 \(File No. 333-250838\) filed on December 7, 2020\).](#)
- 21.1* [Subsidiaries of the Registrant.](#)
- 23.1* [Consent of KPMG LLP, Independent Registered Public Accounting Firm](#)
- 31.1* [Certification of Chief Executive Officer required by Rule 13a-14\(a\) or Rule 15d-14\(a\) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.](#)
- 31.2* [Certification of Chief Financial Officer required by Rule 13a-14\(a\) or Rule 15d-14\(a\) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.](#)
- 32.1* [Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.](#)
- 32.2* [Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.](#)
- 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.
- 101.SCH* Inline XBRL Taxonomy Extension Schema Document
- 101.CAL* Inline XBRL Taxonomy Extension Calculation Linkbase Document

101.DEF* Inline XBRL Taxonomy Extension Definition Linkbase Document

101.LAB* Inline XBRL Taxonomy Extension Label Linkbase Document

101.PRE* Inline XBRL Taxonomy Extension Presentation Linkbase Document

104 Cover Page Interactive Data File (embedded within the Inline XBRL document)

* Filed herewith

† Portions of this exhibit (indicated by asterisks) have been omitted in accordance with the rules of the Securities and Exchange Commission.

Indicates a management contract or any compensatory plan, contract or arrangement.

SIGNATURES

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

ABCELLERA BIOLOGICS INC.

Date: February 21, 2023

By: /s/ Carl L. G. Hansen

Carl L.G. Hansen, Ph.D.

Chief Executive Officer

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

Name	Title	Date
/s/ Carl L. G. Hansen Carl L. G. Hansen, Ph.D.	Chief Executive Officer and Director (<i>Principal Executive Officer</i>)	February 21, 2023
/s/ Andrew Booth Andrew Booth	Chief Financial Officer (<i>Principal Financial Officer and Principal Accounting Officer</i>)	February 21, 2023
/s/ Véronique Lecault Véronique Lecault, Ph.D.	Chief Operating Officer and Director	February 21, 2023
/s/ Andrew Lo Andrew Lo, Ph.D.	Director	February 21, 2023
/s/ Michael Hayden Michael Hayden, Ph.D.	Director	February 21, 2023
/s/ John S. Montalbano John S. Montalbano	Director	February 21, 2023
/s/ Peter Thiel Peter Thiel	Director	February 21, 2023

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

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Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors AbCellera Biologics, Inc.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of AbCellera Biologics, Inc. and subsidiaries (the Company) as of December 31, 2022 and 2021, the related consolidated statements of income and comprehensive income, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2022, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2022, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 21, 2023 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Basis for Opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated 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 consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

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

Fair value of contingent consideration liability

As discussed in Note 20 to the consolidated financial statements, the Company completed a business combination with TetraGenetics, Inc. (TetraGenetics) in 2021. The purchase consideration for this business combination included contingent consideration consisting of potential milestone payments based on the achievement of specified technical milestones and additional development and commercial milestone payments related to successfully developed therapeutics. As discussed in Note 16 to the consolidated financial statements, contingent consideration related to a business acquisition is recorded at fair value on the acquisition date and adjusted on a recurring basis for changes in its fair value. As of December 31, 2022, the Company has a contingent consideration liability of \$36,760 thousand related to the TetraGenetics acquisition. The determination of the contingent consideration liability requires the Company to make significant estimates and assumptions.

We identified the assessment of the fair value of the contingent consideration liability associated with the TetraGenetics acquisition as a critical audit matter. Evaluating the key assumptions, including certain non-observable inputs such as the probabilities of successful achievement of technical, development, and commercial milestones and forecasted revenues involved complex and challenging auditor judgment. Changes in these key assumptions could have a significant impact on the measurement of the contingent consideration liability.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of an internal control related to the Company's process for determining the fair value of the contingent consideration liability, including the development of the key assumptions. We performed sensitivity analyses and assessed the impact of possible changes to the key assumptions on the fair value of the contingent consideration liability. We evaluated the probabilities of successful achievement of technical, development, and commercial milestones assumptions used in the Company's model by comparing them to relevant and reliable publicly available third-party data and studies. We evaluated the Company's forecasted revenues by comparing them to relevant and reliable third-party industry data.

/s/ KPMG LLP

Chartered Professional Accountants

We have served as the Company's auditor since 2017.

Vancouver, Canada
February 21, 2023

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors
AbCellera Biologics Inc.:

Opinion on Internal Control Over Financial Reporting

We have audited AbCellera Biologics, Inc.'s and subsidiaries (the Company) internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2022 and 2021, the related consolidated statements of income and comprehensive income, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2022, and the related notes (collectively, the consolidated financial statements), and our report dated February 21, 2023 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ KPMG LLP

Chartered Professional Accountants

Vancouver, Canada
February 21, 2023

AbCellera Biologics Inc.
Consolidated Balance Sheets
(All figures in U.S. dollars. Amounts are expressed in thousands except share data)

	December 31, 2021	December 31, 2022
Assets		
Current assets:		
Cash and cash equivalents	\$ 476,142	\$ 386,535
Marketable securities	246,835	499,950
Total cash, cash equivalents, and marketable securities	722,977	886,485
Accounts and accrued receivable	160,576	38,593
Restricted cash	25,000	25,000
Other current assets	21,247	75,413
Total current assets	<u>929,800</u>	<u>1,025,491</u>
Long-term assets:		
Property and equipment, net	111,616	217,255
Intangible assets, net	148,392	131,502
Goodwill	47,806	47,806
Investments in and loans to equity accounted investees	50,313	72,522
Other long-term assets	30,642	46,331
Total long-term assets	<u>388,769</u>	<u>515,416</u>
Total assets	<u>\$ 1,318,569</u>	<u>\$ 1,540,907</u>
Liabilities and shareholders' equity		
Current liabilities:		
Accounts payable and other liabilities	\$ 32,017	\$ 33,150
Current portion of contingent consideration payable	22,934	44,211
Income taxes payable	35,683	-
Accrued royalties payable	22,506	19,347
Deferred revenue	7,536	21,612
Total current liabilities	<u>120,676</u>	<u>118,320</u>
Long-term liabilities:		
Operating lease liability	36,413	76,675
Deferred revenue	27,409	19,516
Deferred grant funding	33,349	40,801
Contingent consideration payable	35,886	16,054
Deferred tax liability	37,370	33,178
Other long-term liabilities	1,733	3,086
Total long-term liabilities	<u>172,160</u>	<u>189,310</u>
Total liabilities	<u>292,836</u>	<u>307,630</u>
Commitments and contingencies		
Shareholders' equity:		
Common shares: no par value, unlimited authorized shares at December 31, 2021 and 2022: 283,257,104 and 286,851,595 shares issued and outstanding at December 31, 2021 and 2022 respectively	722,430	734,365
Additional paid-in capital	35,357	74,118
Accumulated other comprehensive income (loss)	280	(1,391)
Accumulated earnings	267,666	426,185
Total shareholders' equity	<u>1,025,733</u>	<u>1,233,277</u>
Total liabilities and shareholders' equity	<u>\$ 1,318,569</u>	<u>\$ 1,540,907</u>

Subsequent event

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

AbCellera Biologics Inc.
Consolidated Statements of Income and Comprehensive Income
(All figures in U.S. dollars. Amounts are expressed in thousands except share and per share data)

	Year Ended December 31,		
	2020	2021	2022
Revenue:			
Research fees	\$ 19,848	\$ 19,076	\$ 40,802
Licensing revenue	-	20,778	696
Milestone payments	15,000	8,000	900
Royalty revenue	198,307	327,349	443,026
Total revenue	233,155	375,203	485,424
Operating expenses:			
Royalty fees	27,143	45,516	66,436
Research and development ⁽¹⁾	29,393	62,062	107,879
Sales and marketing ⁽¹⁾	3,842	6,913	11,270
General and administrative ⁽¹⁾	11,910	41,848	55,485
Depreciation, amortization, and impairment	4,836	14,451	27,843
Total operating expenses	77,124	170,790	268,913
Income from operations	156,031	204,413	216,511
Other (income) expense			
Interest (income)	(293)	(3,330)	(16,079)
Interest and other	6,811	6,080	4,045
Grants and incentives	(8,320)	(17,486)	(10,554)
Total other income	(1,802)	(14,736)	(22,588)
Net earnings before income tax	157,833	219,149	239,099
Income tax expense	38,915	65,685	80,580
Net earnings	\$ 118,918	\$ 153,464	\$ 158,519
Foreign currency translation adjustment	-	280	(1,671)
Comprehensive income	\$ 118,918	\$ 153,744	\$ 156,848
 Net earnings per share attributable to common shareholders			
Basic	\$ 0.53	\$ 0.56	\$ 0.56
Diluted	\$ 0.45	\$ 0.48	\$ 0.50
 Weighted-average common shares outstanding			
Basic	159,195,023	275,763,745	285,056,606
Diluted	263,129,765	318,294,236	314,827,255

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

1Exclusive of depreciation, amortization, and impairment

AbCellera Biologics Inc.
Consolidated Statements of Stockholders' Equity
(All figures in U.S. dollars. Amounts are expressed in thousands except share data)

	Series A1 Preferred Shares		Series A2 Preferred Shares		Common Shares		Additional Paid-in Capital	Accumulated Earnings (Deficit)	Accumulated Other Comprehensive Income (Loss)	Total Shareholders' Equity	
December 31, 2019	Shares	Amount	Shares	Amount	Shares	Amount					
Issuance of Series A2 preferred shares	-	-	6,017,784	74,662	-	-	-	-	-	74,662	
Shares issued under stock option plan	-	-	-	-	2,719,882	1,450	(508)	-	-	942	
Stock-based compensation expense	-	-	-	-	-	-	4,127	-	-	4,127	
Issuance of common shares upon initial public offering, net of issuance costs of \$32,609 (net of tax \$8,462)	-	-	-	-	27,772,500	531,302	-	-	-	531,302	
Conversion of Series A1 and A2 preferred shares	(2,105,264)	(7,546)	(6,017,784)	(74,662)	81,230,480	82,208	-	-	-	-	
Conversion of convertible note	-	-	-	-	6,093,524	90,305	-	-	-	90,305	
Net earnings	-	-	-	-	-	-	-	118,918	-	118,918	
Balances as of December 31, 2020	-	\$	-	\$	-	269,497,768	\$ 710,387	\$ 5,919	\$ 114,202	\$ 830,508	
Shares issued under stock option plan and other	-	-	-	-	13,759,336	12,043	(5,477)	-	-	6,566	
Stock-based compensation expense	-	-	-	-	-	-	29,240	-	-	29,240	
Reclassification of liability classified options	-	-	-	-	-	-	5,675	-	-	5,675	
Foreign currency translation adjustment	-	-	-	-	-	-	-	-	280	280	
Net earnings	-	-	-	-	-	-	-	153,464	-	153,464	
Balances as of December 31, 2021	-	\$	-	\$	-	283,257,104	\$ 722,430	\$ 35,357	\$ 267,666	\$ 280	\$ 1,025,733
Shares issued and restricted stock units ("RSUs") vested under stock option plan	-	-	-	-	3,594,491	11,935	(10,720)	-	-	1,215	
Stock-based compensation expense	-	-	-	-	-	-	49,481	-	-	49,481	
Foreign currency translation adjustment	-	-	-	-	-	-	-	-	(1,671)	(1,671)	
Net earnings	-	-	-	-	-	-	-	158,519	-	158,519	
Balances as of December 31, 2022	-	\$	-	\$	-	286,851,595	\$ 734,365	\$ 74,118	\$ 426,185	\$ (1,391)	\$ 1,233,277

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

AbCellera Biologics Inc.
Consolidated Statements of Cash Flows
(Expressed in thousands of U.S. dollars)

	December 31, 2020	December 31, 2021	December 31, 2022
Cash flows from operating activities:			
Net earnings	\$ 118,918	\$ 153,464	\$ 158,519
Cash flows from operating activities:			
Depreciation of property and equipment	2,317	4,403	8,953
Amortization and impairment of intangible assets	2,519	10,062	18,890
Amortization of operating lease right-of-use assets	435	2,785	5,259
Stock-based compensation	8,397	30,646	49,481
Deferred tax expense	2,098	(2,018)	(2,114)
Other	4,707	3,570	8,547
Changes in operating assets and liabilities:			
Accounts and accrued research fees receivable	(5,467)	(37,386)	(22,715)
Accrued royalties receivable	(197,553)	59,864	129,171
Income taxes payable	36,412	(13,530)	(88,609)
Accounts payable and accrued liabilities	6,601	1,400	1,066
Operating lease liabilities	(350)	(778)	(3,064)
Deferred revenue	21,810	8,624	6,183
Accrued royalties payable	27,143	(4,637)	(3,160)
Deferred grant revenue	(6,763)	30,718	9,264
Other operating assets and liabilities	1,466	(2,603)	1,689
Net cash provided by operating activities	<u>22,690</u>	<u>244,584</u>	<u>277,360</u>
Cash flows from investing activities:			
Purchases of property and equipment	(9,673)	(58,452)	(70,660)
Purchase of intangible assets	(5,000)	-	(2,000)
Purchases of marketable securities	-	(274,710)	(763,982)
Proceeds from marketable securities	-	27,608	510,631
Receipt of grant funding	-	32,621	16,434
Acquisitions, net of cash acquired	(87,643)	(11,457)	-
Long-term investments and other	1,783	(17,534)	(17,369)
Investment in and loans to equity accounted investees	(19,247)	(30,323)	(25,679)
Net cash used in investing activities	<u>(119,780)</u>	<u>(332,247)</u>	<u>(352,625)</u>
Cash flows from financing activities:			
Repayment of long-term debt and contingent consideration	(19,942)	(4,373)	(323)
Proceeds from long-term debt and exercise of stock options	16,490	5,487	2,755
Proceeds from convertible debentures	89,990	-	-
Payment of liability for in-licensing agreement and other	(387)	(5,000)	(4,060)
Net proceeds from issuance of common shares	522,840	-	-
Proceeds from issuance of preferred shares - series A1 and A2 financing	74,662	-	-
Net cash provided by (used in) financing activities	<u>683,653</u>	<u>(3,886)</u>	<u>(1,628)</u>
Effect of exchange rate changes on cash and cash equivalents	-	(1,425)	(9,599)
Increase (decrease) in cash and cash equivalents	586,563	(92,974)	(86,492)
Cash and cash equivalents and restricted cash, beginning of year	7,553	594,116	501,142
Cash and cash equivalents and restricted cash, end of year	<u>\$ 594,116</u>	<u>\$ 501,142</u>	<u>\$ 414,650</u>
Restricted cash included within other current and other long-term assets	-	-	3,115
Total cash, cash equivalents, and restricted cash shown on the balance sheets	<u>\$ 594,116</u>	<u>\$ 501,142</u>	<u>\$ 411,535</u>
Supplemental disclosure of non-cash investing and financing activities:			
Property and equipment purchases in accounts payable	656	5,397	5,868
Right-of-use assets obtained in exchange for operating lease obligation	1,679	36,638	50,694
Purchase of intangible assets in exchange for in-licensing agreement payable	9,060	-	-

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

AbCellera Biologics Inc.
Notes to Consolidated Financial Statements
(Expressed in thousands of U.S. dollars except share and per share data)

1. Nature of operations

AbCellera Biologics Inc.'s (the "Company") mission is to bring better antibody drugs to patients faster, solve long-standing problems, and transform how antibody drugs are discovered. The Company aims to bring antibody therapeutics from target to clinic by combining expertise, technologies, and infrastructure to build an engine for antibody drug discovery and development. The Company uses the engine to work with partners to build a large and diversified portfolio of royalty (and equivalent) stakes in future antibody drugs. The Company partners with companies of all sizes - from innovative biotechnology companies to leading pharmaceutical companies - propelling programs to the clinic, together.

2. Basis of presentation

These consolidated financial statements are presented in U.S. dollars and have been prepared in accordance with generally accepted accounting principles in the United States of America ("U.S. GAAP"). All intercompany transactions and balances have been eliminated.

All amounts expressed in the consolidated financial statements of the Company and the accompanying notes thereto are expressed in thousands of U.S. dollars, except for share and per share data and where otherwise indicated. References to "\$" are to U.S. dollars and references to "C\$" and "CAD" are to Canadian dollars.

Initial public offering

The Company's registration statement on Form S-1 related to its initial public offering ("IPO") was declared effective on December 10, 2020, by the SEC, and the Company's common shares began trading on the Nasdaq on December 11, 2020. Upon close of the IPO, the Company sold 27,772,500 common shares at a price to the public of \$20.00 per share. The Company received gross proceeds of \$555.5 million, or aggregate net proceeds of \$522.8 million, after deducting offering costs, underwriting discounts and commissions.

Immediately prior to the completion of the IPO, all convertible preferred stock and notes then outstanding converted into an equivalent number of shares of common shares.

On December 4, 2020, the Board of Directors of the Company approved a 1-for-10 forward stock split of its issued and outstanding common shares and stock options, which was affected on December 4, 2020. All share and per share information in these consolidated financial statements has been retroactively restated to reflect the stock split.

3. Significant accounting policies

Principles of Consolidation

The consolidated financial statements include the accounts of the Company, its wholly-owned subsidiaries and variable interest entities ("VIE") when the Company possesses both (1) the power to direct the economically significant activities of the entity and (2) the obligation to absorb losses of, or the right to receive benefits from, the entity that could potentially be significant to that entity. Intercompany accounts and transactions have been eliminated.

In 2021, the Company entered into a participation agreement with a segregated accounts company for purposes of Director and Officer's insurance. The Company contributed \$25.0 million to the segregated account, representing the Company's maximum loss exposure under the participation agreement, for security for a letter of credit issued to a third-party insurer. As the funds cannot be transferred to other parts of the Company, the funds are presented in current assets on the consolidated balance sheets as Restricted Cash.

Use of estimates

The preparation of the consolidated financial statements in accordance with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Areas of significant estimates include, but are not limited to, revenue recognition including estimated timing of completion of performance obligations and

determining whether an option for additional goods or services represents a material right, the fair value of acquired intangible assets, and contingent consideration payable, and the estimates of stock-based compensation awards. The Company bases its estimates on historical experience, known trends and other market-specific or other relevant factors that it believes to be reasonable under the circumstances. On an ongoing basis, management evaluates its estimates when there are changes in circumstances, facts and experience. Changes in estimates are recorded in the period in which they become known. Actual results could significantly differ from those estimates.

COVID-19 Pandemic

The full extent to which the ongoing COVID-19 pandemic and related developments may affect the Company's future financial results and operations will depend on future developments which are difficult to predict. As of the date of these consolidated financial statements, the Company is not aware of any specific event or circumstance that would require the Company to update its estimates, assumptions and judgments or revise the carrying value of its assets or liabilities. Actual results could differ from these estimates, and any such differences may be material to the Company's consolidated financial statements.

Revenue recognition

The Company accounts for revenue from contracts with customers, which includes the identification and assessment of the goods and/or services promised within a contract to evaluate which promises are distinct from each other.

The terms of our arrangements generally include the payment of one or more of the following: (i) non-refundable, up-front fixed fees, (ii) fixed fees for 'discovery' research support, (iii) fixed technology assignment fees, (iv) fixed payments based on the achievement of specified development and/or commercial milestones, (v) royalties on net sales by the customer of licensed products, and in some cases, (vi) early termination penalties, and (vii) reimbursements for costs incurred to fulfill the contract with the customer at cost or at cost plus an agreed upon mark-up.

Promises that are not distinct at contract inception are combined into a single performance obligation. An option to acquire additional goods and/or services is evaluated on both quantitative and qualitative aspects to determine if such an option provides a material right to the customer that it would not have received without entering into the contract. If so, the option is accounted for as a separate performance obligation. If not, the option is considered a marketing offer and is accounted for as a separate contract upon the customer's election.

The transaction price generally includes fixed fees due at contract inception as well as fixed fees payable at the beginning and end of different phases of the discovery research support services performed. Where a fixed fee due at contract inception is an option to obtain additional goods or services and is considered to be a material right, we allocate the transaction price to the optional goods or services we expect to provide to the corresponding consideration we expect to receive. The Company utilizes either the expected value method or the most likely amount method to estimate the amount of variable consideration to include in the transaction price, as most appropriate in the circumstances. With respect to development and commercial milestone payments, at the inception of the arrangement, the Company evaluates whether the associated event is considered probable of achievement and estimate the amount to be included in the transaction price using the most likely amount method. In determining the transaction price the Company constrains the transaction price for variable consideration to limit its inclusion so that it only includes the amount that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

The Company allocates the transaction price to each performance obligation identified in the contract based on relative observable standalone selling prices. Revenue is recognized based on the amount of the transaction price that is allocated to each respective performance obligation when or as the performance obligation is satisfied by transferring a promised good and/or service to the customer. The Company generally uses output methods to measure the progress toward satisfaction of performance obligations that are satisfied over time. Due to different types of end customers and nature of work involved, revenue contracts require formal inspection and approval of experiments and research plans at each stage of work, therefore, the output method is the most faithful depiction of the Company's performance.

Royalty revenue is recognized in the period in which the obligation is satisfied and the corresponding sales by our corporate partners occur.

For the licenses of our intellectual property the Company recognizes revenue from non-refundable, up-front fees when the license is transferred to the customer and the customer is able to use and benefit from the license. Substantially all license revenue for the year ended December 31, 2021, related to the transgenic mouse platform.

Collaborative Arrangements

We may enter into collaborative and other similar arrangements with respect to the development and commercialization of potential drug candidates. Collaborative arrangements are contractual agreements with third parties that involve a joint operating activity, typically a research and/or commercialization effort, where both we and our partner are active participants in the activity and are exposed to the significant risks and rewards of the activity. Our rights and obligations under our collaborative arrangements vary and typically involve the partners to jointly perform research and development activities and/or participate together in commercializing, marketing, promoting, manufacturing and/or distributing a drug product. These arrangements typically include milestone as well as royalty or profit-share payments, contingent upon the occurrence of certain future events linked to the success of the asset in development, as well as expense reimbursements from or payments to the collaboration partner.

The Company considers the nature and contractual terms of arrangements and assesses whether an arrangement involves a joint operating activity pursuant to which the Company is an active participant and is exposed to significant risks and rewards dependent on the commercial success of the activity as described under ASC 808, *Collaborative Arrangements* (ASC 808). For arrangements determined to be within the scope of ASC 808 where a collaborative partner is not a customer for certain research and development activities, the Company accounts for payments received for the reimbursement of research and development costs as a contra-expense in the period such expenses are incurred. If payments from the collaborative partner to the Company represent consideration from a customer in exchange for distinct goods and services provided, then the Company accounts for those payments within the scope of ASC 606, *Revenue from Contracts with Customers* (ASC 606).

The Company applied ASC 606 to all arrangements to date.

Segmented and Enterprise-wide information

The Company manages its operations as a single operating segment for the purposes of assessing performance and making operating decisions. The Company's focus is on the discovery and development of antibodies.

The Company's revenues from external customers in which the services originated were in Canada in 2020. In 2021, \$353.4 million and \$21.8 million of revenues originated from services in Canada and the U.S., respectively, and in 2022, \$484.2 million and \$1.2 million of revenues originated from services in Canada and the U.S., respectively.

Of the Company's long-term assets at December 31, 2021, \$200.3 million was in the U.S. and \$159.5 million in Canada and \$28.9 million in other foreign countries. Of the Company's long-term assets at December 31, 2022, \$183.7 million was in the US, \$300.2 million in Canada, and \$31.5 million in other foreign countries.

Government grants and credits

Government grants are recognized when there is reasonable assurance that the grant will be received, and all associated conditions will be complied with. Reimbursements of eligible expenditures pursuant to government assistance programs are recorded when the related costs have been incurred and there is reasonable assurance regarding collection of the claim.

The Company recognizes the benefits of refundable government investment tax credits for scientific research and development expenditures in the year the qualifying expenditure is made providing there is reasonable assurance of recoverability. The Company records the investment tax credits based on its estimates of amounts expected to be recovered.

Government grants and credits received for expenditures on eligible research, development and capital expenditures are recognized ratably over the benefit period of the related expenditure for which the grants are intended to compensate in grants and incentives in other income.

Grant claims not settled by the balance sheet date are recorded as receivables provided their receipt is probable. The determination of the amount of the claim and the corresponding receivable amount requires management judgement and interpretation of eligible expenditures in accordance with the terms of the programs. The reimbursement claims submitted by the Company are subject to review by the relevant government agencies. The Company has used its best estimate and understanding of the related program agreements in determining the receivable amount.

Functional currency

The reporting currency of the Company and its subsidiaries is the U.S. dollar. The functional currency of the Company and its subsidiaries is the U.S. dollar, and for the Dayhu JV and Beedie JV, is the Canadian Dollar.

Transactions in foreign currencies are translated to the functional currency at exchange rates at the date of the transactions. Period end balances of monetary assets and liabilities in foreign currencies are translated to the functional currency using the period end foreign currency rates. Foreign currency gains and losses are recognized in the consolidated statements of income and comprehensive income.

The functional currency of the Dayhu JV and Beedie JV, our equity method investments, is Canadian dollars and are translated into US dollars using the period-end exchange rate for assets and liabilities and the average exchange rates during the period for revenues, expenses, gains and losses. Foreign exchange gains or losses arising from the translation of these joint ventures' assets and liabilities are included in foreign currency translation adjustment in the consolidated statements of income and comprehensive income.

Cash and cash equivalents and restricted cash

Cash and cash equivalents are defined as cash on hand and deposits held with banks with maturity dates of less than three months. Cash and cash equivalents that are restricted as to withdrawal or usage, in accordance with specific commercial arrangements, are presented as restricted cash on the consolidated balance sheets. As of December 31, 2021, we had \$100.5 million cash, \$375.6 million cash equivalents, and \$ 25.0 million restricted cash. As of December 31, 2022, we had \$126.2 million cash, \$260.3 million cash equivalents and \$28.1 million restricted cash. Of the total restricted cash at December 31, 2022, \$25.0 million is presented as a current asset, \$2.2 million is included within other current assets, and \$0.9 million is included within other long-term assets on the consolidated balance sheets.

Marketable Securities

The Company's marketable securities consist of U.S. government agency securities, certificates of deposit, commercial paper, non-U.S. government agency securities, and asset-backed securities. The Company has classified and accounted for these marketable securities as held-for-trading and they are reported at fair value with \$0.5 million and \$1.7 million of unrealized fair value losses recorded as a component of interest and other on the consolidated statements of income and comprehensive income for the years ended December 31, 2021, and 2022, respectively.

Non-Marketable Securities

Non-marketable securities not accounted for under the equity method are accounted for under the measurement alternative. Under the measurement alternative, the carrying value is measured at cost, less any impairment, plus or minus changes resulting from observable price changes in orderly transactions for identical or similar investments of the same issuer. Non-marketable securities are included as part of other long-term assets on the consolidated balance sheets. Adjustments are determined primarily based on a market approach as of the transaction date and are recorded a component of interest and other on the consolidated statements of income and comprehensive income.

Accounts receivable

The Company has trade receivables which are recorded at the invoiced amount and do not bear interest. The Company evaluates the collectability of accounts receivable on a regular basis based on economic assessment of market conditions and review of customer financial history. There was no allowance for doubtful accounts recorded as of December 31, 2021, and 2022.

Property and equipment

Property and equipment are recorded at cost less accumulated depreciation. Expenditures for major additions and improvements to property and equipment are capitalized and repairs and maintenance costs are expensed as incurred.

Excluding land and assets not yet placed into service, property and equipment are amortized using the straight-line method over the estimated useful lives of the property and equipment as follows:

Asset	Rate
Computer equipment	3 years
Laboratory equipment	5-10 years
Office furniture and equipment	5 years
Leasehold improvements	Shorter of lease term or estimated useful life

Estimated useful lives are periodically assessed to determine if changes are appropriate. When assets are retired or otherwise disposed of, the cost of these assets and related accumulated depreciation or amortization are removed from the accounts and any resulting gains or losses are included in loss from operations in the period of disposal. Costs for capital assets not yet placed into service are capitalized as construction-in-progress and depreciated once placed into service.

Intangible assets

Costs incurred to acquire patents and to prosecute and maintain intellectual property rights are expensed as incurred to general and administrative expense due to the uncertainty surrounding the drug development process and the uncertainty of future benefits. Patents, and intellectual property acquired from third parties are capitalized and amortized over the remaining life of the patent, if related to approved products or if there are alternative future uses for the underlying technology. No patent or intellectual property costs have been capitalized to date. In process research and development (IPR&D) will be amortized on completion of IPR&D activities. Acquired IPR&D represent the fair value assigned to research and development assets that have not reached technological feasibility. IPR&D is classified as an indefinite-lived intangible asset and is not amortized. All research and development costs incurred subsequent to the acquisition of IPR&D are expensed as incurred.

Definite lived intangible assets are amortized using the straight-line method over the estimated useful lives of the assets as follows:

Asset	Useful Life
License	3-10 years
Technology	20 years

Impairment of long-lived assets

The Company assesses the recoverability of its long-lived assets, including property and equipment and intangible assets subject to amortization, for indicators of impairment on each reporting date. If events or changes in circumstances indicate impairment, the Company measures recoverability by a comparison of the asset's carrying amount to the estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of the asset exceeds its estimated future cash flows, an impairment charge is recognized for the amount by which the carrying amount of the asset exceeds the fair value of the asset. When quoted market prices are not available, the Company uses the expected future cash flows discounted at a rate commensurate with the risks associated with the recovery of the asset as an estimate of fair value. No indicators of impairment were identified at the respective balance sheet dates.

Indefinite-lived intangible assets are tested annually for impairment as of October 1, and between annual tests if indicators of potential impairment exist. The Company has the option of performing a qualitative assessment to first determine whether the quantitative impairment test is necessary. This involves an assessment of qualitative factors to determine the existence of events or circumstances that would indicate whether it is more likely than not that the carrying amount of the indefinite-lived intangible asset is less than its fair value. If the qualitative assessment indicates it is not more likely than not that the carrying amount is less than its fair value, a quantitative impairment test is not required. Where a quantitative impairment test is required, the procedure is to compare the indefinite-lived intangible asset's fair value with its carrying amount. An impairment loss is recognized as the difference between the indefinite-lived intangible asset's carrying amount and its fair value.

Leases

The lease term includes all periods covered by renewal and termination options where the Company is reasonably certain to exercise the renewal options or not to exercise the termination options. Corresponding right-of-use assets are recognized consisting of the lease liabilities, initial direct costs and any lease incentive payments. Lease liabilities are drawn down as lease payments are made and right-of-use assets are depreciated over the term of the lease. Operating lease expenses are recognized on a straight-line

basis over the term of the lease, consisting of interest accrued on the lease liability and depreciation of the right-of-use asset. Lease payments are remeasured when a contingency upon which some or all of the variable lease payments to be paid over the remainder of the lease is resolved. Lease payments on short-term operating leases with lease terms twelve months or less are recognized on a straight-line basis over the lease term. The Company has elected to not separate non-lease elements embedded in its lease agreements. For the years ended December 31, 2021, and December 31, 2022, all of our leases are classified as operating leases.

Research and development costs

Research and development costs are expensed in the period incurred. These costs related to spending for partner projects in addition to internal platform development programs and include required materials, salaries and benefits including stock-based compensation, and service contracts. These costs exclude depreciation and amortization.

Royalty fees

Royalty fees consist of certain contractual royalty payments to our strategic partners upon receipt of royalty revenue based on our customers' third-party net sales. Royalty fees are recorded when the third-party sale occurs.

Income taxes

The Company accounts for income taxes under the asset and liability method, which requires the recognition of deferred tax assets ("DTAs") and deferred tax liabilities ("DTLs") for the expected future tax consequences of existing differences between the financial statement and tax bases of assets and liabilities, and net operating loss and tax credit carryforwards for tax purposes. The DTAs and DTLs are computed using enacted tax rates and the effect of a change in enacted tax rates on DTAs and DTLs is recognized in income in the period of enactment.

The Company recognizes DTAs to the extent that these assets are more likely than not to be realized. In making such a determination, all available positive and negative evidence are considered, including, but not limited to, future reversals of existing taxable temporary differences, projected future taxable income, tax-planning strategies, and results of recent operations. Valuation allowances are established for certain deferred tax assets to reduce the DTA to a level which, more-likely-than-not, will be realized. Assets and liabilities are established for uncertain tax positions taken or positions expected to be taken in income tax returns when such positions, in the Company's judgement, do not meet a more-likely-than-not threshold based on the technical merits of the positions. The Company realizes the largest amount of the tax benefit that is more than 50 percent likely to be realized upon ultimate settlement with the related tax authority.

The Company files consolidated federal income tax returns in the United States, which includes eligible subsidiaries. In addition, we file income tax returns in state, local and foreign jurisdictions as applicable. The Company's income tax provision is calculated and allocated under the separate return method.

Income tax credit ("ITC") policy

The Company earns income tax credits (ITCs) in jurisdictions in which it incurs eligible research and development expenditures. The Company uses the flow-through method to account for ITCs. Under this method, the ITCs subject to income tax accounting are recognized as a reduction to income tax expense in the year they are earned.

Stock-based compensation

The Company accounts for awards of stock options and shares to directors, employees, consultants, and non-employees using the fair value method. Under this method, stock-based compensation expense is measured at the fair value at the date of grant and is expensed over the award's vesting period. The requisite service period generally equals the vesting period of the awards.

Equity classified awards are measured using their grant date fair value. For equity classified awards, a corresponding increase in additional paid-in capital is recorded when stock-based compensation is recognized. When stock options are exercised, share capital is credited by the sum of the consideration received and the related portion of the stock-based compensation previously recorded in additional paid-in capital. The effects of forfeitures of options and share awards are accounted for as they occur.

Awards with an exercise price which is not denominated in: (a) the currency of a market in which a substantial portion of the Company's equity securities traded, (b) the currency in which the individual's pay is denominated, or (c) the Company's functional currency, are classified as liabilities. Liability classified awards are initially measured using their grant date fair value and are

subsequently re-measured to fair value at each balance sheet date until exercised or cancelled, with changes in fair value recognized as compensation cost for the period. As of December 31, 2021, and 2022, there were no liability classified options outstanding.

Business combinations and goodwill

Business combinations are accounted for using the acquisition method. The fair value of total purchase consideration is allocated to the fair values of identifiable tangible and intangible assets acquired and liabilities assumed, with the remaining amount being classified as goodwill. All assets, liabilities and contingent liabilities acquired or assumed in a business combination are recorded at their fair values at the date of acquisition. If the Company's interest in the fair value of the acquiree's net identifiable assets exceeds the cost of the acquisition, the excess is recognized in earnings or loss immediately. Transaction costs that are incurred in connection with a business combination, other than costs associated with the issuance of debt or equity securities, are expensed as incurred.

Goodwill is evaluated for impairment on an annual basis as of October 1, or more frequently if an indicator of impairment is present. As part of the impairment evaluation, the Company may elect to perform an assessment of qualitative factors. If this qualitative assessment indicates that it is more likely than not that the fair value of the reporting unit that includes the goodwill is less than its carrying value, then a quantitative impairment test would be prepared to compare this fair value to the carrying value and record an impairment charge if the carrying value exceeds the fair value. As of October 1, 2022, the Company performed a qualitative assessment for its annual impairment test of goodwill after concluding that it was not more likely than not that the fair value of the reporting unit was less than its carrying value. Consequently, the quantitative impairment test was not required. The Company concluded that there were no impairment indicators related to goodwill as at December 31, 2021 and 2022.

Equity method investments

The Company accounts for its investments in equity-accounted joint ventures using the equity method. Under the equity method, the initial cost of the investment is adjusted for subsequent additional investments and the Company's proportionate share of earnings or losses and distributions. The Company does not control the equity-accounted investments and as a result, the Company does not have the unilateral ability to determine whether cash generated by its equity-accounted investees is retained within the equity-investee or is distributed to the Company and other owners. In addition, equity-accounted investees do not control the timing of such distributions to the Company and other owners. The Company evaluates its investments in joint ventures for impairment when events or circumstances indicate that the carrying value of such investments may have experienced an other-than-temporary decline in value below carrying value. If the estimated fair value is less than the carrying value, the carrying value is written down to its estimated fair value and the resulting impairment is recorded in the Company's consolidated statements of income and comprehensive income.

Net earnings per share

The Company follows the two-class method when computing net earnings per share as the Company has issued shares that meet the definition of participating securities. The two-class method determines net earnings per share for each class of common and participating securities according to dividends declared or accumulated and participation rights in undistributed earnings. The two-class method requires income available to common shareholders for the period to be allocated between common and participating securities based upon their respective rights to receive dividends as if all income for the period had been distributed.

Basic net earnings per share attributable to common shareholders is computed by dividing the net earnings attributable to common shareholders by the weighted-average number of common shares outstanding for the period. Diluted net earnings attributable to common shareholders is computed by adjusting net earnings attributable to common shareholders to reallocate undistributed earnings based on the potential impact of dilutive securities. Diluted net earnings per share attributable to common shareholders is computed by dividing the diluted net earnings attributable to common shareholders by the weighted-average number of common shares outstanding for the period, including potential dilutive common shares. For purpose of this calculation, outstanding stock options, restricted share units (RSUs), and convertible preferred shares and notes are considered potential dilutive common shares.

The Company's convertible preferred shares, all of which converted prior to the completion of our IPO in 2020, contractually entitle the holders of such shares to participate in dividends but do not contractually require the holders of such shares to participate in losses of the Company.

4. Changes in significant accounting policies

Recent accounting pronouncements adopted

There was no adoption of any new accounting standards that had a significant impact on the consolidated financial statements.

Recent accounting pronouncements not yet adopted

The Company has reviewed recent accounting pronouncements and concluded that they are either not applicable to the Company or that no material impact is expected in the consolidated financial statements as a result of future adoption.

5. Net earnings per share

Basic and diluted net earnings per share attributable to common shareholders was calculated as follows:

	Year Ended December 31,		
	2020	2021	2022
Basic earnings per share			
Net earnings	\$ 118,918	\$ 153,464	\$ 158,519
Less: earnings allocated to Preferred Shareholders ⁽¹⁾	(33,817)	-	-
Net earnings attributable to common shareholders - basic	<u>\$ 85,101</u>	<u>\$ 153,464</u>	<u>\$ 158,519</u>
Weighted-average common shares outstanding - basic	159,195,023	275,763,745	285,056,606
Net earnings per share attributable to common shareholders - basic	\$ 0.53	\$ 0.56	\$ 0.56
Diluted earnings per share			
Net earnings attributable to common shareholders - diluted	\$ 118,918	\$ 153,464	\$ 158,519
Weighted-average common shares outstanding - basic	159,195,023	275,763,745	285,056,606
Convertible preferred shares	63,260,090	-	-
Stock options and RSUs	40,674,652	42,530,491	29,770,649
Weighted-average common shares outstanding - diluted	<u>263,129,765</u>	<u>318,294,236</u>	<u>314,827,255</u>
Net earnings per share attributable to common shareholders - diluted	\$ 0.45	\$ 0.48	\$ 0.50

¹ The Company's preferred shares were all converted prior to the IPO in 2020.

The Company excluded nil, 908,409, and 11,824,006 potential common shares for the years ended December 31, 2020, 2021, and 2022, respectively, from the computation of diluted net earnings per share attributable to common shareholders for the periods indicated because including them would have had an anti-dilutive effect.

6. Other current assets

Other current assets consisted of the following:

	December 31,	
	2021	2022
Taxes receivable	\$ 14,282	\$ 64,817
Prepaid expenses and other	5,293	9,064
Materials and supplies	1,672	1,532
Total other current assets	\$ 21,247	\$ 75,413

7. Property and equipment, net

Property and equipment, net consisted of the following:

	December 31,	
	2021	2022
Computers	\$ 7,843	\$ 8,303
Land	33,044	53,405
Building	1,212	11,361
Laboratory equipment	18,805	41,256
Leasehold improvements	22,750	40,567
Operating lease right-of-use assets	37,788	80,838
Property and equipment	121,442	235,730
Less accumulated depreciation	(9,826)	(18,475)
Property and equipment, net	\$ 111,616	\$ 217,255

As of December 31, 2021 and December 31, 2022, building and leasehold improvements include construction and tenant improvements in progress that have not commenced depreciation in the amount of \$19.8 million and \$25.6 million, respectively. Depreciation expense on property and equipment for the years ended December 31, 2020, 2021 and 2022 was \$2.3 million, \$4.4 million and \$9.0 million, respectively.

8. Intangible assets and goodwill

Intangible Assets

Intangible assets consisted of the following:

	December 31, 2021			December 31, 2022		
	Gross carrying amount	Accumulated amortization	Net book value	Gross carrying amount	Accumulated amortization	Net book value
License	\$ 35,873	\$ 9,994	\$ 25,879	\$ 37,873	\$ 17,859	\$ 20,014
Technology	52,700	2,587	50,113	52,700	5,222	\$ 47,478
IPR&D	72,400	-	72,400	64,010	-	\$ 64,010
	<u>\$ 160,973</u>	<u>\$ 12,581</u>	<u>\$148,392</u>	<u>\$ 154,583</u>	<u>\$ 23,081</u>	<u>\$131,502</u>

Amortization expense related to intangible assets for the years ended December 31, 2020, 2021 and 2022 was \$2.5 million, \$10.1 million and \$10.5 million, respectively. Depreciation and amortization expense is reflected on the consolidated statements of income and comprehensive income.

For the year ended December 31, 2022, the Company recorded a full impairment charge of the carrying value of \$8.4 million (or \$6.3 million, net of deferred income tax) associated with one of the next-generation transgenic humanized mice that was acquired through the 2020 Trianni acquisition. The impairment was a result of the discontinuance of the validation and development of this specific rodent line. Impairment expense is reflected within Depreciation, amortization, and impairment expense on the consolidated statements of income and comprehensive income. The Company concluded that there were no impairment indicators from the remaining intangible assets.

Amortization expense on intangible assets subject to amortization is estimated to be as follows for each of the next five years ended December 31:

	Amortization Expense
2023	\$ 10,625
2024	5,810
2025	4,241
2026	4,241
2027	4,241
	\$ 29,158

In March 2020, the Company entered into an agreement with Alloy Therapeutics (Alloy) to use the ATX-Gx™ humanized mice platform to enable in vivo human antibody discovery for its partner programs. Under the terms of the agreement, the Company will offer its biotechnology and pharmaceutical partners access to ATX-Gx™, Alloy's proprietary suite of immunocompetent transgenic mice, for use in any antibody discovery program and against any therapeutic target. The agreement provides for future alternative use to the Company and as such the corresponding value has been recorded as an intangible asset. The asset will be amortized on a straight-line basis over the 10-year term of the license agreement with Alloy.

The acquisition of \$14.1 million consisted of an initial cash payment of \$5.0 million, with two additional \$5.0 million installment payments paid in twelve and twenty-four months, respectively. The estimated fair value of the non-current portion of the financial obligation was determined by discounting future principal and interest amounts at estimated interest rates expected to be available to the Company with an interest rate of 10.98%.

Goodwill

Goodwill consisted of the following:

	Net carry amount
Balance at December 31, 20201	\$ 31,500
Additions	16,306
Balance at December 31, 20211	\$ 47,806
Additions	-
Balance at December 31, 20221	\$ 47,806

1Accumulated impairment as at December 31, 2021 and 2022 was nil.

9. Investments in and loans to equity accounted investees

The Company has entered into two separate 50% joint ventures, Dayhu JV and Beedie JV, as part of the construction of future office and laboratory headquarters. To date, the Company has recorded immaterial amounts of proportionate income or loss with respect to either venture.

Dayhu JV

During 2020, the Company entered into a joint venture with Dayhu (Dayhu JV). At December 31, 2021 and December 31, 2022, the equity investment balance was \$19.6 million and \$18.7 million, respectively.

In March, 2021, the Company made a commitment of up to CAD \$82.7 million (\$61.1 million at December 31, 2022) to the Dayhu JV (Dayhu JV Loan) to fund the construction at a rate referenced to a Canadian bank prime rate adjusted for applicable margins as defined in the agreement, and repayment on the earlier of thirty months from the date of initial advancement and September 1, 2023, or upon the trigger of certain liquidity events as defined in the agreement. The loan is secured by the underlying land and future assets of the Dayhu JV. At December 31, 2021, and December 31, 2022, the outstanding related party loan balance was \$18.0 million and \$38.1 million, respectively, to the Dayhu JV.

In July 2022, the Company entered into an agreement of up to CAD \$46.0 million (\$34.0 million at December 31, 2022) with Dayhu (New Dayhu Loan) to replace Dayhu's portion of the outstanding Dayhu JV Loan balance as at January 1, 2023, at a rate referenced to a Canadian bank prime rate adjusted for applicable margins as defined in the agreement. The agreement has a maturity of December 31, 2025, with a call provision, callable by the Company after September 30, 2023, including customary make whole provisions. The loan is secured by the underlying land and existing and future assets of the Dayhu JV.

Subsequent to December 31, 2022, the Company issued CAD \$46.0 million (\$34.0 million at December 31, 2022) to Dayhu from the New Dayhu loan, which was used to repay, in part, Dayhu's 50% portion of the Dayhu JV Loan.

Beedie JV

In March, 2021, the Company entered into the Beedie joint venture (Beedie JV). At December 31, 2021 and December 31, 2022, the equity investment balance was \$12.7 million and \$15.7 million, respectively.

In June 2022, the Company made a commitment to our partner Beedie for a land loan of up to CAD \$7.5 million (\$5.5 million at December 31, 2022) plus a construction loan for up to 80% of Beedie's share of construction costs. The commitment is at a rate referenced to a Canadian bank prime rate adjusted for applicable margins as defined in the agreement, and repayment on the earlier of thirty months from the date of initial advancement of the construction loan and five years from the initial advancement of the land loan, or upon the triggering of certain repayment events as defined in the agreement. The loan is secured by the underlying land and existing and future assets of the Beedie JV. The loan receivable balance, which was solely relates to the land loan to date, was \$5.5 million as at December 31, 2022 and is included in other long-term assets.

10. Accounts payable and other liabilities

Accounts payable and other liabilities consisted of the following:

	December 31,	
	2021	2022
Accounts payable and accrued liabilities	\$ 14,924	\$ 14,828
Liability for in-licensing agreement	4,933	-
Current portion of operating lease liability	3,652	5,583
Payroll liabilities	4,035	6,454
Current portion of deferred grant funding	4,473	6,285
Total accounts payable and other liabilities	<u>\$ 32,017</u>	<u>\$ 33,150</u>

11. Shareholders' Equity

Common Shares

As of December 31, 2021 and 2022, the Company's articles of the corporation, as amended and restated, authorized the Company to issue unlimited voting common shares, each with no par value per share. The voting, dividend, and liquidation rights of the holders of the Company's common shares are subject to and qualified by the rights, powers and preferences of the holders of the Series A preferred shares set forth below.

As of each balance sheet date, common shares consisted of the following:

	December 31, 2021		December 31, 2022	
	Shares authorized	Shares issued and outstanding	Shares authorized	Shares issued and outstanding
Common shares	<u>Unlimited</u>	<u>283,257,104</u>	<u>Unlimited</u>	<u>286,851,595</u>

Each voting common share entitles the holder to one vote on all matters submitted to a vote of the Company's shareholders. Common shareholders are entitled to receive dividends, if any, as may be declared by the board of directors, subject to the preferential dividend rights of the preferred shares. Through December 31, 2022, no cash dividends had been declared or paid by the Company.

Series A1 and Series A2 Preferred shares

On August 3, 2018, the Company entered into an investment agreement with DCVC Bio, L.P. for gross proceeds of CAD \$10.0 million (\$7.7 million) in exchange for 2,105,264 Series A1 preferred shares. Total proceeds received net of financing costs were \$7.6 million.

On March 23, 2020, the Company entered into an investment agreement with certain shareholders for gross proceeds of \$75.0 million in exchange for 6,017,784 Series A2 preferred shares. Total proceeds received net of financing costs were \$74.7 million.

The Series A1 and A2 preferred shares were voting and were convertible, at any time and from time to time at the option of its holder, into fully paid and non-assessable common shares at a 1:10 ratio, subject to appropriate adjustment for splits, dividends, other similar recapitalization and the like.

Conversion of preferred shares to common shares was mandatory in the event of a Qualified Initial Public Offering with proceeds of at least \$70.0 million.

The holders of the Series A1 and A2 preferred shares were entitled to vote, together with the holders of common shares, as a single class, on all matters submitted to the shareholders for a vote and were entitled to the number of votes equal to the number of common shares into which the Series A1 and A2 preferred shares could convert on the record date for determination of shareholders entitled to vote.

The holders of the Series A1 and A2 preferred shares were entitled to receive noncumulative dividends, as and if declared by the board of directors (the “Preferred Dividend”). The Company may not pay any dividends on common shares of the Company unless the holders of Preferred Shares then outstanding first receive, or simultaneously receive, the Preferred Dividend on each outstanding Series A1 and A2 preferred share and a dividend on each outstanding Series A1 and A2 preferred share in an amount at least equal to the product of the dividend payable on each share of such class or series determined, if applicable, as if all shares of such class or series had been converted into common shares. To the date of conversion, no cash dividends had been declared or paid by the Company.

In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company or Deemed Liquidation Event, the holders of Series A1 and A2 preferred shares then outstanding were entitled to a 1x non-participating liquidation preference. Due to the various rights and privileges within the existing Series A1 and A2 Preferred and Common shareholder agreements, the Company concluded triggering a deemed liquidation event was within the control of the Company, and therefore the Series A1 and A2 preferred shares were classified as permanent equity.

Immediately prior to the completion of our IPO, all Series A1 and A2 preferred shares converted to an equal number of common shares.

Stock-based compensation

Sixth Amended and Restated Stock Option Plan:

We maintain the AbCellera Biologics Inc. Sixth Amended and Restated Stock Option Plan, our Pre-IPO Plan, which was approved by our board of directors on November 18, 2020. The Pre-IPO Plan allows for the grant of options (and for U.S. participants, either incentive stock options and/or nonstatutory stock options) to employees, directors, and consultants, subject in each case to compliance with applicable tax laws.

Our 2020 Share option and Incentive Plan, or 2020 Plan became effective on the date immediately prior to the date on which our initial S-1 registration statement was declared effective by the SEC on December 10, 2020. As a result, we do not expect to grant any additional awards under the Pre-IPO Plan following that date. Any awards granted under the Pre-IPO Plan will remain subject to the terms of our Pre-IPO Plan and applicable award agreements. Options were granted under the Company’s Pre-IPO Plan in Canadian dollars and were converted to U.S dollars for administrative convenience in 2021.

In March 2021, substantially all employee option holders whose awards were liability-classified elected to convert the currency of their option exercise price from Canadian dollars to U.S. dollars for administrative convenience. As a result of the modification, \$5.7 million was reclassified from liability to equity.

2020 Share Option and Incentive Plan:

Our 2020 Plan was approved by our board of directors on November 18, 2020 and approved by our shareholders on December 1, 2020, and became effective on the date immediately prior to the date on which our initial S-1 registration statement was declared effective by the SEC on December 10, 2020. The 2020 Plan replaced our Pre-IPO Plan, as our board of directors will not make additional awards under the Pre-IPO Plan.

The shares we issue under the 2020 Plan will be authorized but unissued shares or shares that we reacquire and typically vest over four years. The common shares underlying any awards that are forfeited, cancelled, held back upon exercise or settlement of an award to satisfy the exercise price or tax withholding, reacquired by us prior to vesting, satisfied without any issuance of shares, expire or are otherwise terminated (other than by exercise) under the 2020 Plan and the Pre-IPO Plan will be added back to the common shares available for issuance under the 2020 Plan.

The maximum aggregate number of common shares that may be issued as incentive share options may not exceed the Initial Limit cumulatively increased on January 1, 2022, and on each January 1 thereafter by the lesser of (i) the Annual Increase for such year or (ii) 21,280,000 common shares. As of December 31, 2022, the number of shares available for issuance under the 2020 Plan was 21,329,770 which includes awards granted and outstanding under the Pre-IPO Plan that are forfeited after December 10, 2020.

The following table summarizes the Company's stock options granted under the Pre-IPO Plan:

	Number of Shares	Weighted-Average Exercise Price	Weighted-Average Contractual Term (years)
Outstanding as of December 31, 2021	39,206,307	\$ 0.86	7.02
Granted	-	-	
Exercised	(3,354,740)	0.36	
Forfeited	(2,157,417)	1.03	
Outstanding as of December 31, 2022	<u>33,694,150</u>	<u>\$ 0.90</u>	<u>6.21</u>
Options exercisable as of December 31, 2022	23,355,838	\$ 0.71	5.75

The following table summarizes the Company's stock options granted under the 2020 Plan:

	Number of Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (years)
Outstanding as of December 31, 2021	5,284,347	\$ 19.19	9.56
Granted	7,603,999	11.91	
Exercised	-	-	
Forfeited	(565,413)	16.82	
Outstanding as of December 31, 2022	<u>12,322,933</u>	<u>\$ 14.81</u>	<u>9.14</u>
Options exercisable as of December 31, 2022	1,778,166	\$ 20.21	8.47

The intrinsic value of options exercised during 2020, 2021, and 2022 was \$6.8 million, \$295.6 million and \$34.4 million, respectively. As of December 31, 2022, there was \$113.4 million of unrecognized compensation cost related to unvested stock options granted under the Plans, which is expected to be recognized over a weighted average period of 2.88 years.

Restricted Share Units

The Company grants Restricted Share Units (RSUs) to certain employees that vest over a period of four years, in the amount of one-quarter each year on the anniversary of the grant date. RSUs are equity-settled on each vesting date, subject to the grantee's continued employment with the Company on the vesting date. The fair value of RSUs granted was calculated by using the Company's closing stock price on the grant date.

The following table summarizes the Company's RSUs granted under the 2020 Plan:

	Number of Shares	Weighted-Average Grant Date Fair Value
Outstanding as of December 31, 2021	1,080,413	\$ 23.62
Granted	3,370,710	11.36
Vested and settled	(239,751)	24.45
Forfeited	(264,387)	14.43
Outstanding as of December 31, 2022	<u><u>3,946,985</u></u>	<u><u>\$ 13.71</u></u>

The intrinsic value of RSUs vested and settled during 2020 and 2021 was nil, and \$2.5 million in 2022. As of December 31, 2022, there was \$44.9 million of unamortized RSU expense that will be recognized over a weighted average period of 3.25 years.

Stock-based compensation expense was classified in the consolidated statements of income and comprehensive income as follows:

	Year ended December 31,		
	2020	2021	2022
Research and development expenses	\$ 5,365	\$ 15,663	\$ 24,327
Sales and marketing expenses	1,691	2,120	3,134
General and administrative expenses	1,341	12,863	22,020
	<u><u>\$ 8,397</u></u>	<u><u>\$ 30,646</u></u>	<u><u>\$ 49,481</u></u>

The fair value of each option award is determined on the date of grant using the Black-Scholes option pricing model. The weighted-average valuation assumptions for stock options granted in the period are as follows:

	Year ended December 31,		
	2020	2021	2022
Average risk-free interest rate ¹	0.64%	1.23%	2.86%
Expected volatility ²	79.00%	72.00%	70.00%
Average expected term (years) ³	6.11	6.21	6.24
Expected dividend yield ⁴	0.00%	0.00%	0.00%
Weighted average fair value of options granted ⁵	\$ 5.60	\$ 12.31	\$ 7.77

The weighted-average valuation assumptions for liability classified stock options outstanding at December 31, 2022 are as follows:

	Year ended December 31,		
	2020	2021	2022
Average risk-free interest rate ¹	0.46%	-	-
Expected volatility ²	75.00%	-	-
Average expected term (years) ³	6.25	-	-
Expected dividend yield ⁴	0.00%	-	-
Weighted average fair value of options granted ⁵	\$ 37.44	-	-

- (1) This rate is from federal government marketable bonds for each option grant during the year, having a term that most closely resembles the expected life of the option.
- (2) Volatility is a measure of the amount by which a financial variable such as a share price has fluctuated (historical volatility) or is expected to fluctuate (expected volatility) during a period. As the Company does not yet have sufficient history of its own volatility, the Company has identified several public entities of similar complexity and stage of development and calculates historical volatility using the volatility of these companies.
- (3) This is the period of time that the options granted are expected to remain unexercised. Options granted have a maximum term of ten years. The Company uses the simplified method to calculate the average expected term, which represents the average of the vesting period and the contractual term.

- (4) No dividends have been paid by the Company yet.
- (5) The Company granted stock options at exercise prices not less than the fair value of its common shares as determined by the Board, with input from management. Management estimated the fair value of its common shares based on a number of objective and subjective factors, including internal valuations, external market considerations affecting the biotechnology industry and the historic prices at which the Company sold common shares.

12. Revenue

The disaggregated revenue categories are presented on the consolidated statements of income and comprehensive income.

Deferred Revenue

Deferred revenue represents payments received for performance obligations not yet satisfied and are presented as current or long-term in the accompanying consolidated balance sheets based on the expected timing of satisfaction of the underlying goods and/or services.

Deferred revenue outstanding at each respective period is as follows:

	December 31,	
	2021	2022
Deferred revenue	34,954	41,128

During the years ended December 31, 2020, 2021 and 2022, the Company recognized \$3.0 million, \$4.7 million and \$11.5 million, respectively, of revenue that had been included in deferred revenue in the previous year.

In March of 2020, the Company entered into a research collaboration and license agreement with Eli Lilly pursuant to which the Company will perform discovery research for several targets for Eli Lilly to develop and commercialize. Under the agreement, the Company is entitled to receive an aggregate of up to \$29.0 million of milestone payments as well as royalties in the low single digits based on net sales for non-COVID-19 targets and in the low- to mid-teens for aggregate sales below \$125.0 million and mid-teens to mid-twenties on aggregate sales above \$125.0 million.

The agreement resulted in an initial upfront payment of \$26.7 million, of which \$21.9 million was included in deferred revenue at December 31, 2020. For the year ended December 31, 2021, the Company received an additional \$1.7 million in payments, for total payments received in respect of this agreement of \$28.4 million. For the year ended December 31, 2022, the Company received \$0.8 million in additional payments. The Company recognized \$6.9 million of revenue in the year ended December 31, 2022. The Company expects to recognize approximately \$1.4 million in revenue in the next 12 months related to these payments under the agreement.

Of the remaining deferred revenue balance of \$26.9 million, which is related to various other agreements, approximately \$20.2 million is expected to be recognized in revenue in the next 12 months.

13. Government Funding

In 2020, the Company received a funding commitment from the Government of Canada under Innovation, Science and Economic Development's (ISED) Strategic Innovation Fund (SIF) for a total of CAD \$175.6 million (\$129.7 million as of December 31, 2022) which is intended to support research and development efforts related to the discovery of antibodies to treat COVID-19, and to build technology and manufacturing infrastructure for antibody therapeutics against future pandemic threats.

Since inception, the Company incurred \$79.3 million in expenditures in respect of the SIF grant funding. \$46.1 million relates to spending under phase 1 of the agreement and such amounts are not repayable, while \$33.2 million was claimed in respect of phase 2 of the funding commitment, where repayment is conditional on achieving certain revenue thresholds in seven years starting a year following the completion of the funded project. Repayment will be calculated as a percentage rate of the Company's revenue, with payment made on an annual basis during the repayment period of fifteen years. The funding and its associated conditional repayment is not and will not be secured by any of the Company's assets, and includes certain non-financial covenants and restrictive covenants on dividend payments or other shareholder distributions that would prevent the Company in satisfying its obligations under the arrangement. As of December 31, 2022, no amounts have been accrued related to the repayment terms as the conditions are estimated to be non-probable at December 31, 2022.

For the year ended December 31, 2020, 2021 and 2022, the Company incurred \$12.4 million, \$47.1 million, \$18.9 million in expenditures in respect of the SIF grant funding, respectively. For the year ended December 31, 2020, 2021 and 2022, \$5.3 million, \$13.8 million, \$3.9 million, respectively, relates to research and development expenditures and is reflected in grants and incentives on the consolidated statements of income and comprehensive income. The remaining \$15.0 million is attributable to capital asset expenditures and is amortized into other income over the average asset life of seven years. Unamortized amounts are included in accounts payable and other liabilities and long term deferred grant funding on the consolidated balance sheets.

The balance of SIF grant funding included in the balance of accounts and accrued receivable is \$14.8 million and \$6.9 million as of December 31, 2021 and 2022, respectively.

14. Income taxes

a. For financial reporting purposes, income before income taxes includes the following components:

	December 31,		
	2020	2021	2022
Canadian	\$ 163,077	\$ 211,471	\$ 279,771
Foreign	(5,244)	7,678	(40,672)
Total	\$ 157,833	\$ 219,149	\$ 239,099

The expense (benefit) for income taxes consists of:

	December 31,		
	2020	2021	2022
Current			
Canadian	\$ 36,931	\$ 60,498	\$ 81,392
Foreign	(114)	7,248	1,300
	36,817	67,746	82,692
Deferred and other:			
Canadian	2,461	(1,342)	2,322
Foreign	(363)	(719)	(4,434)
	2,098	(2,061)	(2,112)
Income tax expense	\$ 38,915	\$ 65,685	\$ 80,580

	December 31,		
	2020	2021	2022
Current tax expense	\$ 36,817	\$ 67,746	\$ 82,692
Deferred tax expense (benefit)	2,098	(2,061)	(2,112)
Total tax expense	\$ 38,915	\$ 65,685	\$ 80,580

b. The consolidated effective income tax rate differs from the expected Canadian statutory tax rate of 27% (2020, 2021, 2022: 27%). Reconciliation between the expected tax rate on income from operations and the statutory tax rate was as follows:

	December 31,		
	2020	2021	2022
Net earnings before income taxes	\$ 157,833	\$ 219,149	\$ 239,099
Combined statutory tax rate	27%	27%	27%
Expected income tax expense (recovery) at statutory rates	42,615	59,170	64,557
Stock-based compensation	1,934	7,007	11,710
Change in valuation allowance	(680)	5,007	8,318
Tax rate differential	-	-	(1,911)
Prior year tax assessments and adjustments	36	1	3,529
Change due to SR&ED	(1,698)	(4,809)	(5,908)
Foreign exchange	(4,048)	47	536
Other	756	(738)	(251)
Income tax expense	\$ 38,915	\$ 65,685	\$ 80,580

c. Deferred income tax assets (“DTAs”) and liabilities (“DTLs”) result from the temporary differences between assets and liabilities recognized for financial statement and income tax purposes. The significant components of the Company’s deferred income tax assets and liabilities were as follows:

	December 31,	
	2021	2022
<u>Deferred tax assets:</u>		
Long-term debt	\$ 6,293	\$ 7,695
Financing fee	6,575	4,827
Operating lease liability	5,299	17,355
Deferred revenue	4,768	6,042
Net operating losses carried forward	4,996	5,054
Capitalized research and development costs for tax purposes	-	1,807
Other	3,019	4,696
	30,950	47,476
<u>Deferred tax liabilities:</u>		
Property and equipment	\$ (3,256)	\$ (6,443)
Land	(2,135)	(2,007)
Intangibles	(36,866)	(32,682)
Operating lease right-of-use assets	(4,732)	(16,687)
Government funding receivable	(3,029)	(1,657)
Other	(1,661)	(2,437)
	(51,679)	(61,913)
	(20,729)	(14,437)
Less: valuation allowance	(9,233)	(13,411)
Net deferred tax asset (liability)	(29,962)	(27,848)
Deferred tax asset	21,717	34,065
Deferred tax liability	(51,679)	(61,913)
Net deferred tax assets (liability)	\$ (29,962)	\$ (27,848)

Amounts recognized in the Company's consolidated balance sheets as of December 31, 2021 and 2022 comprise of \$7.4 million and \$5.3 million, respectively, included in other long-term assets and \$37.4 million and \$33.2 million, respectively, as deferred tax liability.

Management assesses the available positive and negative evidence to estimate whether sufficient future taxable income will be generated to permit use of the existing DTAs. A significant piece of objective negative evidence evaluated was the cumulative loss incurred over the three-year period ended December 31, 2022, in foreign subsidiaries. Such objective evidence limits the ability to consider other subjective evidence, such as our projections for future growth.

On the basis of this evaluation, valuation allowances of \$9.2 million and \$13.4 million as of December 31, 2021 and 2022, respectively, have been recorded to recognize only the portion of the DTA that is more likely than not to be realized against DTL that reverses in carryforward period. The amount of the DTA considered realizable, however, could be adjusted if estimates of future taxable income during the carryforward period are reduced or increased or if objective negative evidence in the form of cumulative losses is longer present and additional weight is given to subjective evidence such as our projections for growth.

d. As of December 31, 2022 the Company has Canadian a non-capital loss of approximately \$58.2 million and we generated federal and provincial investment tax credit of approximately \$7.2 million. The non-capital loss and investment tax credits are available to be carried back up to three years against taxable income. The Company had no unclaimed tax deductions for scientific research and experimental development. The Company had operating losses carried forward related to foreign operations of approximately \$1.5 million, \$18.2 million and \$19.4 million as of December 31, 2020, 2021 and 2022 respectively. Certain tax attributes are subject to an annual limitation as a result of the acquisitions of Lineage and TetraGenetics which constitute a change of

ownership as defined under IRC Section 382. Certain operating losses available for the foreign subsidiary deferred tax assets can be carried forward indefinitely while the rest expire ranging from 2034 to 2037.

Expiry date	Net Operating Loss
2034	\$ 1,929
2035	1,449
2036	941
2037	1,231
Indefinite	8,435
Total amount	\$ 13,985

e. As of December 31, 2022, the Company has immaterial accumulated undistributed earnings generated by foreign subsidiaries. The Company has not provided a deferred liability for the income taxes associated with its foreign investments because it is the Company's intention to indefinitely reinvest in its foreign investments.

f. A reconciliation of total unrecognized tax benefits for the years ended December 31, 2020, 2021 and 2022 were as follows:

	2020	2021	2022
January 1 balance	\$ 387	\$ 109	\$ -
Gross increase - tax position in prior period	-	-	-
Gross increase - tax position in current period	109	-	-
Gross decrease - tax position in current period	(387)	(109)	-
December 31 balance	\$ 109	\$ -	\$ -

Included in the balance of unrecognized tax benefits at December 31, 2020, 2021 and 2022 are potential benefits of nil that, if recognized, would affect the effective tax rate on income from operations. Recognition of these potential benefits would result in a deferred tax asset in the form of undeducted SR&ED expenditures or tax credits available for carry-forward, which would be subject to a valuation allowance based on conditions existing at the reporting date.

Net operating losses arising in tax years ending after December 31, 2017 can be carried over to each taxable year following the tax year of loss indefinitely. Under the Coronavirus Aid, Relief, and Economic Security Act, losses incurred effective 2021 can only be used to offset 80% of taxable income.

The Company is subject to taxation primarily in Canada, the United States, and Australia. Further, while the statute of limitations in each jurisdiction where an income tax return has been filed generally limits the examination period, as a result of loss carry-forwards, the limitation period for examination generally does not expire until several years after the loss carry-forwards are utilized. Tax years ranging from 2018 to 2022 remain subject to Canadian income tax examinations. Tax years ranging from 2018 to 2022 remain subject to the foreign income tax examinations. Other than routine audits done by tax authorities for tax credits and tax refunds that the Company has claimed, management is not aware of any other material income tax examination currently in progress by any taxing jurisdiction.

15. Leases

The Company leases office and laboratory facilities in Vancouver, Canada and Sydney, Australia, Cambridge, United Kingdom and Boston, USA.

The Company's operating leases have a fixed term with a remaining life between fourteen months and 15 years, with renewal options included in the contracts ranging from one to ten years. The leases have varying contract terms, escalation clauses and renewal options. Generally, there are no restrictions placed upon the lessee by entering into these leases, other than restrictions on use of property, sub-letting and alterations.

The balance sheet classification of the Company's lease liabilities was as follows:

	December 31, 2021	December 31, 2022
Operating lease liabilities:		
Current portion	\$ 3,652	\$ 5,583
Long-term portion	36,413	76,675
Total operating lease liabilities	\$ 40,065	\$ 82,258

At December 31, 2022, the future minimum lease payments of the Company's operating lease liabilities were as follows:

	Amount
2023	\$ 9,610
2024	9,242
2025	9,132
2026	8,872
2027	8,857
Thereafter	65,912

As of December 31, 2022, the weighted-average remaining lease term is 12.1 years and the weighted-average discount rate used to determine the operating lease liabilities was approximately 4.9%.

The Company incurred total operating lease expenses, including fixed lease payments, of \$0.8 million, \$3.7 million and \$7.1 million and variable lease payments, of \$0.3 million, \$0.4 million and \$1.8 million during the years ended December 31, 2020, 2021 and 2022, respectively.

16. Financial Instruments

The Company categorizes its financial assets and liabilities measured at fair value into a three-level hierarchy established by U.S. GAAP that prioritizes those inputs to valuation techniques used to measure fair value based on the degree to which they are observable. The three levels of the fair value hierarchy are as follows: Level 1 inputs are quoted prices in active markets for identical assets and liabilities; Level 2 inputs, other than quoted prices included within Level 1, are observable for the asset or liability either directly or indirectly; and Level 3 inputs are not observable in the market.

The Company's financial instruments consist of cash and cash equivalents, restricted cash, marketable securities, accounts receivable, loans receivable, loans to equity accounted investees, accounts payable and accrued liabilities and royalties payable, and contingent consideration payable. The carrying values of cash and cash equivalents, restricted cash, accounts receivable, accounts payable and accrued liabilities, royalties payable, loans receivable, and loans to equity accounted investees approximate their fair values.

Contingent Consideration

Contingent consideration related to business acquisitions is recorded at fair value on the acquisition date and adjusted on a recurring basis for changes in its fair value. Changes in the fair value of contingent consideration liabilities can result from changes in anticipated payments and changes in assumed discount periods and rates. These inputs are unobservable in the market and are therefore categorized as Level 3 inputs. Further information related to the Trianni and TetraGenetics contingent consideration is disclosed in Note 20. There were no changes to the valuation technique or significant changes to the inputs used in these fair value

measurements since acquisition. The discount rate applied increased to 10.7% (from 8.0% since acquisition date) associated to the TetraGenetics contingent consideration at December 31, 2022.

The following table presents the changes in fair value of the liability for contingent consideration:

	December 31, 2021				
	Liability at beginning of the period	Additions	Increase in fair value of liability for contingent consideration ¹	Réparation of contingent consideration	Liability at end of the year
Trianni	\$ 22,559	\$ -	\$ 2,925	\$ (2,550)	\$ 22,934
TetraGenetics	\$ -	\$ 35,100	\$ 786	\$ -	\$ 35,886

	December 31, 2022				
	Liability at beginning of the period	Additions	Increase in fair value of liability for contingent consideration ¹	Réparation of contingent consideration	Liability at end of the year
Trianni	\$ 22,934	\$ -	\$ 571	\$ -	\$ 23,505
TetraGenetics	\$ 35,886	\$ -	\$ 874	\$ -	\$ 36,760

(1) Increase in fair value of liability for contingent consideration is included within interest and other in other income on the consolidated statements of income and comprehensive income.

Marketable Securities

As part of the Company's cash management strategy, the Company holds a diversified portfolio of high credit quality marketable securities that are available to support the Company's operations.

Level 2 marketable securities in the fair value hierarchy were based on quoted market prices to the extent available or alternative pricing sources and models utilizing market observable inputs to determine fair value. There were no transfers between Level 1, Level 2 and Level 3 during the period.

The following table presents information about the Company's marketable securities that are measured at fair value on a recurring basis and indicates the level of the fair value hierarchy used to determine such fair values:

	Fair Value Measurements at December 31, 2021:				
	Level 1	Level 2	Level 3	Total	
Marketable securities					
U.S. government agencies	\$ 10,100	\$ -	\$ -	\$ -	\$ 10,100
Certificate of deposit	-	\$ 8,699	-	-	\$ 8,699
Commercial paper	-	\$ 6,726	-	-	\$ 6,726
Corporate bonds	-	\$ 172,046	-	-	\$ 172,046
Non-U.S. government agencies		\$ 25,480			\$ 25,480
Asset backed securities	-	\$ 23,784	-	-	\$ 23,784
	\$ 10,100	\$ 236,735	\$ -	\$ -	\$ 246,835

	Fair Value Measurements at December 31, 2022:				
	Level 1	Level 2	Level 3	Total	
Marketable securities					
U.S. government agencies	\$ 103,938	\$ -	\$ -	\$ -	\$ 103,938
Certificate of deposit	-	\$ 167,907	-	-	\$ 167,907
Commercial paper	-	\$ 76,268	-	-	\$ 76,268
Corporate bonds	-	\$ 138,776	-	-	\$ 138,776
Asset backed securities	-	\$ 13,061	-	-	\$ 13,061
	\$ 103,938	\$ 396,012	\$ -	\$ -	\$ 499,950

17. Commitments and contingencies

From time to time, the Company may become involved in routine litigation arising in the ordinary course of business. At each reporting date, the Company evaluates whether or not a potential loss amount or a potential range of loss is probable and reasonably estimable under the provisions of the authoritative guidance that addresses accounting for contingencies. The Company does not have contingency reserves established for any litigation liabilities and any of the costs related to such legal proceedings are expensed as incurred.

The Company may enter into certain agreements with strategic partners in the ordinary course of operations that may include contractual milestone payments related to the achievement of pre-specified research, development, regulatory and commercialization events and indemnification provisions, which are common in such agreements.

Pursuant to the agreements, the Company may be obligated to make research and development and regulatory milestone payments upon the occurrence of certain events and upon receipt of royalty payments in the low single-digits to mid-twenties based on certain net sales targets. For the years ended December 31, 2020, 2021, and 2022, the Company expensed approximately \$27.1 million, \$45.5 million, and \$66.4 million, respectively, related to such obligations, of which \$27.1 million, \$22.5 million, and \$19.3 million, respectively, is included in current liabilities as accrued royalties payable.

Excluding the lease arrangements as accounted for in Note 15 – Leases, the Company has the following additional commitments in respect of leased facilities where the lease commencement dates are subsequent to December 31, 2022:

	Amount
2023	\$ -
2024	-
2025	6,761
2026	6,761
2027	6,761
Thereafter	142,942

18. Financial Risk Management

Concentration of Credit Risk

Financial instruments that potentially subject the Company to a concentration of credit risk consist primarily of cash and cash equivalents, marketable securities, restricted cash, and accounts and accrued receivable. Cash and cash equivalents, marketable securities, and restricted cash are invested with the primary objective being the preservation of capital and maintenance of liquidity. The guidelines on the diversification of the marketable securities portfolio and credit quality of financial instruments that the Company holds minimizes the exposure to concentration of credit risk. The Company further limits its exposure to credit loss by placing its cash and cash equivalents with multiple high credit quality financial institutions.

The Company's exposure to credit risk for accounts and accrued receivables is indicated by the carrying value of its accounts receivable and accrued receivables. We review our trade receivables, accrued revenue, and accrued royalties and reserve for amounts if collectability is no longer reasonably assured based on an assessment of various factors including historical loss rates and expectations of forward-looking loss estimates. Any adjustments made to our historical loss experience reflect current differences in asset-specific risk characteristics and current economic conditions. At December 31, 2021 and 2022, accounts and accrued royalty receivable amounts were due from thirteen and twenty-one customers, respectively.

For the year ended December 31, 2021, we recognized milestone payments of \$7.0 million and royalty revenue totaling \$327.3 million, exclusively from our partnership with Lilly, of which \$138.4 million was receivable at December 31, 2021. For the year ended December 31, 2022, we recognized royalty revenue totaling \$443.0 million, exclusively from our partnership with Lilly, of which \$9.3 million was a receivable as of December 31, 2022.

Interest Rate Risk

The Company's exposure to interest rate risk is primarily attributable to its cash and cash equivalents, restricted cash, marketable securities, long-term contingent consideration payable and long-term operating lease liability.

As of December 31, 2022, the Company had cash and cash equivalents of \$386.5 million, restricted cash of \$28.1 million, and marketable securities of \$500.0 million, a majority of which was maintained in high credit quality and liquid bank accounts, term deposits, and held for trading marketable securities. The Company's interest rate risk is affected by changes in the general level of interest rates, particularly because the majority of the Company's investments are short-term in nature. Due to interest rates available to the Company, the short-term duration of the Company's cash and cash equivalent holdings and marketable securities, and the low risk profile of the marketable securities, a 100 basis points change in interest rates would not have a material effect on the fair market value of cash, cash equivalents, restricted cash, and marketable securities. The Company also has the ability to hold the marketable securities until maturity, and therefore, the Company would not expect the Company's operating results or cash flows to be affected to any significant degree by the effect of a sudden change in market interest rates.

The Company does not enter into investments for speculative purposes and has not used any derivative financial instruments to manage interest rate exposure.

The Company is further exposed to the risk that the fair value of the contingent consideration payable and operating lease liability will vary as a result of changes in market interest rates. In order to manage funding needs or capital structure goals, the Company may enter into arrangements that are subject to either fixed market interest rates set at the time of issue or floating rates determined by ongoing market conditions. Debt subject to variable interest rates exposes the Company to variability in interest expense, while debt subject to fixed interest rates exposes the Company to variability in the fair value of debt. To manage interest rate exposure, the Company may access various sources of financing and manages borrowings in line with debt ratings, liquidity needs, maturity schedule, and currency and interest rate profiles.

Foreign Currency Risk

The Company holds cash primarily in U.S. and Canadian dollars. The Company had Canadian denominated cash and cash equivalents of CAD \$8.2 million and CAD \$44.9 million as of December 31, 2021 and 2022, respectively.

The Company incurs certain operating expenses and accounts payable in currencies other than the U.S. dollar, primarily in Canadian dollars, and accordingly is subject to foreign exchange risk due to fluctuations in exchange rates. The Company does not use derivative instruments to hedge exposure to foreign exchange risk. The operating results and financial position of the Company are reported in U.S. dollars in the Company's consolidated financial statements. The fluctuation of the U.S. dollar relative to the Canadian dollar will have an impact on the reported balances for net assets, net earnings and shareholders' equity in the Company's consolidated financial statements.

Partner Program Counterparty Risk

For the year ended December 31, 2021, four of our partners accounted for 29%, 17%, 11% and 10% of our research fees revenue. Our partnership with Lilly constituted one of the partnerships that generated 10% or more of our consolidated revenues.

For the year ended December 31, 2022, three of our partners accounted for 29%, 17% and 11% of our research fee revenue. Our partnership with Lilly constituted one of the partnerships that generated 10% or more of our consolidated revenues.

19. Related party transactions

In addition to the Dayhu JV Loan disclosed in Note 9, the Company had the following related party transactions:

- a) During 2022, the Company engaged advisory services with a firm co-founded by a director of the Company. For the year ended December 31, 2022, \$0.3 million was included in general and administrative expenses, of which \$0.2 million was included in accounts payable at December 31, 2022.

20. Acquisitions

Trianni

On November 3, 2020, the Company completed a business combination with Trianni, Inc. ("Trianni"), a biotechnology company with a humanized rodent platform, in which we were the acquirer.

To fund the merger, on October 30, 2020 AbCellera entered into convertible note agreement wherein AbCellera issued convertible notes in consideration of \$90.0 million. Issuance costs associated with the convertible notes was immaterial. The convertible notes mature five years from the date of issuance and bear no interest for the first twelve months and bear five percent

(5%) interest per annum thereafter. Interest is payable annually starting twenty-four months from the date of issuance until maturity. Upon a liquidity event, such as an IPO, if occurred within 6 months of the issue date, then immediately prior to the liquidity event, noteholders may convert the principal amount of the note into common shares of the company at 85% of the IPO issue price of common shares. The convertible notes are also convertible at the option of the holders on the interest commencement date, which is 12 months after the issuance date.

The number of common shares to be issued will be equal to 800,000 common shares (for certain specified investors) plus the number of common shares determined by dividing (i) the aggregate of the outstanding principal of the convertible note by (ii) AbCellera's pre-money valuation of as defined in the agreement divided by the aggregate number of our common shares outstanding at the time of conversion. We determined that no value should be assigned to the embedded derivatives and that there was no beneficial conversion feature.

Immediately prior to the completion of our IPO, the convertible notes were converted into 6,093,524 common shares of the Company in accordance with the terms of the convertible note agreement. The convertible note was fully extinguished upon conversion and the carrying value of the convertible note was reclassified into common shares.

Estimated Purchase Price Consideration

	Estimated Fair Value
Closing Payment	\$ 97,432 (i)
Earn-out payment	21,782 (ii)
	\$ 119,214

- (i) Pursuant to the merger agreement, the initial purchase price is \$90.0 million adjusted for certain closing adjustments for working capital, indebtedness, transaction and other expenses as well as payments to Trianni option holders for the cancellation and extinguishment of Trianni options.
- (ii) Represents the estimated fair value of the earn-out payments related to the specific customer license ending on April 9, 2024. The estimated fair value was categorized within Level 3 of the fair value hierarchy and determined by estimating the payout of 85% of the expected future net cash flows associated to the specific customer license during the earn-out period ending on April 9, 2024. The significant assumptions inherent in the development of the value include the amount and timing of projected future net revenues received by us from the specific customer license, and the discount rate selected to measure the risks inherent in the future cash flows, which was approximately 22%.

In accordance with the acquisition method of accounting, the purchase price of Trianni has been allocated to the acquired assets and assumed liabilities based on their estimated acquisition date fair values. The fair value estimates were based on income, estimates and other analyses. The excess of the total consideration over the estimated fair value of the amounts initially assigned to the identifiable assets acquired and liabilities assumed has been recorded as goodwill, which is not deductible for income tax purposes. The goodwill balance represents the combined company's expectations of the strategic opportunities available to it as a result of the merger, as well as other synergies that will be derived from the merger. Goodwill also reflects the requirement to record deferred tax balances for the difference between the assigned values and the tax bases of assets acquired and liabilities assumed in the business combination.

Total transaction costs expensed in the consolidated statements of income and comprehensive income was immaterial.

During the period ended December 31, 2021, the Company has recorded immaterial adjustments to the preliminary allocation of the purchase price for the finalization of working capital adjustments, income taxes, and the resulting impact to goodwill. The following table summarizes the final purchase price allocation for the Trianni transaction:

Fair value of assets and liabilities acquired	Purchase Price Allocation
Cash and cash equivalents	\$ 8,282
Other current assets	2,794
Total current assets	11,076
Other assets	221
Intangibles	103,582 (i)
Goodwill	30,944 (ii)
Total assets	145,823
Current liabilities	92
Deferred income tax liability	26,517 (ii)
Total liabilities	26,609
Estimated fair value of net identifiable assets acquired and liabilities assumed	\$ 119,214

- (i) The estimated fair value of and useful lives of the intangible assets acquired is as follows:

	Estimated fair value (a)	Estimated useful lives in years(b)
License	\$ 21,782	3
Technology	41,400	20
IPR&D	40,400	(c)
	<u>\$ 103,582</u>	

- (a) The estimated fair values were categorized within Level 3 of the fair value hierarchy and were determined using an income-based approach, which was based on the present value of the future estimated after-tax cash flows attributable to each intangible asset. The significant assumptions inherent in the development of the values, from the perspective of a market participant, include the amount and timing of projected future cash flows (including revenue, regulatory success and profitability), and the discount rate selected to measure the risks inherent in the future cash flows, which was between 19%-22%.
 - (b) The estimate of the useful life was based on an analysis of the expected use of the asset by us, any legal, regulatory or contractual provisions that may limit the useful life, the effects of obsolescence, competition and other relevant economic factors, and consideration of the expected cash flows used to measure the fair value of the intangible asset
 - (c) IPR&D assets are indefinite life intangible assets at the time of acquisition and will be amortized upon completion of IPR&D activities.
- (ii) Goodwill represents the excess of the estimated purchase price over the estimated fair value of Trianni's identifiable assets acquired and liabilities assumed. Goodwill also reflects the requirement to record deferred tax balances for the difference between the assigned values and the tax bases of assets acquired and liabilities assumed in the business combination. Goodwill is not deductible for tax purposes.

Net earnings for the period in the consolidated statements of income and comprehensive income includes immaterial amount of Trianni revenue and net loss of approximately \$1.8 million from the acquisition date to the year ended December 31, 2020.

Unaudited Pro Forma Financial Information

The following unaudited pro forma financial information presents consolidated results assuming the acquisition of Trianni occurred January 1, 2019.

	Years Ended December 31,
	2020
Sales	\$ 239,410
Net earnings	115,088

TetraGenetics

On September 10, 2021, the Company completed a business combination with TetraGenetics, Inc. (“TetraGenetics”), a biotechnology company with a proprietary platform for generating recombinant human ion channels and other transmembrane proteins. The Company acquired 100% of the issued and outstanding shares of TetraGenetics in exchange for: upfront cash consideration of \$12.5 million adjusted for certain closing amounts; potential milestone payments up to \$37.5 million based on the achievement of technical milestones, and additional development and commercial milestone payments related to successfully developed therapeutics. The Company deposited an additional \$12.5 million in escrow included as part of other long-term assets subject to release to the former shareholders of TetraGenetics upon the achievement of certain technical milestones. The estimated fair value of the potential milestone payouts have been included in the final consideration.

The acquisition date fair value of the final purchase price consideration consisted of the following:

	Estimated Fair Value
Closing consideration	\$ 12,926 (i)
Contingent consideration	35,100 (ii)
	\$ 48,026

- i) Pursuant to the merger agreement, the initial cash consideration adjusted for certain preliminary closing adjustments.
- ii) Represents the estimated fair value of the contingent consideration related to potentially successful milestone events. The estimated fair value was categorized within Level 3 of the fair value hierarchy and determined by estimating the expected future cash flows associated with the potential milestone events. The significant assumptions inherent in estimating the fair value include the amount and timing of projected future cash flows, risk adjusted for various factors including probability of success and discounted at an 8.0% discount rate to estimate the present value of the risk adjusted future cash flows.

In accordance with the acquisition method of accounting, the purchase price of TetraGenetics has been allocated to the acquired assets and assumed liabilities based on their estimated acquisition date fair values. The fair value estimates were based on income, estimates and other analyses. The excess of the total consideration over the estimated fair value of the amounts initially assigned to the identifiable assets acquired and liabilities assumed has been recorded as goodwill, which is not deductible for income tax purposes. The goodwill balance represents the assembled workforce acquired, the combined company's expectations of the strategic opportunities available as a result of the merger, and other synergies that will be derived from the merger.

Total transaction costs expensed in the consolidated statements of income and comprehensive income were immaterial.

During the year ended December 31, 2022, no adjustments were made to the preliminary allocation of the purchase price.

The following table summarizes the final purchase price allocation for the TetraGenetics transaction:

Fair value of assets and liabilities acquired	Purchase Price Allocation
Other assets, including cash of \$955	2,632
Intangibles	43,300 (i)
Goodwill	16,906 (ii)
Total assets	<u><u>62,838</u></u>
Other liabilities	2,984
Deferred tax liability	11,830
Total liabilities	<u><u>14,814</u></u>
Estimated fair value of net identifiable assets acquired and liabilities assumed	\$ 48,024

- (i) The estimated fair value and useful lives of the intangible assets acquired is as follows:

	Estimated fair value (a)	Estimated useful lives in years(b)
Technology	\$ 11,300	20
IPR&D	32,000	(c)
	<u><u>\$ 43,300</u></u>	

- (a) The estimated fair values were categorized within Level 3 of the fair value hierarchy and were determined using an income-based approach, which was based on the present value of the future estimated after-tax cash flows attributable to each intangible asset. The significant assumptions inherent in estimating the fair values, from the perspective of a market participant, include the amount and timing of projected future after-tax cash flows including revenue, operating costs, milestone and regulatory success, obsolescence, and profitability. The discount rate selected to present value the future after-tax cash flows attributable to the Technology is a 20.1% fully risked discount rate. A de-risked discount rate of 8.0% was used to present value the probability of success risk adjusted after-tax cash flows attributable to the IPR&D.
- (b) The estimate of the useful life was based on an analysis of the expected use of the asset by the Company, any legal, regulatory or contractual provisions that may limit the useful life, the effects of obsolescence, competition and other relevant economic factors, and consideration of the expected cash flows used to measure the fair value of the intangible asset.
- (c) IPR&D assets are indefinite life intangible assets at the time of acquisition and will be amortized upon completion of IPR&D activities.

- (ii) Goodwill represents the excess of the estimated purchase price over the estimated fair value of TetraGenetics' identifiable assets acquired and liabilities assumed.

The Company has not provided post acquisition and pro forma information relating to the pre-acquisition period as it is not material.