

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, 2021

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) 559-9905

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. ☒

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, 2021, the last business day of the Registrant's most recently completed second quarter, was approximately \$3,794,989,154.

The number of shares of Registrant's Common Stock outstanding as of February 20, 2022 was 283,923,782.

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, 2021 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 platform;
- companies and technologies in our industry that compete with our business;
- our ability to manage and grow our business by introducing our antibody discovery platform to new partners and expanding our relationships with existing partners;
- our partners ability to achieve projected discovery and development milestones and other anticipated key events, including commercial sales resulting in royalties to us, in the expected timelines or at all;
- our ability to provide our partners with a full solution from target to IND submission;
- our partners ability to develop a molecule discovered by us into a viable commercial product, on a timely basis or at all;
- our expectations regarding the completion of our 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 future growth effectively;
- our ability to obtain additional financing in future offerings;
- the volatility of the trading price of our common shares;
- our ability to attract and retain key scientific and engineering personnel;
- business disruptions affecting our operations and the development of our platform due to the global COVID-19 pandemic;
- our ability to avoid material weaknesses or significant deficiencies in our internal control over financial reporting in the future;
- our expectations regarding our PFIC status for our taxable year ending December 31, 2021 or any future taxable year;
- our expectations regarding our recent business acquisitions and our ability to realize the intended benefits of such transactions;
- our expectations regarding the use of our cash resources;
- the ability of our partners to deliver royalty bearing products to the market;
- our expectations about market trends; and
- our ability to predict and manage 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.

Table of Contents

	<u>Page</u>
<u>PART I</u>	
Item 1. <u>Business</u>	1
Item 1A. <u>Risk Factors</u>	36
Item 1B. <u>Unresolved Staff Comments</u>	72
Item 2. <u>Properties</u>	72
Item 3. <u>Legal Proceedings</u>	72
Item 4. <u>Mine Safety Disclosures</u>	73
<u>PART II</u>	
Item 5. <u>Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	74
Item 6. <u>Reserved.</u>	75
Item 7. <u>Management’s Discussion and Analysis of Financial Condition and Results of Operations</u>	76
Item 7A. <u>Quantitative and Qualitative Disclosures About Market Risk</u>	95
Item 8. <u>Financial Statements and Supplementary Data</u>	95
Item 9. <u>Changes in and Disagreements With Accountants on Accounting and Financial Disclosure</u>	96
Item 9A. <u>Controls and Procedures</u>	96
Item 9B. <u>Other Information</u>	96
Item 9C. <u>Disclosure Regarding Foreign Jurisdictions that Prevent Inspections</u>	97
<u>PART III</u>	
Item 10. <u>Directors, Executive Officers and Corporate Governance</u>	98
Item 11. <u>Executive Compensation</u>	98
Item 12. <u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	98
Item 13. <u>Certain Relationships and Related Transactions, and Director Independence</u>	98
Item 14. <u>Principal Accounting Fees and Services</u>	98
<u>PART IV</u>	
Item 15. <u>Exhibits, Financial Statement Schedules</u>	99
Item 16. <u>Form 10-K Summary</u>	99

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.
- Our commercial success depends on the quality of our antibody discovery platform and technological capabilities and their acceptance by new and existing partners in our market.
- If we cannot maintain and expand current partnerships and enter into 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 drug candidates discovered using our antibody discovery platform 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 platform. Such investments in technology are inherently risky and may affect our operating results. If the return on these investments is lower or develops more slowly than we expect, our revenue and operating results may suffer.
- 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 biotech platform technology market is highly competitive, and if we cannot compete successfully with our competitors, we may be unable to increase or sustain our revenue, or sustain profitability.
- Our business has been and may continue to be adversely affected by the COVID-19 pandemic.
- Our success depends on our ability to protect our intellectual property.
- We previously identified a material weakness in our internal control over financial reporting and if we fail to maintain an effective system of internal control in the future, this could result in loss in investor confidence and adversely impact our share price.
- 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 believe that the surest path to a better future is through technological advancement and that the new frontier of technology lies at the interface of computation, engineering and biology. Our mission is to improve health with technologies that transform the way that antibody-based therapies are discovered. We aim to become the centralized operating system for next generation antibody discovery.

Our full-stack, artificial intelligence-, or AI, powered antibody discovery platform searches and analyzes the database of natural immune systems to find antibodies that can be developed as drugs. We believe our technology increases the speed and the probability of success of therapeutic antibody discovery, including enabling discovery against targets that may otherwise be intractable. We forge partnerships with drug developers of all sizes, from large cap pharmaceutical to small biotechnology companies. We empower them to move quickly, reduce cost and tackle the toughest problems in drug development. As of December 31, 2021, we had 156 discovery programs that are either completed, in progress or under contract with 36 partners. As a recent example, in a collaboration with Eli Lilly and Company, or Lilly, we applied our technology stack to co-develop two antibody therapies to treat and prevent COVID-19. At the start of the pandemic, when bringing a treatment to patients quickly was the priority, we discovered bamlanivimab from a single blood sample obtained from a convalescent patient, and with our partners, advanced into clinical testing 90 days after initiation of the program. It was the first monoclonal antibody therapy to reach clinical testing and the first to receive Emergency Use Authorization, or EUA, from the U.S. Food and Drug Administration, or FDA, for the treatment of mild-to-moderate COVID-19 in high-risk patients. Since receiving authorization in November 2020, bamlanivimab alone and together with other antibodies has been used to treat approximately a million patients, potentially preventing tens of thousands of hospitalizations and deaths. Knowing that additional antibodies would be needed to combat emerging variants, we deployed our platform to identify bebtelovimab (also known as LY-CoV1404), a highly potent antibody that neutralizes Omicron and all currently known variants of concern (VOC). Lilly advanced bebtelovimab into clinical testing in May 2021 and received an EUA from the FDA in February 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 into clinical development on this timeframe again in the future. We initiated our partnering program in 2015 and have only had this one program result in clinical milestone payments to us to date, and we have not yet had a program receive marketing approval.

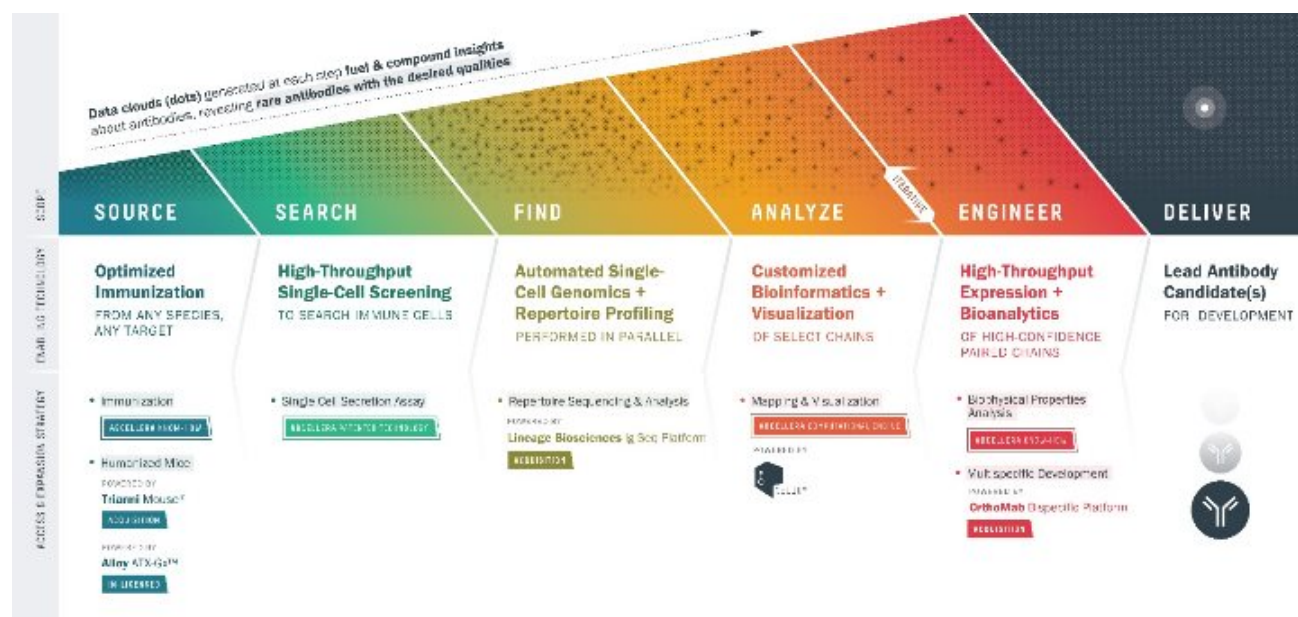
Antibodies, which are proteins generated by natural immune systems to fight infection and disease, are amongst the fastest growing class of drugs and are used across multiple therapeutic areas, including oncology, inflammation, neurodegeneration and many others. In 2019, antibody-based therapeutics accounted for over \$140.0 billion in sales worldwide and represented five of the top 10 selling therapeutics. The rise of genomics, high-throughput biology and genetic engineering has greatly expanded the opportunity and the ecosystem of innovators working to advance the development of antibody-based therapeutics. There has been a proliferation of biopharmaceutical companies pursuing innovative drug candidate formats and new targets. As new entrants continue to emerge, we believe the total addressable market will continue to expand.

As the field of antibody therapeutics evolves, finding novel antibodies with desired therapeutic properties has become increasingly competitive and demanding. We believe that there are two fundamental problems hindering the discovery and development of next generation antibody-based therapeutics. The first is the state of technology: because of the limitations of legacy discovery approaches, there are many well-validated targets for which suitable antibodies cannot be found. The second is access: most companies are forced to cobble together fragmented solutions and lack the facilities and expertise needed to prosecute their antibody programs. Both of these problems contribute to the rising cost of drug development and delay bringing needed therapies to patients.

Many emerging and established life sciences companies have been built around technologies that focus on one or a limited number of steps in the discovery process, including immune repertoire sequencing, or RepSeq, single-cell analysis, AI, and transgenic rodent platforms. We believe we uniquely integrate proprietary technologies that address each of these steps, creating a complete solution for our partners. Over the last 10 years, we have developed and assembled technologies that unlock the database of natural antibodies. We are democratizing the industry by providing our partners of all sizes with access to our centralized operating system.

As depicted in Figure 1 below, our technology stack is a chain of interlocking technologies that is designed to enable the identification of antibodies with desired therapeutic properties.

Figure 1: Our Technology Stack



Some notable technologies within our stack that compound the productivity and efficiency of each step of the discovery process include:

- **Source.** We combine proprietary immunization with genetically engineered mouse technologies, including the proprietary suite of humanized mice we acquired in November 2020 in connection with our acquisition of Trianni, to provide a diverse source of human antibodies.
- **Search.** Our patented microfluidic single-cell screening technology combines speed, throughput, efficiency, resolution and versatility, enabling rapid and deep searches of natural antibody responses.
- **Find.** Following the acquisition of Lineage Biosciences Inc., or Lineage, in March 2017, we integrated high-throughput RepSeq technology with our single-cell screening technology to provide leading capabilities for the comprehensive profiling and functional characterization of antibody diversity.
- **Analyze.** Our internally developed platform, Celium, a powerful computational engine for mining, interacting and visualizing the terabytes of data generated during an antibody discovery campaign, combines software, AI and visualization tools to organize, compute and interactively explore large multidimensional data sets.
- **Engineer.** We acquired rights to the OrthoMab bispecific technology in June 2020, which is a versatile and clinically-validated protein engineering solution to design and produce bispecific antibodies.

The marriage of advanced data collection and computation creates a flywheel effect that augments our technology. As we run our partnership business, we are amassing unique, multi-dimensional data sets that link measurements at the level of single immune cells with the properties of the antibodies they make and the DNA sequences that encode their function. A single antibody discovery project can generate millions of DNA sequences and single-cell measurements, as well as thousands of target-specific antibodies, each characterized by hundreds of data points. Every project generates more data about the antibody immune response. This creates a competitive advantage whereby Celium extracts insights from the data that allows us to accelerate wet lab experimentation with *in silico* computation in a continuously iterative process. Because our computation is grounded on real world data, the output of Celium is not theoretical predications. We find real molecules that have been optimized by nature.

Our business thesis is based on the belief that technological advancement can improve the drug development process and that maximizing the value and impact of our work is best achieved through partnerships. In March 2020, we tested these beliefs as we mobilized our response to the COVID-19 pandemic. Working with our partner Lilly, we were able to progress from initiation of discovery to clinical trials in only 90 days.

As of March 15, 2021, bamlanivimab, the first monoclonal antibody therapy from this collaboration, has been evaluated both alone and together with other antibodies across multiple clinical trials for the treatment and prevention of mild-to-moderate COVID-19. Bamlanivimab alone and together with other antibodies has been used to treat approximately a million high-risk COVID-19 patients.

Lilly has successfully completed a Phase 1 study of bamlanivimab in hospitalized patients with COVID-19 (NCT04411628), a Phase 2/3 study in people recently diagnosed with COVID-19 in the ambulatory setting (BLAZE-1, NCT04427501) and a Phase 3 study of bamlanivimab for the prevention of COVID-19 in residents and staff at long-term care facilities (BLAZE-2, NCT04497987). A Phase 2 study assessing the efficacy and safety of bamlanivimab alone, and bamlanivimab with other neutralizing antibodies versus placebo for the treatment of symptomatic low-risk COVID-19 in the outpatient setting (BLAZE-4, NCT04634409) has completed enrollment. In addition, bamlanivimab is being tested in the National Institutes of Health-led ACTIV-2 study in ambulatory COVID-19 patients. On January 27, 2021 Lilly announced an expansion to the ongoing BLAZE-4 trials to evaluate bamlanivimab together with VIR-7831.

Bamlanivimab received EUA, from the FDA, on November 9, 2020, and bamlanivimab in combination with etesevimab received EUA from the FDA for the treatment of mild-to-moderate COVID-19 in high-risk patients on February 9, 2021. On November 22, 2020, Lilly was granted authorization for bamlanivimab by Health Canada under the Interim Order Respecting the Importation, Sale and Advertising of Drugs for Use in Relation to COVID-19. Similar authorizations for bamlanivimab have been granted in Europe, the Middle East and Africa. Through its COVID-19 Treatment Guidelines, the National Institutes of Health recommended the use of bamlanivimab together with etesevimab to treat early COVID-19 in high-risk patients on February 23, 2021. Bamlanivimab alone and together with etesevimab received a positive opinion from the European Medicines Agency's Committee for Medicinal Products for Human Use, on March 5, 2021: the harmonized, European Union, or EU, level opinion on the efficacy, quality, and safety of the antibodies can be used by EU member states when making decisions on the possible use of the therapies at a national level prior to market authorization. On September 16, 2021, the EUA for bamlanivimab together with etesevimab was expanded to include post-exposure prophylaxis for COVID-19. On December 3, 2021, the EUA for bamlanivimab with etesevimab was expanded to include high-risk pediatric patients for the treatment of mild to moderate COVID-19 as well as post-exposure prophylaxis. On January 24, 2022, the FDA reissued the EUA for bamlanivimab with etesevimab and restricted their use in geographic regions where exposure is likely to have been to a non-susceptible SARS-CoV-2 variant, based on available information including variant susceptibility to these drugs, and regional variant frequency. Due to the high frequency of the Omicron variant, bamlanivimab together with etesevimab is not currently authorized in any U.S. region, and these drugs may not be administered for treatment or post-exposure prevention of COVID-19 under the EUA until further notice by the FDA.

Under our partnership with Lilly, we are entitled to receive a specified percentage of proceeds that Lilly receives from these sales. In 2020 and 2021, we recognized a total of \$198.3 million and \$327.3 million, respectively, in royalty payments related to sales of bamlanivimab. As proud as we are to have played a role in the global response to COVID-19, we believe it is only an example of how our technology can accelerate antibody discovery.

Our business has historically been both high growth and capital efficient. While our historical cash flows may not be indicative of future results, we have generated positive operating cash flow cumulatively since our inception in 2012 and in every year since 2018. Our partnership agreements include: (i) payments for technology access and performance of research, (ii) downstream payments in the form of clinical and commercial milestones and (iii) royalties on net sales of any approved therapeutics. We structure our agreements in a way that is designed to align our partners' economic interests with our own. 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. For the years ended December 31, 2020 and 2021, our revenue was \$233.2 million and \$375.2 million, respectively. For the years ended December 31, 2020 and 2021 our net income was \$118.4 million and \$153.5 million, respectively. As of December 31, 2021, we have entered into agreements for 156 partnered discovery programs, 131 of which include the potential for milestone and royalty payments from our partners. As of December 31, 2021, we had 386 full-time employees in Canada, the United States and Australia, which was comprised of approximately 49% scientists, 32% business professionals, and 19% engineers and data scientists.

Impact of COVID-19

Since the start of the COVID-19 pandemic, we have taken and continue to take 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 implementing a hybrid return to our facilities for those employees who have been working remotely.

We continue to take the following actions to address the evolving COVID-19 pandemic:

- We implemented comprehensive COVID-19 guidelines that are shared via our internal communication platform to provide real-time updates company-wide relying on directives from local health authorities. As information is gathered, we adapt accordingly, including work from home requirements.
- We implemented protocols for employees necessary to carryout Company functions in the office and laboratory facilities including physical distancing, personal protective equipment, signage, erecting barriers between desks and lab benches, and implementing space restrictions for different areas of the facilities.
- We have limited business travel to essential activities and have robust procedures to control and monitor all office and facility access.
- We have not been required to stop research activities due to the COVID-19 pandemic. We will continue to adapt and apply new measures as required and as directed by local health authorities.

Our Strategy

Our mission is to improve health with technologies that transform the way that antibody-based therapies are discovered. To achieve this mission, we aim to become the operating system for next generation antibody discovery and to act as an integral part of our partners' development efforts.

We seek to expand the industry of antibody therapeutics in two ways. First, we believe our technology can solve discovery problems to unlock new opportunities for therapeutic antibody development. Second, by accessing our teams, technologies and facilities, partners can eliminate the extended delays and costs associated with setting up antibody discovery capabilities. Through our partnership business, we aim to enable our partners to start programs without delay and prosecute them at maximum speed.

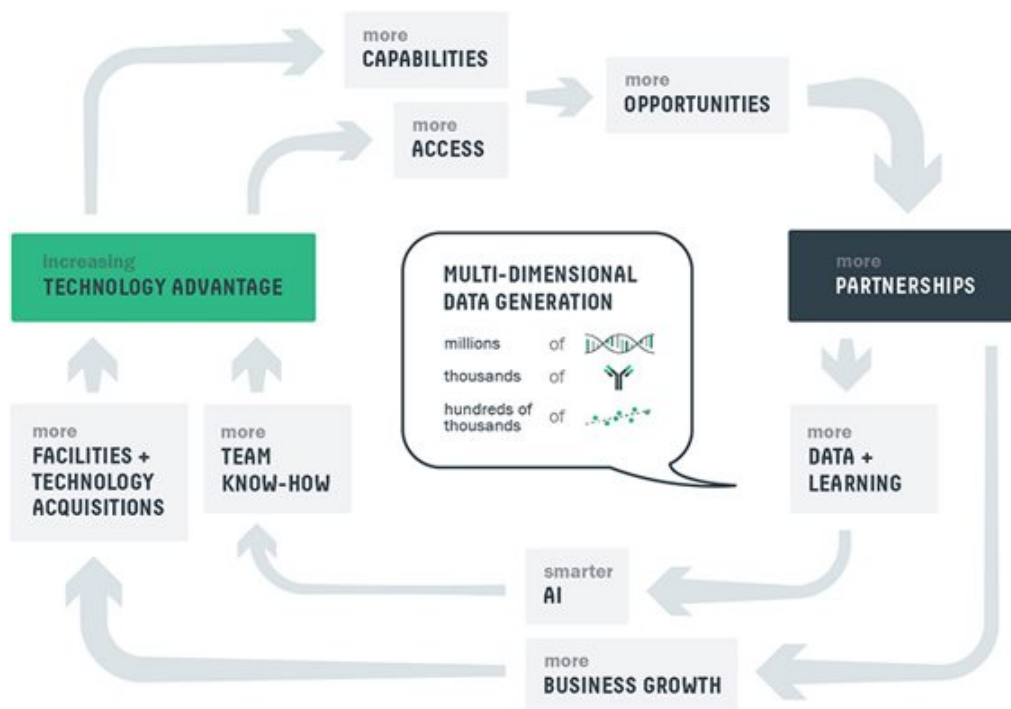
Our strategy includes:

- **Create more value with our existing partnerships.** We have entered into contracts for more than 155 antibody discovery programs. Our partners include large cap pharmaceutical companies, biotechnology companies of all sizes and non-profit and government organizations. Where appropriate, we seek to expand our single-program partnerships to multi-year, multi-target agreements. As of December 31, 2021, over 80% of partnerships with downstream-participation contracts included multiple targets. Through continual expansion of our capabilities and the addition of new technologies we will also look to increase the royalties associated with our partnership deals.
- **Increase the number of partnerships.** We will work to forge new partnerships across our target customers, including large cap pharmaceutical companies, biotechnology companies of all sizes and non-profit and government organizations dedicated to drug development. We plan to gain new customers via increased business development activities, technological expansion and superiority over alternative methods. We will also work to increase the number of deals with smaller early-stage biotech firms by offering flexible deal structures and vertical integration from target to antibody drug candidate.
- **Expand our market by delivering a full solution through forward integration.** Many of our potential partners, including early stage biotech companies, are seeking a partner with the infrastructure, resources and expertise to execute early stage discovery and preclinical development programs. Building on our existing platforms, we are adding capabilities and infrastructure to support full chemistry, manufacturing and control, or CMC, activities and GMP manufacturing to provide our partners with a full solution from target to investigational new drug application, or IND, submission.
- **Scale our teams and facilities to meet future demand.** We are building capacity to support the execution of additional partnerships and expansion of the scope of discovery programs. To achieve this, we are investing in expanding our workforce and our facilities, and increasing efficiency through automation and software solutions.
- **Further our technological differentiation.** We believe we have technological differentiation for discovery of antibody drug candidates from natural immune systems. We intend to maintain our leading position through research and development to amplify and add capabilities in areas such as computation, protein engineering, immunization technologies, genetically engineered rodents and cell line selection. As we do so, we will continue to expand and protect our intellectual property estate. We will continue to look for strategic technology acquisitions to broaden and deepen our capabilities and expertise in antibody discovery and development, or that offer opportunities to expand our partnership business into adjacent therapeutic modalities, including vaccine development and cell therapy.

- **Leverage synergy of data and computation.** We leverage unique data sets and AI to increase the efficiency, speed, and capacity of our discovery programs. In our partnership programs, we maintain rights to large 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.

We believe our strategy creates a virtuous cycle, as depicted in Figure 2 below, that will drive our position as the centralized operating system for antibody discovery.

Figure 2: Our Business Strategy



Our Key Competitive Strengths

Our industry position and success are based on the following key competitive strengths:

- **Better antibody discovery, from the start.** Our ability to perform comprehensive searches of natural immune systems allows us to expand the universe of antibody candidates and increase the probability of finding those candidates with therapeutic properties. This allows us to be more selective, thereby increasing the quality of leads that advance to development, including finding rare antibodies and reducing the time, cost and effort of having to start again or fix molecules that are broken.
- **A full-stack technology, accessible to all.** We have built a centralized operating system for therapeutic antibody discovery and development. Our proprietary technology stack leverages and integrates a wide array of state-of-the-art technological tools and expertise in areas including microfluidics, single-cell analysis, high-throughput genomics, machine learning and hyper-scale data science. Our end-to-end solution allows us to rapidly source, search, decode, engineer and ultimately deliver lead antibodies for our partners' development efforts. We democratize antibody discovery by enabling drug developers of all sizes throughout the world to benefit from our technologies and initiate their programs without delay.
- **An AI platform built on real world data.** Our AI platform is built and continually validated with real world data. Unlike AI-only antibody discovery platforms, the output of our process is not theoretical predictions. We apply computation to find real molecules with desired properties. We inform wet lab experimentation with *in silico* computation, and vice versa, continuously iterating this process for each discovery campaign.
- **A unique combination of hardware, software and wetware.** We believe our approach is differentiated based on the integration of proprietary and patented technologies across hardware, software and wetware. Our founders pioneered single-

cell antibody screening in nanoliter volumes and developed proprietary microfluidic devices and custom instrumentation to automate and scale screening. Our workflows incorporate proprietary immunization methods, including the Trianni suite of transgenic mice, optimized molecular biology protocols and patented protein engineering technologies. These technologies are bound together with custom software, data science tools and machine learning algorithms, and are operated by high-performing teams.

- **Industry-innovating business model.** We have built a high-growth business that applies to a broad universe of partners and directly aligns with their economic interests. We believe this capital-efficient model allows us to build a diversified portfolio of royalty streams that reach into the future therapeutic antibody market. As we focus on improving our antibody discovery platform, we will continue to make critical investments in technology that benefit the entire industry. As of December 31, 2021, we have entered into 156 partnership agreements.
- **The flywheel of data, partnerships and technology.** We believe our technology becomes more powerful and more accurate with each program. Data generated through our discovery partnerships provides the basis for training AI modules that yield new insights into antibody responses and that improve the speed, accuracy and efficiency of our technology. This creates a positive feedback loop through which each round of data analysis improves the speed and efficiency of the next round of data generation.
- **Strong brand built on performance and third-party recognition.** Our business is built on the success of our partners and the strength of our technology. The strength of our technology has won the support of governments, including \$30.6 million from the U.S. Defense Advanced Research Platform, or DARPA, Pandemic Prevention Platform, or P3, program and CAD \$175.6 million (\$125.6 million) from the Government of Canada's Strategic Innovation Fund. We have been covered extensively by the media, including top-tier outlets such as CNN, MSNBC, Time Magazine, the Financial Post, The New York Times, Wired and the Wall Street Journal.
- **Robust IP portfolio including foundation patents.** Our patent portfolio reflects our innovative position and end-to-end capabilities in antibody discovery, including microfluidic single-cell screening and cell culture, single-cell genomics, antibody RepSeq and bispecific antibody engineering. Our Chief Executive Officer and Chief Operating Officer are named inventors of the microfluidic single-cell screening and cell culture patents exclusively in-licensed from the University of British Columbia, or UBC. Through the acquisition of Lineage, we control some of the earliest filed RepSeq patents that we are aware of. We leverage the advanced computational and experimental protein engineering methodologies disclosed and claimed in the OrthoMab patent portfolio to generate bispecific antibodies from any two antibody sequences. In addition, we have filed non-provisional applications in the US with counterparts in numerous jurisdictions around the world related to bamlanivimab, and other COVID-19 antibodies, which we have exclusively licensed to our partner Lilly.
- **Founder-led team, custom-built for interdisciplinary technology development.** We believe investments in teams and technology are the surest path to a better future and that the frontier of technology lies at the intersection of engineering, biology and data science. Our founder-led team, backed by investors from the life sciences and tech sectors, has been custom-built for technology development at the interface of genomics, microfluidics, computation, biologics, protein engineering and translational sciences. As of December 31, 2021, we employed approximately 400 people, over two-thirds of whom are scientists, engineers, and data scientists.

Industry Background

Nature's database of antibodies

Antibodies are the body's solution for fighting infection and disease. Antibodies are Y-shaped proteins, made by the immune system, that circulate in the blood. Their function is to specifically recognize foreign targets (viruses, bacteria, proteins or cancer cells), bind to them and then eliminate them. The repertoire of antibodies made during an immune response is extensive and encodes essential information about our health, our history of disease and our protection against future illness.

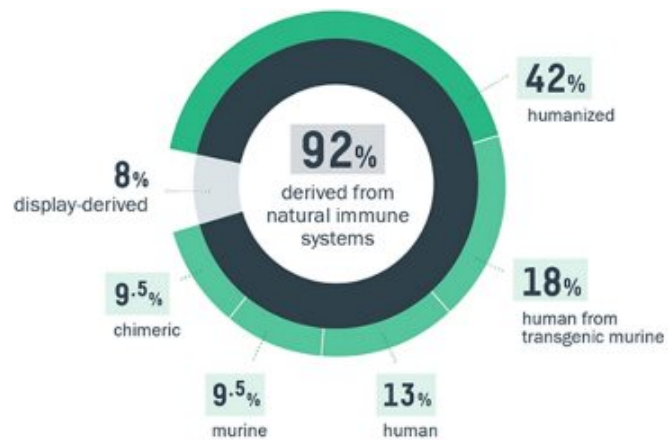
Unlike approximately 20,000 genes that are hard-coded in the human genome, antibodies are created *de novo* in each individual immune cell through a process of the random shuffling of DNA fragments. For each antibody, this random shuffling creates two separate genes, referred to as the heavy chain and the light chain, that assemble to form a complete antibody molecule. Taken together, there are approximately 2.9 million different combinations of heavy and light chain genes. The complexity of this diversity is augmented by additional random DNA insertions and edits. This results in over 100 trillion different possible antibody molecules, roughly 100 billion times the number of hard-coded genes in our genome. This diversity is astonishingly large. To put it into perspective, if all the possible antibody variable sequences were typed back-to-back in 12-point Arial font, the resulting string of letters would extend from the earth to the sun over 1,000 times.

At any given moment, each of us is making approximately one billion different antibodies, an infinitesimal fraction of the possible diversity of antibodies. Each antibody is made by a single immune cell. When provoked by infection or disease, these cells

quickly divide and mutate their antibodies to create an expanded family, or lineage, of cells having closely related antibodies. Cells producing antibodies that best bind to the target get a selective advantage and divide faster: those that do not, are eliminated. Through this selection process, immune systems generate large families of optimized antibodies that can bind almost any target tightly and with exquisite precision.

Natural antibodies created by the immune system benefit from the processes of selection, quality assurance and optimization that have evolved over 500 million years. As a result, naturally-produced antibodies generally have superior properties for drug development. As compared to antibodies isolated from man-made libraries, they generally bind more tightly and specifically, and have superior properties for manufacturing. Due to their superior drug-like properties, approximately 92% of all approved antibody drugs have been derived from natural immune systems, as illustrated in Figure 3 below.

Figure 3: Sources of Approved Antibody Drugs



(Source: TAB Database of Therapeutic Antibodies, September 27, 2020).

Our Market Opportunity

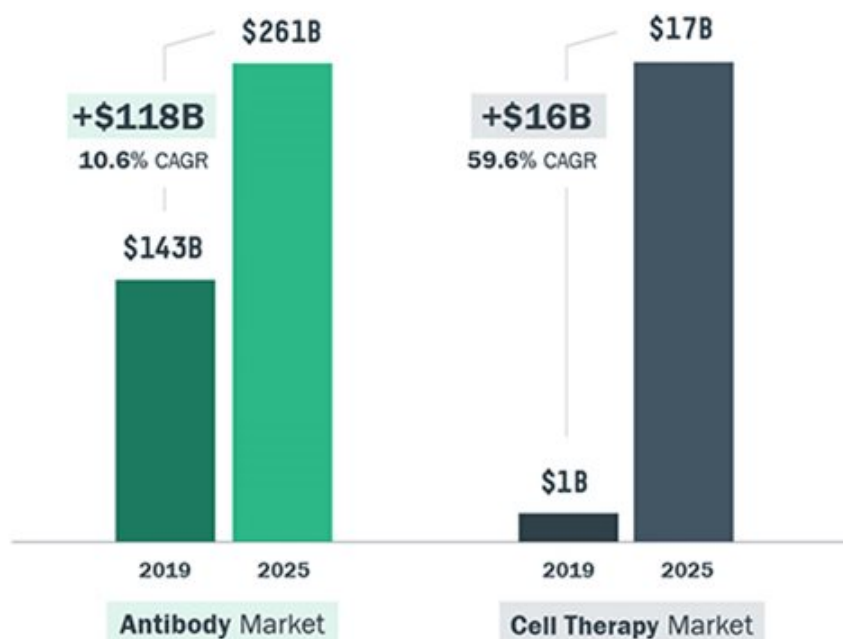
Antibodies are the fastest growing class of drugs and are used across multiple therapeutic areas, including oncology, inflammation, neurodegeneration and many more. In 2019, antibody-based therapeutics accounted for over \$140.0 billion in sales and represented five of the top 10 selling therapeutics worldwide. Antibodies represented 70% of the sales of all biologics, and 36 antibody therapeutics reached blockbuster status with sales higher than \$1.0 billion. Mean peak-year sales for currently marketed monoclonal antibody and monoclonal conjugate antibody drugs are estimated at approximately \$3.1 billion (median \$1.8 billion). As of September 30, 2020, there were over 115 approved antibody therapeutics, with more than 150 in Phase 3 clinical trials. The cycle time for antibody discovery projects to reach Phase 1 clinical trials from target selection has been approximately 5.5 years. Monoclonal antibody and monoclonal conjugate antibody drugs have taken on average approximately 7.5 years to reach market authorization from the start of Phase 1 clinical trials. From 2014 to 2020, the number of Phase I clinical trials beginning to enroll patients for monoclonal antibody and conjugate antibody therapies increased by more than 120%, from 207 to over 460.

The probability for a molecule discovered by us to succeed in reaching Phase 1 clinical trials has been estimated at approximately 37%. Monoclonal antibody and monoclonal conjugate antibody drugs have had an approximately 18.5% likelihood of receiving market authorization from the start of Phase 1 clinical trials. According to a study of over 9,000 clinical development programs at large pharmaceutical companies, approximately 90% of all molecules fail to reach approval. Antibody-based therapeutics have thus achieved a higher rate of clinical success and offer several advantages:

- Minimal off-target toxicity
- Long half-life in circulation
- Ability to stimulate the immune system
- Low immunogenicity
- Higher affinity and potency

As shown in the Figure 4 below, the antibody-based therapeutics market is expected to reach approximately \$260.0 billion in size by 2025, representing a CAGR of approximately 11% for the period from 2019 to 2025. Further, the more nascent cell therapy market is expected to grow from \$1.0 billion in 2019 to over \$17.0 billion in 2025, reflecting a CAGR of approximately 60%. Opportunities for accelerating growth of the antibody therapeutics market include improved access to traditionally difficult targets (e.g., G protein-coupled receptors, or GPCRs, and ion channels), the emergence of new therapeutic modalities (e.g., bispecifics, chimeric antigen receptor T cells, or CAR-T, cell therapy and antibody conjugates) and the ever-expanding number of companies entering the space. Our partnership business allows us to participate in the future antibody therapeutic market through royalties and milestones on drugs that have been discovered using our platform. As of December 31, 2021, we had 156 discovery programs that are either completed, in progress or under contract with 36 partners ranging from large pharmaceuticals to biotechnology companies.

Figure 4: Total End Market Sales (\$billion)



Challenges

Technology has dramatically improved efficiency in nearly all sectors of our economy. Within drug discovery, technological improvements have also been made, but we believe the impact has been limited. For instance, the cost of developing new drugs has roughly doubled every nine years since the 1950s. This retrograde trend, referred to as Eroom's Law, stands in stark contrast to Moore's law, which successfully describes the doubling of computational power every two years.

Looked at from any perspective, drug development still:

- **Fails too often.** According to a study of over 9,000 clinical development programs at large pharmaceutical companies, approximately 90% of molecules fail to reach approval. Failure rates are even higher when considering programs that do not advance into clinical development. We believe the prevalent use of outdated technologies and fragmented processes by antibody drug developers of all sizes create significant inefficiencies throughout the drug discovery process. When antibodies with suboptimal properties are advanced into preclinical and clinical development, they are less likely to progress through development.
- **Takes too long.** Based on a database of antibody drug development programs, the average antibody drug takes between approximately 9.4 and 12 years from initiation to approval. Selecting an antibody with the desired properties for successful preclinical and clinical development is akin to finding a needle in a haystack. We believe the inefficiencies in established antibody discovery methods can contribute up to years of delays and result in suboptimal antibodies being developed.
- **Costs too much.** According to a well-publicized study published by Tufts University in 2016, the average cost of drug development was approximately \$2.9 billion. A significant portion of this cost relates to the use of suboptimal drug candidates.

We believe that these challenges are often attributable to a continued reliance on outdated technologies. This is a watershed moment to redefine drug discovery. The past 10 years have seen unprecedented advances in the tools to measure biology, including genomics, high-throughput imaging and industrial-scale lab automation. These tools generate an avalanche of data that contain the insights needed to more quickly bring drugs to the clinic. At the same time, computational power and AI now make it possible to see relationships within big data sets that could otherwise not be seen.

Deep integration of high-quality data generation and computational tools are needed to solve the following challenges in discovery:

- ***Underpowered and fragmented technologies.*** There are well-validated drug targets that cannot be addressed using conventional methods because of limitations with:
 - o ***Outdated discovery technologies.*** Antibody discovery workflows primarily use technology invented more than 35 years ago, including hybrid cells, or hybridoma, and display. Hybridoma provides only a tiny window into the database of natural antibodies. Display technologies do not benefit from natural antibody optimization.
 - o ***Fragmented solutions.*** Recently developed technologies are not integrated into a complete solution and address only a limited number of steps in antibody discovery.
- ***Access to technology.*** Most companies are unable to access the novel technologies needed to address every step of the antibody discovery process:
 - o ***High entry barrier.*** The time and capital-intensive nature of building internal antibody discovery capabilities limits the number of firms that can effectively participate in drug development.
 - o ***Siloed technology access.*** New technologies are often held within companies for internal use and not available broadly.
- ***Developing technologies are entrenched in theoretical solutions.*** The application of machine learning approaches can be limited by predictions that are difficult or impossible to transfer into experimentally validated results.

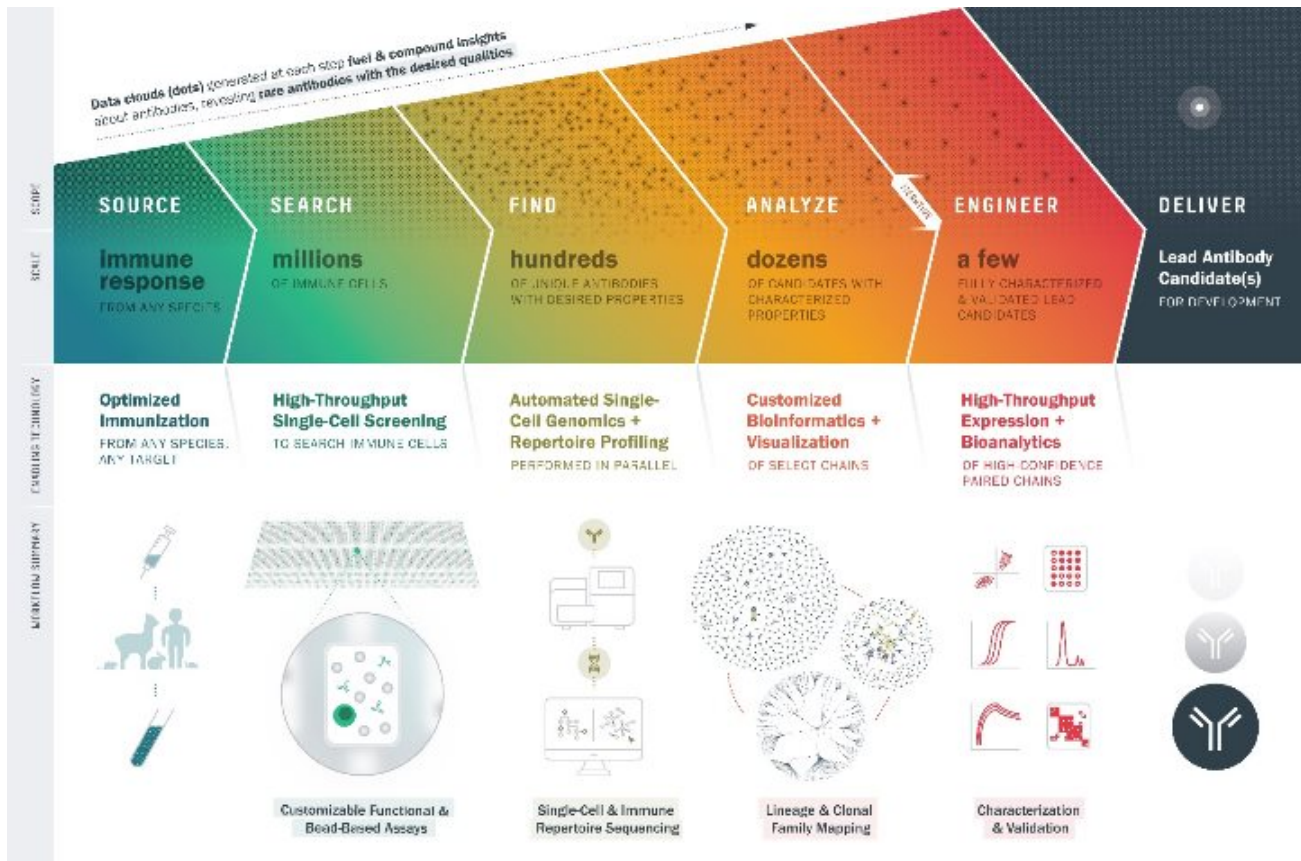
Our Platform

Our platform is an operating system designed to support many antibody modalities; unlock new targets; increase the speed to clinical development for our partners and increase the potential clinical and commercial success for our partners.

Our full-stack, AI-powered technology sources, searches, decodes and analyzes antibody responses with the ultimate goal of engineering new antibody drug candidates for our partners. Our platform incorporates and integrates modern technology tools from engineering, microfluidics, single-cell analysis, high-throughput genomics, machine learning and hyper-scale data science. We have internally developed, in-licensed or acquired our technologies. We deploy our platform to help our partners in their efforts to identify antibodies with better potency and developability.

We believe our approach of integrating modern hardware, software and wetware is unique. We have pioneered nanoliter volume single-cell antibody screening methods using microfluidics. Our workflows incorporate proprietary immunization methods, including the Trianni suite of transgenic mice, optimized molecular biology protocols and patented protein engineering technologies. The aggregation of these technologies, coupled with our proprietary processes and team, allows us to provide a differentiated offering to our partners. Figure 5 below represents how our technologies are integrated into one stack.

Figure 5: Our Technology Stack with Workflow Summary



The computational engine of our platform, Celium, combines software, AI and visualization tools to mine, organize, compute and interactively explore the immense multidimensional data sets that we produce in each antibody discovery campaign. Unlike many AI-based antibody discovery approaches, Celium is continually improved with real world data. We iteratively inform wetlab experimentation with *in silico* computation, and vice versa. The output of our process is not theoretical predictions. We discover real molecules that have been optimized by nature.

Our platform is an operating system that is designed to provide the following benefits:

- **Support many antibody modalities.** Our technology is capable of performing discovery from a variety of species and using a wide array of selection criteria. We believe this expands the starting diversity and increases the likelihood of finding antibodies with specific properties needed for new antibody therapeutic modalities: discovery of binding domains for a variety of antibody formats; discovery of internalizing antibodies for antibody-drug or antibody-siRNA conjugates; single-chain camelid antibodies for use in CAR-T and protein engineering; and antibody pairs that have specific affinity and binding epitope recognition for bispecific antibody applications.
- **Unlock new targets.** Our technology is capable of performing deep searches of antibody responses using cell-based assays that preserve the native conformation of traditionally difficult membrane protein targets. We believe this capability, combined with our proprietary immunization methods, provides a unique advantage in the discovery of rare antibodies that modulate the function of GPCRs and ion channels, two large and well-validated families of drug targets for which discovery using traditional techniques has been extremely difficult or intractable. Our proprietary Trianni All-Epitope mouse line (currently in validation) is engineered to mount robust immune responses against difficult targets that have high homology between rodents and humans, such as some high-value GPCR and ion channel class of targets that are prevalent in many diseases and indications including cancer, neurodegenerative and cardiovascular diseases, and pain.
- **Increase the speed to clinical development for our partners.** Our integrated technology stack is designed to accelerate the discovery and pre-clinical development process. We anticipate substantial time can be saved through faster workflows and

avoiding unnecessary cyclical efforts. Our technology stack is capable of going from screen to hundreds of antibody sequences in only three days, and from sequences to characterized antibody proteins in less than ten days. Speed may also be achieved by increasing diversity at the start of discovery to maximize the chance that suitable leads are found on the first pass, and by minimizing the requirement of protein engineering. Finally, additional speed in discovery can be achieved by integrating all steps of the process seamlessly.

- **Increase the potential clinical and commercial success for our partners.** We aim to increase the probability of clinical and commercial success of our partners. Our technology stack is designed to provide a competitive advantage in speed to the clinic and to identify antibodies with superior biophysical properties.

We believe our competitive advantage is derived from integration of multiple proprietary technologies and a seamless workflow. Table 1 below provides how each aspect of our end-to-end technology stack addresses challenges in antibody therapeutic discovery:

Table 1: Our Platform and Solution

	DISCOVERY CHALLENGE	OUR SOLUTION
SOURCE	❗ It can be difficult to generate a diverse source of high-quality antibodies.	✔ Our proprietary technology combines optimized immunization with genetically engineered humanized mouse technology to provide a diverse source of human antibodies.
SEARCH	❗ Outdated technologies are highly inefficient in searching natural antibody responses.	✔ Our patented microfluidic single-cell screening technology performs a deep search of antibody responses.
FIND	❗ It can be challenging to profile and characterize antibody repertoires to find the best potential candidates.	✔ We combine high-throughput immune repertoire sequencing with single-cell screening to functionally characterize antibody diversity.
ANALYZE	❗ It can be difficult to measure, aggregate and compute the large data sets needed to analyze natural antibodies.	✔ Our automated antibody characterization pipeline generates large multi-dimensional data sets that can be manipulated, computed, and interactively explored using our computational engine, Celium.
ENGINEER	❗ Most antibody engineering approaches add risk and time to antibody development, and robust bispecific antibody technology is difficult to access.	✔ We leverage computation and expanded antibody data sets to streamline engineering of antibodies , and our OrthoMab bispecific technology provides a flexible and clinically-validated protein engineering solution to design and produce bispecific antibodies.

Our Partnership Business

We forge partnerships with large cap pharmaceutical companies, biotechnology companies of all sizes and non-profit and government organizations. Our partners select a target and define the antibody properties needed for therapeutic development. We provide discovery solutions to partners that have a range of discovery capabilities, from the highly enabled to the less enabled. We enable discovery against targets that have traditionally been intractable, and we accelerate programs against less difficult targets.

Our Target Market

We provide discovery solutions to partners that have a range of discovery capabilities, from the highly enabled to the less enabled. We accelerate discovery programs spanning a range of difficulty, from traditionally “Intractable discovery problems” to less difficult “Tractable discovery problems”. These categories, taken together, create a two-dimensional grid that segments our market opportunities as shown in Figure 6 below.

Figure 6: Our Target Market Matrix



The four segments depicted in Figure 6 above are as follows:

- **Segment 1.** Includes tractable targets at large cap pharmaceutical and large biotech companies that have made significant investments in building internal capabilities in antibody discovery, typically using automated hybridoma methods and/or antibody display technology. We believe that our full technology stack allows us to serve this market by delivering antibody drug candidates faster and of higher quality, and by providing access to more advanced technologies for next-generation biologics.
- **Segment 2.** Includes intractable targets at large cap pharmaceutical and large biotech companies. This segment holds untapped potential to generate first-in-class therapies for large unmet medical needs (e.g., pain, autoimmunity, metabolism), but technological barriers have resulted in limited success. We believe our technology provides a strong competitive advantage to find viable antibody drugs candidates for difficult targets, including GPCRs and ion channel targets.
- **Segment 3.** Includes tractable targets at growth biotech companies. These companies have comparatively limited discovery capabilities versus their larger peers. We believe that in working with these partners we can provide the following advantages: (i) access to a fully integrated technology stack (ii) accelerate their efforts with timely access to the necessary teams and facilities and (iii) improve the quality of the final antibody leads. In this way, we democratize antibody discovery by providing all of our partners with access to our centralized operating system.
- **Segment 4.** Includes intractable targets at growth biotech companies. Presently, there are few partners working in this market segment. We believe that our technology stack can unlock these opportunities, leading to an expanded ecosystem of companies developing antibody therapeutics with the potential to become first-in-class therapies.

Our Partnership Deals

Our deals emphasize participation in the success and upside of future antibody therapeutics. Our partnership agreements include near-term payments for technology access, research and intellectual property rights, downstream payments in the form of clinical and commercial milestones, royalties on net sales, and may include alternative investment opportunities including equity in our business partner and various rights for deeper involvement in moving molecules forward.

As of December 31, 2021, we had 156 discovery programs that were either completed, in progress or under contract, including 131 with 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 the recent publicly disclosed partnerships established over the last two years are included in Tables 2 and 3 below.

Table 2: Summary Partnership Agreements with Pharmaceutical & Biotechnology Companies that include downstream participation from 2018 to 2021*

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

* Effective date of agreement

Table 3: Downstream Participation

Most of the programs with our partners will generate milestone payments to us should our partners reach certain preclinical, clinical, regulatory, and commercial milestones. In addition, programs that generate molecules that become commercial products may generate royalty payments to us on the net sales of those products. We also have other downstream economic participation including equity/equity-like positions and options to co-invest. The following table represents the potential maximum value of our milestones by development stage and our range of royalty payments:

Milestones (in billions) ¹		Royalty on net sales, 5th to 95th percentile range ²	
Preclinical	\$0.05	2015-2019 contracts	0-4%
Clinical	\$0.75	2020-2021 contracts	2.5-8.4%
Regulatory	\$1.08		
Commercial	\$2.72	Other downstream participation	
Total	\$4.60	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

Reflecting the increasing value that we create for our partners, and our ability to capture that value, are the range and progression of the royalty rates we are entitled to under our agreements. Half of royalty rates associated with the 98 new partner programs under contract in 2020 and 2021 range from 3% to 5% of net sales. At the top end, royalty rates reach over 8% while very few programs have rates below 2.5%.

Further, the total milestones for our portfolio of programs under contract and not adjusted for the probability of success is \$4.6 billion. In addition, our equity and equity-like positions in new companies and options to co-invest, particularly with early-stage firms, represent higher value programs within the overall portfolio.

Table 4: Summary of Partnership Agreements with Non-Profit & Government Organizations from 2018 to 2021

Non-Profit & Government	Summary	Therapeutic Indication or Modality	Date Announced
Government of Canada	• CAD \$175.6 million (\$125.6 million) over multiple years • Funding for technology and manufacturing infrastructure for antibody therapies against future pandemic threats	• COVID-19 • Infectious disease/ pandemic response	May 3, 2020
Bill & Melinda Gates Foundation	• \$4.8 million over two years • Follow-up to successful 2017 project on tuberculosis	• Infectious disease, including HIV and malaria	March 14, 2019
Genome BC and Genome Canada	• CAD \$3.0 million • Genome Applications Partnership Program (GAAP) with UBC	• Duchenne muscular dystrophy • Fibrosis	August 16, 2018
DARPA	• Up to \$30.6 million over four years • Establish rapid pandemic response platform	• Pandemic response	March 13, 2018
CQDM and Brain Canada	• CAD \$0.8 million	• Function-modifying antibodies against GPCR target	January 27, 2018

In March 2020, we entered into a multi-year strategic Research Collaboration and License Agreement, or RCLA, with Lilly on the discovery of antibodies for up to nine Lilly-selected therapeutic targets, including COVID-19. Under the terms of the RCLA, Lilly has the right to develop and commercialize therapeutic products resulting from our collaboration. As part of the RCLA, we received an upfront payment of \$25.0 million and are eligible to receive research payments for non-COVID-19 targets. We are also eligible to receive pre-clinical, clinical, and product approval milestones and tiered royalties on future sales for all Lilly-selected targets. We are entitled to receive an aggregate of up to \$29.0 million of milestone payments under the terms of the RCLA. As of December 31, 2020 and 2021, we have received \$15.0 million and \$7.0 million, respectively, for clinical and other milestones related to bamlanivimab. For non-COVID-19 targets, we are eligible to receive royalties in the low single digits based on net sales; whereas for COVID-19, we continue to be eligible to receive royalties 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. We have recorded royalty payments related to sales of bamlanivimab of \$198.3 million and \$327.3 million as of December 31, 2020 and 2021, respectively.

Our Technology

Therapeutic antibody discovery has a myriad of challenges. Antibodies that are suitable candidates for therapeutic development must engage a target specifically, induce the desired therapeutic function and also have physical properties that make them suitable for manufacturing and formulation as drug products. Only a small fraction of the antibodies in any given immune response will satisfy all

these requirements. Even for those that do, only a small subset will be optimal for drug development. Therefore, a broad and deep search of the database of natural antibodies is needed to expand the universe of quality drug candidates and increase the likelihood of success.

We have built a technology stack with five key capabilities that we believe solve the discovery problem and are critical to the success of any therapeutic program:

1. **Source.** Generate and access a high-quality universe of antibodies for any target;
2. **Search.** Explore this diversity with sufficient throughput and specificity to isolate the rare cells that make antibodies with the desired properties;
3. **Find.** Decode the genetic sequences of selected antibodies and expand diversity with related sequences present in the immune response;
4. **Analyze.** Collect data on the relevant therapeutic properties of each selected antibody to generate large multidimensional data packages, and apply computation to select the most promising leads;
5. **Engineer.** Use broader information of antibody responses and molecular engineering to optimize and reformat lead antibodies for development.

Our technology stack achieves these functionalities by leveraging state-of-the-art methods from microfluidics, single-cell analysis, high-throughput imaging, AI, robotics, genomics and protein engineering, all complemented by custom software and data visualization capabilities.

Source: Immunization

The first step in a therapeutic antibody discovery program is to generate the source of antibodies that will define the search space for discovery. There are two competing paradigms: generate synthetic antibody diversity in man-made libraries, known as the display methods, or generate antibody diversity *in vivo* by immunization of animals. A brief description of these methods, along with their challenges, is as follows:

- **Synthetic antibodies.** Display methods encompass a set of synthetic discovery approaches that are based on man-made collections, also referred to as libraries, of human antibody genes. These methods, in use for more than 25 years, have resulted in a small fraction of clinically approved antibody therapeutics. The main disadvantages of display libraries are (i) low binding affinity of antibodies from the initial selection step, necessitating protein engineering steps to increase affinity, (ii) difficulty in manufacturing leads due to poor expression and developability and (iii) difficulty in performing selections on high-value cell-surface targets. We believe these shortcomings have contributed to the relatively low success rate of display technologies in the clinic.
- **Natural antibodies.** In the same way that seasonal vaccination is used to generate antibodies that protect the population against flu, antibody responses against a drug target can also be generated through the immunization of animals. Antibodies generated in this way benefit from the natural process of selection (enriched for antibodies that bind the target), quality assurance (antibodies can be expressed and are not sticky, making them more developable into a drug candidate) and affinity maturation (the natural process whereby antibodies are optimized within the body to bind tightly to the target). As a result, antibodies generated through immunization are generally of higher quality and have accounted for the large majority of all approved therapeutics. However, some of the challenges faced with many immunization-based approaches are (i) difficulty in raising a strong immune response against poorly immunogenic targets, (ii) traditional screening methods that restrict immunization and discovery to rodents and (iii) the need to convert antibodies discovered in rodents to human antibodies (humanization) before they can be used.

Our Approach to Sourcing Diverse Antibodies. We believe natural immune sources are a superior search space for therapeutic antibodies. To solve the challenges of sourcing antibodies by immunization, we have assembled multi-species screening capabilities, genetically engineered mouse technology and optimized immunization technologies that are capable of generating diverse and high-quality sources of natural antibodies.

- **Any source, any tissue.** Our single-cell screening and RepSeq capabilities enable discovery from any host species and any immune tissue, bypassing the restriction to rodent species of traditional screening approaches. To date, we have successfully applied our discovery technology to search immune responses of numerous species, including humans, mice, rats, rabbits, dogs, cats, llamas, alpacas and cows. In addition to greatly expanding our search space, the versatility of our platform also means we can access antibody responses of species with unique properties. For instance, we have completed multiple programs focused on isolating single-chain antibodies, or VHH antibodies, that are made by camelids (e.g., llamas or alpacas). VHH antibodies derived from camelids are of high interest due to their small size, ability to bind to novel epitopes

and the ease with which they can be engineered to produce next generation therapeutics, including multi-specific antibodies and cell therapies. Finally, as recently demonstrated in our work on COVID-19, our approach also allows for a deep search of antibody responses from the large and complex immune responses of human donors, which have been naturally exposed to a pathogen.

- **Human antibodies from rodents.** The ability to source fully human antibodies from rodents provides our partners the added benefit of bypassing the need to humanize sequences identified from non-humanized animals. We acquired the Trianni humanized rodent platform in November 2020, which includes a suite of genetically engineered transgenic mice that express human variable antibody genes. Currently, the flagship Trianni mouse is available for discovery projects. The flagship Trianni mouse was generated with proprietary *in silico* design of antibody genes that resulted in a novel antibody gene structure at the heavy, lambda and kappa mouse antibody loci to maximize antibody diversity. This proprietary antibody design contains the human antibody repertoire, plus the natural constant regions of mouse antibody genes and the natural regulatory elements from the mouse genome, making these human antibodies optimized for expression and maturation by the mouse immune system. We believe this feature helps maximize the response to immunization, the diversity of human antibodies, and enable proper affinity maturation in the mouse to isolate quality human antibodies as therapeutic candidates in antibody discovery campaigns. In addition to the flagship Trianni mouse, we acquired a suite of additional transgenic humanized rodent lines currently being validated and available for discovery projects in the near future, as indicated below. These lines aim to provide partners with the following benefits:
 - *Generate multispecifics and access difficult targets with the Heavy-Chain Only, or HCO, Mouse:* The HCO Mouse expresses antibodies comprised of only heavy chains, without the accompanying light chains found in conventional IgG antibodies. This smaller HCO antibody can access additional target sites that the larger conventional IgG molecules cannot, due to less steric constraints, thereby expanding the target space. HCO antibodies can also serve as the basis for combining targeting arms for bispecific and multispecific antibodies without the complexity of correct heavy and light chain pairing. In addition, this mouse line provides the opportunity for generating the fully human VHH antibodies described above, without the expense of immunizing large camelids, and with the benefit of starting with fully human sequences that do not need to be engineered to be more human-like. The HCO Mouse was also generated with the proprietary Trianni *in silico* design that helps maximize immune response, antibody diversity and enable natural antibody maturation.
 - *Break immune tolerance with the All-Epitope Mouse:* The All-Epitope Mouse is engineered to overcome immune tolerance to antigens that have high-homology to mouse proteins, to allow generation of robust immune responses against highly-conserved, high-value drug targets such as GPCRs and ion channels that are prevalent in multiple diseases and indications, including cardiovascular diseases, cancer, neurological diseases, inflammation and pain (see the subsection below titled “—Our Technology in Action”).
 - *Target new epitopes with the DD Mouse:* The DD Mouse provides additional flexibility to discover antibodies with long CDR3 regions (the region of the antibody that makes primary contact with the target) allowing access of “hidden” or recessed areas of targets that are not available for contact by conventional IgG molecules with typical CDR3 lengths).
 - *Maximize efficiency with the Eazysort Mouse:* The Eazysort Mouse is engineered to allow up-front enrichment of immune cells that recognize the target, helping maximize the efficiency of searching for the right antibodies by focusing the subsequent single cell screening to antibodies of interest.

These proprietary transgenic mice, combined with our platform technologies in immunization, single-cell screening, immune repertoire profiling and protein engineering, provide a flexible and synergistic advantage for rapid, next-generation discovery and development of fully human antibodies for drug development across a very broad target space. Notably, the Trianni platform and suite of transgenic rodents, together with expertise from Trianni personnel joining our research and development program, is a foundation to develop additional novel next-generation animals to expand our platform.

In addition to the Trianni transgenic mouse technologies, we also have in-licensed the ATX-Gx humanized immunocompetent transgenic mouse platform from Alloy Therapeutics. Like the flagship Trianni mouse, the ATX-Gx mouse is genetically engineered to express human antibody genes. We believe that by performing immunizations on both the Trianni mouse and the ATX-Gx mouse in parallel, we are able to expand the diversity of human antibody responses, thereby creating a larger search space for antibody discovery. We believe this will allow us to isolate more and higher quality candidate antibodies. We expect to continue to use both the Trianni mouse and the ATX-Gx mouse in our partnered programs, along with the Trianni next generation mice for the most demanding therapeutic discovery projects.

- **Optimized immunization methods.** We have developed a suite of immunization technologies that have been optimized (i) for use with our screening platforms (ii) to address the challenge of immunizing each species, and (iii) to address challenging

targets. Specifically, we have developed immunization methods that, when coupled with our deep screening capabilities, allow for antibody generation against targets that are 100% identical to the host species. This is particularly valuable for the generation of antibodies with desired species cross-reactivity (e.g., mouse, cynomolgus monkey—important animal models for testing antibodies in preclinical studies—and human), or for targeting highly conserved protein epitopes. Importantly, these strategies negate the perceived advantage of display platforms for bypassing tolerance, the process by which natural antibody responses are suppressed against self-similar targets. For further explanation, see the case study titled “Overcoming Tolerance with Proprietary Immunization and Deep Search Technologies” in “—Our Technology in Action.” We have also developed a suite of genetic immunization methods for targets that cannot be easily expressed or purified as soluble antigens. This is particularly valuable for discovery against high-value membrane protein targets including GPCRs and ion channels.

Search: Microfluidic Single-Cell Screening

Searching natural immune systems is fundamentally a single cell problem. One mL of blood contains approximately 1 million white blood cells, of which approximately 1% are single antibody secreting cells, or B cells, that make antibodies. Of these, only a fraction is likely to bind to a target of interest, and of these binders, only a very small fraction is likely to have properties that make it suitable as a therapeutic. To effectively search the natural immune system for antibodies requires a technology that can scan through millions of antibody-producing cells and make high-resolution measurements to assess the properties of their unique antibodies. B cells are microscopic, having a diameter of approximately 10 microns (about 1/10 of the width of a human hair) and generate only a minute amount of antibody. When analyzed in the volume of conventional screening formats and conventional labware such as a 96-well plate, this small amount of antibody is too dilute, making it essentially undetectable.

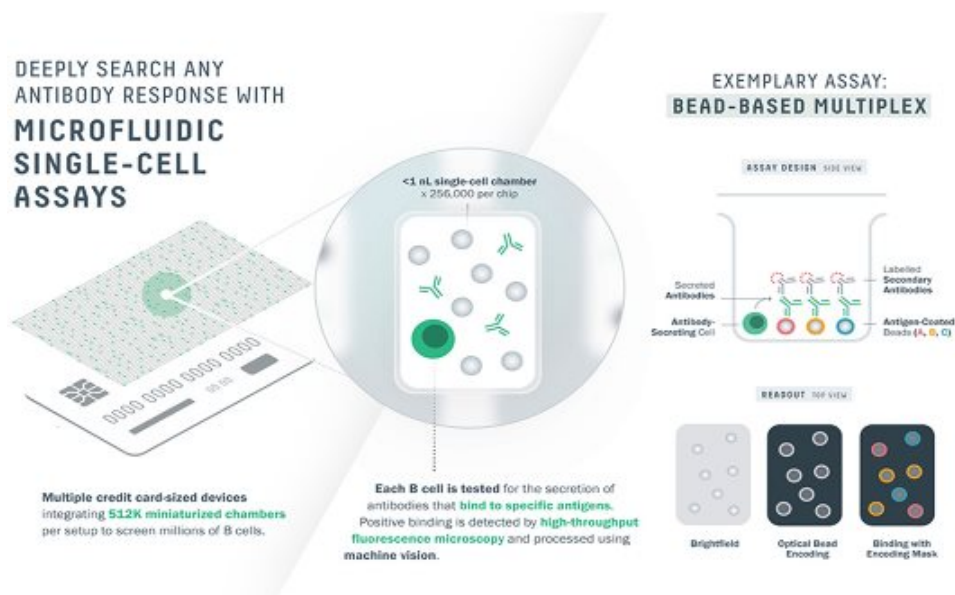
It is because conventional methods lack the sensitivity to analyze individual cells that traditional discovery approaches require that each cell be “grown” into a larger population. However, since B cells generally cannot be grown into these larger populations in the lab, the classic approach to this problem is the “hybridoma method”, which is literally “fusing” a special type of cancer cell with immune cells obtained from the spleen of an immunized rodent (typically a mouse or a rat). These hybridomas inherit the immortal properties of the cancer cell line (i.e., can be grown) and continue to secrete a single type of antibody. Although this approach has been the workhorse of antibody discovery for decades, it has major limitations: (i) it is generally limited to rodents, (ii) it is slow (taking weeks to achieve sufficient cells to test the secreted antibodies) and (iii) it loses more than 99% of the available antibody diversity since the fusion process has extremely low efficiency, typically between 0.1% and 1%.

Our Approach to Search Natural Antibodies. To solve these challenges, our founders pioneered and developed a nano-liter volume single-cell microfluidic screening technology that provides the sensitivity, resolution and scalability needed to perform a deep search of any antibody response.

We believe our screening approach provides a unique combination of speed, throughput and versatility in searching antibody responses. Our microfluidic single-cell screening technology consists of custom-made microfluidic devices that integrate 256,000 single-cell analysis chambers on a chip about twice the size of a credit card. At the beginning of a screening experiment, a sample of B cells isolated from an immunized animal is flowed into the device at a concentration selected to result in approximately one single cell per chamber. Once cells are loaded, they are isolated in single-cell analysis chambers, each having a volume of less than one nanoliter. In this small volume, approximately 100,000 times smaller than what is used in a conventional bench-top experiment, a B cell secretes enough antibodies within minutes to be detected by microscopy. Using fluidically-controlled reagent and particle additions, a variety of experimental protocols can be executed so that each single cell is interrogated to determine the properties of the antibody it makes. A screening experiment takes several hours and is performed the same day as immune cells are isolated from immunized rodents. This is significantly faster than the weeks required to establish hybridoma cultures.

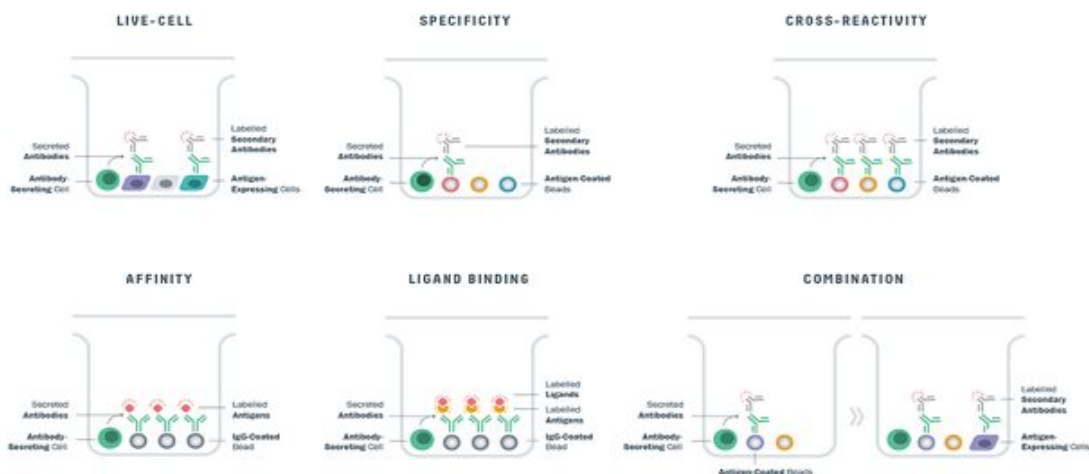
Our microfluidic devices are operated using proprietary high-throughput imaging instruments that incorporate custom robotics, fluid control, software systems and AI-based image analysis. Each instrument can run two microfluidic chips in parallel for a total of 512,000 chambers per instrument run. In a two-hour run, each of the 512,000 chambers is imaged up to 10 times, resulting in over five million chamber images, or roughly 700 chamber images per second. A representation of our microfluidic screening devices and assay readouts are showing in Figure 7 below.

Figure 7: Our Screening Approach for Antibody Responses



Our AI-based image algorithms perform real-time analysis of these images to identify chambers that contain single cells that make antibodies with the desired properties. As depicted in Figure 8 below, our technology supports a wide array of complex image-based single-cell secretion measurements including multiplexed target binding on up to six targets, affinity-based enrichment, multiplexed cell-binding, ligand blocking assays and a selection of functional assays. We currently have throughput to screen more than four million cells per screening day.

Figure 8: Representations of Exemplary Microfluidic Screening Assays



As compared to other technologies we believe our microfluidic screening platform provides unique combined advantages of:

- Throughput to screen greater than 500,000 cells per instrument run.
- Speed to go from immune cells to selected antibody-generating single cells in less than a day.
- Antibody selections based on a wide array of measurements.
- Capability to perform selections on both protein and cellular targets.
- Versatility to search antibody diversity from any species or tissue.

Find: Automated Single-Cell Sequencing and RepSeq

The collection and interpretation of antibody sequence data presents several challenges. First, because only a small fraction of antibodies are suitable for therapeutic development, methods that are based on sequencing antibodies from single cells before evaluating their function are extremely inefficient, low-throughput and costly. Second, sequencing antibodies from selected single cells is technically challenging due to the very small quantities of starting material and the large number of possible sequences that need to be captured. Third, although bulk sequencing of antibodies can provide a comprehensive view of immune responses, these methods often lose information on the correct natural pairing of heavy and light protein chains, which together comprise an antibody, and provide no means to assess the functional relevance of each antibody.

Our Approach to Find Natural Antibodies. To solve these challenges, we combine our nano-liter volume microfluidic single-cell screening platform, automated single-cell antibody sequencing and immune repertoire antibody sequencing to enable the deep analysis and functional interpretation of antibody responses.

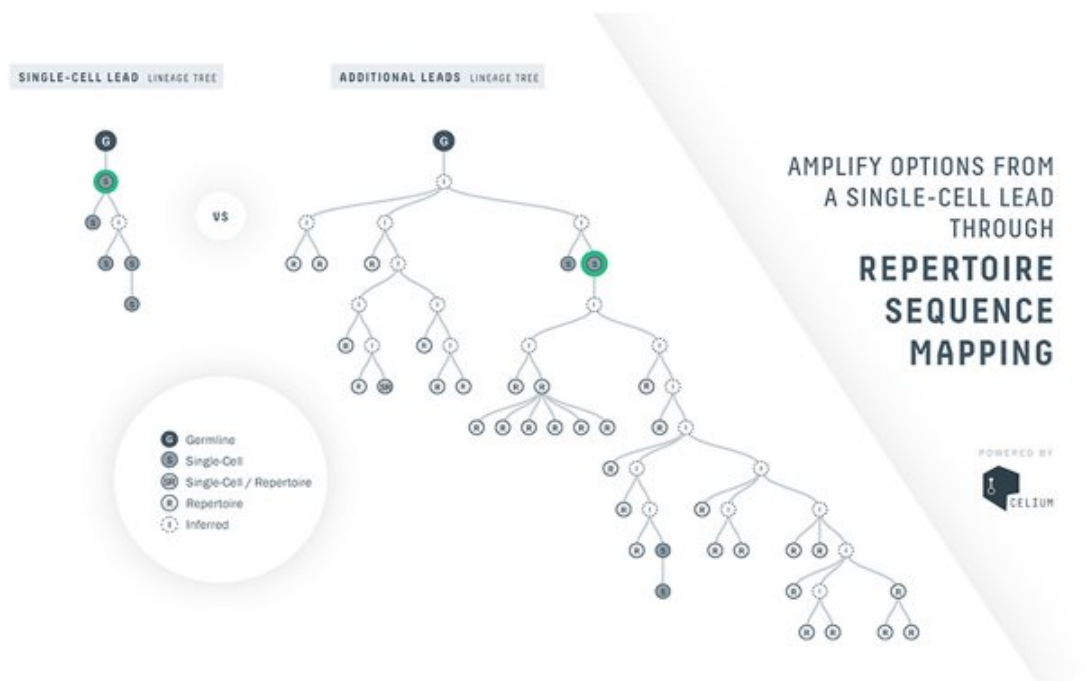
Automated single-cell sequencing. Our microfluidic single-cell screening technology allows us to evaluate the binding and/or functional properties of antibodies made by millions of single cells at the first step of analysis. For each screening run on each instrument, up to 768 individual cells that exhibit desired properties can be recovered into microplates for the following single-cell sequencing steps. Our proprietary sequencing protocols have been optimized to achieve approximately 90% efficiency in the recovery of high-quality heavy and light chain antibody sequences from single cells and have been adapted for discovery from multiple species. To achieve speed, reproducibility and throughput, our single-cell sequencing pipeline has been implemented using robotic automation and automated bioinformatics software. We currently have throughput to process up to 15,360 single cell samples per week and to recover high-quality, chain-paired sequences from 3,840 single-cell samples in three days.

RepSeq. We believe our RepSeq technology, when coupled with our microfluidic single-cell screening and sequencing technologies, provides unique capabilities for expanding the search of natural antibody responses. RepSeq is based partly on foundational RepSeq patents that we have exclusively licensed from Stanford as part of our acquisition of Lineage in 2017. RepSeq uses high-throughput sequencing to perform near-comprehensive profiling of the repertoire of heavy and light chain antibody genes that are present in a sample. In its highest-throughput implementation, a single RepSeq sequencing run can generate approximately 800 million antibody sequences.

Since these are bulk sequences obtained from mixtures of large numbers of cells, the interpretation of these big data sets has multiple challenges. The first is the loss of information regarding which heavy chain is naturally paired with which light chain. The second is the inability to identify which rare antibody sequences are relevant to the program (e.g., bind to the target or have desired function). We solve both of these problems by annotating RepSeq data with functional sequence data derived from our single-cell microfluidic screening and sequencing technologies. Using the sequences of hundreds to thousands of antibodies with known properties, we are able to search RepSeq data from related samples to identify closely related families of antibodies that can be arranged in a lineage to reconstruct their evolution during the immune response. These expanded family trees provide valuable insights for vaccine research and are sources of ready-made alternative therapeutic candidates in cases where an antibody of interest has one or more suboptimal properties.

We have shown that the combination of single-cell analysis and RepSeq can expand the number of therapeutic antibody candidates by more than 10-fold in a single experiment, increasing the number of candidates from hundreds to thousands. Enriching for sequences of value by isolating target-specific immune cells that go into a RepSeq experiment can amplify the number of therapeutic antibody candidates. The combination of single-cell screening and RepSeq allows deep interrogation of an immune repertoire to find the best antibodies. For further explanation, see the case study titled “Human Immune Profiling” under “—Our Technology in Action.” The relationship between single-cell-derived antibodies and family members discovered using RepSeq data is depicted in Figure 9 below.

Figure 9: Antibody Lineage Mapping



Analyze: High Throughput Cloning, Expression and Bioanalytics

Our microfluidic single-cell screening and RepSeq technologies are capable of generating hundreds to thousands of unique antibody candidate sequences from single-cell screening, along with thousands of related antibody sequences from RepSeq. These large antibody sets create formidable challenges for efficiently down-selecting to a small number of the best candidates for development, including (i) the need to produce and handle large numbers of high-quality antibodies by “expressing”, or converting sequences into protein antibodies that can be further analyzed, (ii) the need to perform measurements to characterize each antibody property for target recognition, function, and properties related to suitability for drug development, and (iii) the need for data management and computational tools to organize and understand the resulting data.

Our Approach to Analyzing Natural Antibodies. To address these challenges, we have built a high-throughput antibody generation and characterization pipeline that generates high-dimensional data clouds for each antibody candidate.

Our antibody expression pipeline combines optimized molecular biology protocols, proprietary expression vectors and robotics to enable the rapid cloning, expression and purification of recombinant antibodies using expression systems that are representative of current drug manufacturing standards. When starting from single-cell-derived antibody samples, we are able to generate hundreds of recombinant antibodies within eight days of screening. Our platform supports multiple antibody formats and currently has capacity to generate 960 high-purity antibody samples per week.

These antibodies are then tested across a suite of analytical assays to determine their biophysical properties including their purity, binding properties (e.g., specificity, epitope binning, affinity), thermal stability, expression levels and aggregation state. Expressed antibodies may be further characterized in appropriate functional cell-based assays to assess their potency. Corresponding *in silico* analysis is performed on each antibody to predict potential development liabilities, biophysical properties and immunogenicity.

We believe that by gathering more high-quality data on more antibodies from the start of the discovery process, we can significantly improve the speed, quality and success of antibody discovery.

Celium: Computation and Data Exploration

Our technology stack generates vast and complex data sets. In a single discovery program, our technology stack can produce terabytes of data per screen, including:

- tens of millions of microscopy images from raw screening data
- hundreds of millions of DNA sequences from raw single-cell sequencing
- billions of DNA sequences from raw RepSeq data
- millions of single-cell antibody secretion measurements
- hundreds to thousands of unique single-cell-derived antibody sequences
- tens of thousands of related antibody sequences derived from RepSeq
- several hundred thousand antibody characterization measurements
- associated meta data for each experiment

The sheer quantity and complexity of these data sets present formidable challenges. First, without specialized data collection, standardization, and storage solutions, data of this scale quickly becomes unmanageable and unusable. Second, finding hidden relationships in these complex data sets requires sophisticated computational tools that must be customized for the questions being asked and the data types and structures used. Finally, even once data has been reduced to the key properties of hundreds of antibodies, it may include hundreds of thousands of data points, making interpretation difficult or impossible for scientists.

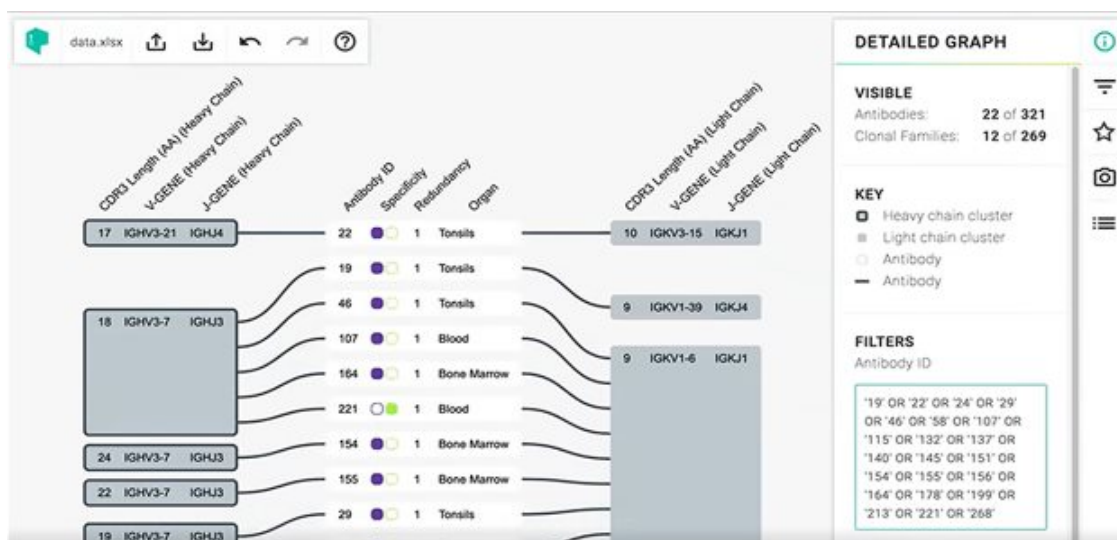
Our Approach to Analyzing Complex Antibody Data. To address these challenges, we have built a computational engine called Celium that integrates data collection, standardization and storage with a suite of computational tools and an interactive visualization interface that allows scientists to quickly explore and interpret complex antibody data sets.

Our technology stack integrates software to automatically standardize the collection, storage, and version control of raw and processed experimental data obtained at every step in the discovery process. Data from every experiment is stored in a central database designed to maintain the relationships that exist between different measurement types, samples, 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 provides a critical advantage that greatly increases the value of data.

We have built a suite of computational tools for extracting information and uncovering relationships that are hidden within our data. Our data handling and report generation software automates standard analyses, and instantly returns essential information that would otherwise take days of work. We have developed machine learning and AI methods to replace manual data analysis, quality assurance and design steps associated with antibody sequencing, protein engineering and antibody chain-pairing. Similarly, our vast image data sets have allowed us to develop AI-based machine vision tools for real-time processing, enabling single-cell screening at much greater speed and resolution. Finally, we are using machine learning algorithms to explore the relationship between antibody sequence space and important drug-like properties including resistance to aggregation, stability and expressibility. We believe that these approaches will become increasingly powerful and predictive as our data sets grow.

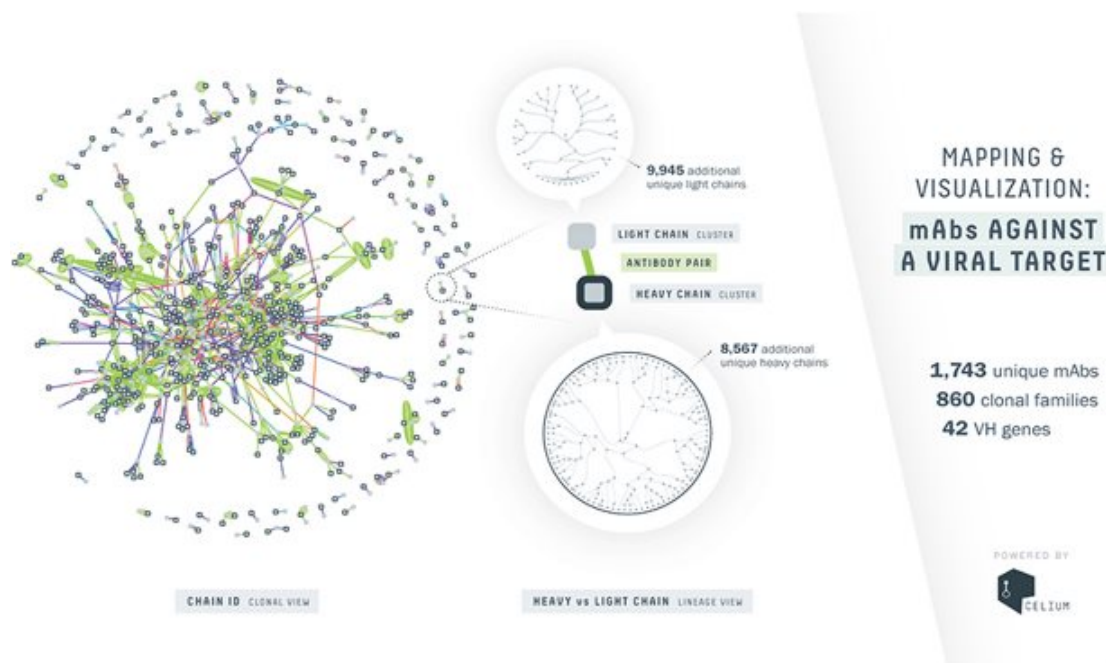
We believe the value of data and computation is greatly amplified by intuitive tools that enable scientists to interactively explore and query complex data sets. Celium achieves this with a dynamic visualization interface that presents each unique antibody as a connection between two unique DNA sequences that encode for the heavy and light chain. Celium presents antibodies as a network of these connections that intuitively represents sequence similarity. Using this visual language, scientists can interactively navigate and filter thousands of antibodies in real time, using hundreds of different data features, as shown in Figure 10. This allows scientists to interactively explore the immune repertoire and set search criteria based on multiple features to find antibodies with the precise characteristics desired for a drug candidate.

Figure 10: Celium Detailed View of Heavy and Light Chain Pairing



Antibodies of interest can be further explored to evaluate sequence features and to expand diversity by linking to associated RepSeq data as shown in Figure 11. By integrating RepSeq data, Celium has the power to map antibody lineages to identify lead candidates likely to have improved binding and functional properties. This allows for expansion of diversity around antibodies of interest to identify new drug candidates for testing and development.

Figure 11: Celium Chain ID Clonal & Rep Seq Lineage View



We believe Celium is a unique and powerful tool that enables rapid exploration of multiple data sets in hours that would otherwise take many weeks to search. It provides an elegant human interface that allows scientists to quickly explore data and gain insights that inform action.

Engineer: Advanced Computational Protein Engineering Toolkit

Using natural diversity to accelerate engineering. In many cases, antibodies selected for development need to be modified before they are developed as drugs. These modifications are generally made through a combination of computational design and experimental testing, a process known as antibody engineering. Examples of antibody engineering problems include improving how tightly an antibody binds to its target; removing antibody sequences known to be problematic during manufacturing; modifying non-human antibodies to resemble human antibodies; and removing antibody sequences that may induce immune responses in patients.

The central challenge in antibody engineering is that the relationship between DNA sequence modifications and the resulting antibodies is not well understood. Antibody engineering therefore relies heavily on trial and error to identify DNA changes that give the desired phenotypic results. This process is complicated by the fact that optimizing for one property, such as binding affinity, may cause the loss of another desirable property, such as solubility or expression. This challenge is amplified when the source antibodies need major improvements, as is the case for synthetic antibodies that typically require multiple rounds of antibody engineering to improve their binding affinity, biophysical properties, or both.

Our Approach to Engineering Natural Antibodies. We address these challenges by first generating large, diverse and high-quality panels of candidate antibodies early in the discovery process and, second, by applying antibody engineering approaches that are informed by natural antibody responses.

We believe the best approach to protein engineering is to start with a large panel of the best possible candidate antibodies. To achieve this, we apply our microfluidic single-cell screening platform to maximize the diversity of antibodies selected upfront for multiple target-binding properties, followed by thorough characterization of their functional properties and developability. We then apply stringent filtering with the aim of down-selecting to a small number of leads. When performing discovery from humanized rodents, including our proprietary suite of Trianni humanized rodents, or from humans, we have used this approach to generate high affinity antibodies that require minimal engineering prior to development. Starting with a greater diversity of antibodies, which have been pre-selected for desirable properties and that benefit from natural immune responses, can significantly reduce development time and the technical risk of protein engineering.

In cases where antibody properties need to be improved, we can use expanded panels of antibody sequences from RepSeq to inform the design and generation of high-confidence optimization candidates. We believe this approach, to use natural antibody variants from the repertoire to help design optimized candidates, is particularly powerful for high-value membrane protein targets such as GPCRs and ion channels (which cannot be optimized by conventional display-based methods). We also believe it can significantly improve the success-rate and reduce the time needed to optimize development leads.

OrthoMab Bispecific Platform. Beyond improving antibody properties, antibody engineering can also build completely new antibody drug formats with novel molecular geometry, binding properties or chemical properties. Of particular interest is the combination of two source antibodies to create a “bispecific” antibody that can simultaneously bind to two targets. Antibodies are normally comprised of two identical heavy chains and two identical light chains, to make a symmetrical “mirror-image” molecule with two identical targeting arms. In contrast, bispecific antibodies are generally comprised of two different heavy chains and light chains, and therefore have targeting arms that recognize two different targets. Because of their unique properties, bispecific antibodies are a rapidly emerging new class of antibody therapy. As of December 31, 2020, following the first approval in 2015, there are now more than 120 molecules in clinical development, including more than 80 in Phase 1. They enable improved and novel therapeutic mechanisms not possible with other modalities. Examples of the application of bispecific antibodies include (i) recruitment of immune cells to help kill cancer cells, (ii) linking together two receptors to activate a signaling pathway, (iii) serve as a protein scaffold to bring proteins together and (iv) modifying the pharmacokinetics and pharmacodynamics of soluble proteins, as depicted in Figure 12 below.

Figure 12: Therapeutic Modalities Using Bispecific Antibodies



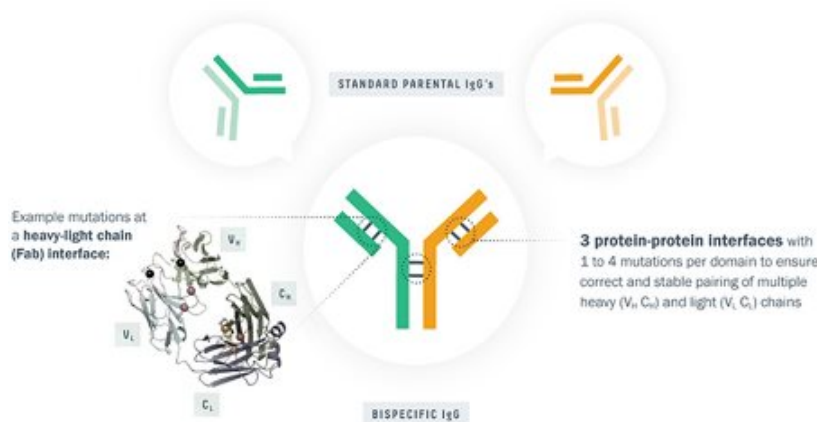
To realize this potential, it is important to develop capabilities to:

- generate a large and diverse panel of starting antibodies that recognize multiple epitopes (locations on their respective targets), with varying binding affinities and binding geometries.
- identify suitable pairs from this starting panel that bind with the right orientation and the right location on each respective target, and bind with suitable affinity
- manufacture bispecific antibodies in a scalable and efficient process
- ensure the resulting bispecific antibody looks as similar as possible to a normal antibody so as not to induce an immune response in the patient.

Our Approach to Engineering Bispecific Antibodies. OrthoMab, addresses these challenges by enabling the combination of any two source antibodies into a bispecific antibody that can be manufactured using conventional expression and purification methods, with minimal liabilities and immunogenicity.

OrthoMab is a clinically validated protein engineering technology that enables the creation of a bispecific antibody from any two source antibodies, each comprised of a unique heavy chain and a unique light chain. The key innovation of OrthoMab is a set of patented DNA mutations that have been computationally designed using molecular structural modeling. These mutations ensure that the four antibody chains pair correctly: the two different heavy chains preferentially associate together, rather than two molecules of the same heavy chain, and each light chain pairs only with its cognate heavy chain as shown in Figure 13 below.

Figure 13: Patented OrthoMab DNA Mutations



By using engineered mutations to control chain-pairing, OrthoMab enables manufacturing of bispecifics at high yields and purities using industry-standard processes. Because each side of an OrthoMab bispecific is 99% identical to the source antibody, it lowers the risk of introducing immunogenic epitopes. Finally, in addition to conventional Y-shaped bispecific antibodies, OrthoMab allows for the creation of a wide array of alternative bispecific formats as shown in Figure 14. The OrthoMab technology was patented by scientists at Lilly and the University of North Carolina at Chapel Hill. We acquired non-exclusive rights to use OrthoMab technology from Dualogics, LLC, through an asset purchase agreement in July 2020.

Figure 14: Exemplary Bispecific Formats Achievable with OrthoMab



Our Technology in Action

COVID-19: From Discovery to Clinic in 90 Days

We have been working with DARPA since March 2018 as part of the P3 program to optimize our technology stack to find effective and field-ready therapeutics against pathogenic threats in record time.

Problem. An effective response to a pathogenic threat requires comprehensive deep screening and characterization of a human antibody response at the maximum speed possible, so that pathogen-specific therapeutics can be quickly identified, developed and deployed. Ideally, samples from index patients (patients who are the first to have been confirmed infected with the pandemic virus) who recovered would be made available to deploy our pandemic response platform.

Solution. We developed rapid antibody screening, expression, purification and characterization pipelines to deeply mine human antibody responses. As part of the P3 program, and prior to COVID-19, we pressure tested our technology stack twice in simulated pandemic responses. In late 2018, we demonstrated rapid isolation of hundreds of Middle Eastern Respiratory Syndrome Coronavirus, or MERS-CoV, heavy chain only antibodies, or HcAbs, from infected camelids (a natural host for MERS-CoV) in less than 96 hours from sample receipt. Many of these HcAbs were more potent neutralizers than benchmark antibodies. In early 2019, together with our partners, we discovered influenza-neutralizing antibodies from a single sample from a human donor, and demonstrated that we could deploy our platform from sample receipt to successful testing in animals in 55 working days. Our seven lead antibodies were all 100% protective against a 20-times lethal dose of the 2009 pandemic H1N1 strain of influenza virus in rodents.

Result. We rapidly deployed our pandemic response platform to find a therapeutic antibody against COVID-19 in the spring of 2020 starting from a blood sample obtained from a U.S. patient. We screened approximately 5.8 million single cells to identify over

500 unique anti-SARS-CoV-2 antibodies. Each of these antibodies was evaluated computationally and experimentally to identify approximately 500 different properties per antibody which yielded 220,000 data points, which allowed us to filter down to a smaller group of lead candidates. Within 23 days of receiving the sample, we and our partners identified 24 lead antibodies for further development and clinical testing. One antibody drug candidate was selected by our partner Lilly, and the first patients were dosed in the first-ever COVID-19 clinical trial in North America. This was only 90 days from when we received the sample. The antibody, bamlanivimab, has been evaluated both alone and together with another antibody called etesevimab in more than 5,000 patients across multiple clinical trials for the treatment and prevention of COVID-19. Bamlanivimab and together with other antibodies has been used to treat approximately a million high-risk COVID-19 patients. This demonstrates that a rapid discovery-to-clinic timeline is possible with our rapid and high throughput discovery engine.

Unlocking High-value Membrane Proteins (GPCRs and Ion Channels)

Membrane proteins such as GPCRs and ion channels are a validated and highly valuable class of drug targets in multiple prevalent diseases and indications, including cardiovascular diseases, cancer, neurological diseases, inflammation and pain. Membrane proteins are very difficult targets for antibody therapeutics. They are large and complex proteins, often with multiple subunits embedded in the cell membrane with only a small portion exposed outside of the cell. They also exist in families of multiple, closely-related members. The specificity of antibody drugs against membrane proteins would solve the off-target side effects that make many of these targets a barrier for small molecule drugs. However, membrane proteins present major challenges for antibody discovery: (i) they are poorly immunogenic, (ii) they are very difficult to purify and handle, (iii) it is difficult to generate binding or functional assays for them and (iv) they often have high homology with other species that are traditionally used for immunization campaigns (such as rodents), leading to natural tolerance mechanisms inhibiting a good immune response. In addition, legacy screening technologies either do not provide the depth and throughput to effectively search the immune response (hybridoma strategy), or are poorly suited for screening against complex membrane protein targets (display strategy).

Problem. Using conventional screening methods, a partner had failed to discover functional antibodies against a very small epitope of a GPCR protein target with close structural homology to a related protein.

Solution. For this campaign, we tailored our technology stack to include multiplexed live cell screening assays with counter-screens against the closely related homologs in order to identify unique antibodies against the target epitope. The GPCR was expressed in its natural conformation on live cells, bypassing the need for complicated protein purification and handling. The ability to screen against live cells at such high throughput, while simultaneously screening for specificity against closely related homologs, is a powerful application of our platform.

Result. Within three months, we identified hundreds of unique antibodies against the target epitope, including several that were the desired functional antagonists. This number of antibodies from a screening campaign against a GPCR, plus the high frequency of functional candidates, is a significant success, and a lead candidate was subsequently identified by our partner and advanced into IND-enabling studies. This project demonstrates the power of our technology stack to increase the probability of success for antibody discovery campaigns against difficult targets.

Overcoming Tolerance with Proprietary Immunization and Deep Search Technologies

Antibodies produced by immunized animals are subject to immune tolerance, the process by which the body suppresses antibodies that react to self-antigens. This makes it difficult to generate diverse sets of antibodies against human targets that are similar or identical to the analogous proteins expressed by the animal being immunized. The difficulty in generating immune responses against self-similar targets has long been perceived as a drawback of discovery from natural immune repertoires. Our technology and proprietary immunization approaches allow us to generate diverse antibodies against such targets.

Problem. A partner approached us with a human target with 100% homology across mice, rats and humans. In addition, the human target had two related protein homologs, against which any discovered antibodies must discriminate.

Solution. In this campaign we deployed our proprietary and optimized immunization protocols to first generate a robust immune response in rodents. Next, we developed a high throughput single-cell screening strategy that used multiplexed fluorescence detection to find antibodies specific to the target, but that did not bind the two homologous proteins.

Result. We screened four million single cells from the immunized rodents and identified more than 1,900 target-specific antibodies, a hit-frequency that demonstrates a robust immune response breaking tolerance against a 100% homologous target. Of these hits, we identified 428 unique antibody leads with a degree of somatic hypermutation that indicates a mature and directed immune response against a difficult target.

Single Chain Antibody Discovery from Camelids

HcAbs are single-chain antibodies lacking light chains, found naturally in camelids such as llamas and alpacas (along with conventional paired heavy and light chain IgG antibodies, at approximately 50% frequency). HcAbs are valuable for various antibody-based therapeutics, such as bispecific antibodies, antibody-drug conjugates and CAR-Ts. In addition, the decreased complexity of having only single chains comprising the antibody molecules means they are more straightforward to produce and manufacture.

Problem. A partner needed to identify HcAbs from immunized llamas against transforming growth factor beta-3, or TGF- β 3, that could also discriminate between closely related homologs, transforming growth factor beta-1, or TGF- β 1, and transforming growth factor beta-2, or TGF- β 2. The partner did not have the screening technology to identify antibodies with such restricted specificity.

Solution. We designed custom reagents to distinguish HcAbs from conventional IgGs in llamas and also designed custom assays to identify HcAbs specific to TGF- β 3 that could differentiate between TGF- β 1 and TGF- β 2. To find these rare antibodies, we deployed our deep screening platform and screened approximately 20 million single cells over four days to deeply mine the immune response. We identified 67 unique HcAbs, which is a <0.001% antigen specific HcAb hit frequency, indicating an exceedingly rare antibody. This illustrates the flexibility of our platform to discover non-conventional antibody modalities, from alternative species, and the depth required to find rare antibodies with very specific properties.

Human Immune Profiling

An important application of immune profiling is devising improved strategies for the prevention and treatment of viral pathogens such as influenza. Influenza is a recurring seasonal epidemic with major pandemic potential. A significant challenge in addressing influenza is that it is constantly changing. Seasonal strains that circulate in a population accumulate mutations that are influenced by the existing population immunity, resulting in the emergence of new strains for which existing vaccines are less effective. Even more concerning, novel strains can sometimes emerge when viruses that normally infect only animals rearrange their genes in a way that allow them to jump to the human population. Functional profiling human immune responses to influenza infection or vaccination may assist in developing antibody or vaccine products that help protect against serious influenza infections.

Problem. Deep sequencing technologies have been applied to broadly survey the diversity of antibody sequences generated during an immune response. However, such technologies do not indicate which antibodies bind to the target of interest, where they bind on the target or which are most protective against infection.

Solution. To identify antibodies against influenza that may be effective in passive immunotherapy treatments (highly specific and potently neutralizing) and vaccine development (recognizes multiple strains of influenza to inform vaccines that generate long-lasting immunity), we screened four million single cells from multiple human donors. We designed a custom multiplexed screening strategy to simultaneously profile antibodies for their binding profiles against four hemagglutinin proteins derived from H1N1, H2N3, H3N2 or H5N1 influenza strains. We then recovered single cells with desired binding properties for sequencing to determine their heavy and light chain sequences. For selected antibodies we then searched RepSeq data for related antibody sequences.

Results. Our influenza screen uncovered 19,920 influenza-specific antibodies, from which we recovered and sequenced 3,646. This resulted in 1,743 unique antibodies grouped within 860 clonal lineages. Through the combination of single-cell sequences and RepSeq data, we were able to construct detailed antibody lineages for virus-specific antibodies, and then to expand the number of selected virus-specific antibodies by approximately 50 times.

Research and Development—Platform Expansions

We have several active research efforts to expand the breadth and depth of our technology stack. In addition to research and development directed to improve the speed, efficiency, throughput and capabilities of our existing technologies, we have initiated the following platform development projects:

GPCR and Ion Channel Targets. We believe our immunization and screening platform provide us with a competitive advantage in the discovery of antibody against traditionally difficult multi-pass transmembrane proteins, including GPCRs and ion channels. To date we have successfully applied our technology to discover panels of hundreds of antibodies against these target classes, with the most advanced of these programs now at late-stage preclinical development. However, we believe further improvements at the *Source* and *Engineer* steps of our technology stack would allow us to more fully unlock the potential of these target classes. To this end, in 2019 we started a research and development group, Channel Bio, in Sydney Australia, that is developing technologies specifically for GPCR and ion channel targets. In September 2021 we also acquired TetraGenetics Inc., a biotechnology company with a proprietary platform for generating recombinant human ion channels and other transmembrane proteins.

Transgenic rodents. Our recent acquisition of the Trianni platform of humanized rodents, plus the integration of key research and development personnel from Trianni, enables us to generate novel next-generation humanized transgenic rodents to further our platform and offering to partners. The suite of humanized rodents available or in development will serve as the foundation for additional engineering to create novel humanized rodents.

Cell Line Development. Using our microfluidic single-cell screening platform and based on patented clonal selection methods that we have exclusively licensed from UBC, we are developing optimized workflows that we believe may accelerate the development of clonal cell lines with increased productivity in the expression of antibodies.

CMC and GMP Antibody Manufacturing. We are planning a further facilities expansion of approximately 200,000 square feet that will support cell line development, process development and GMP manufacturing of antibody therapeutics. Upon completion of this facility, we expect to be able to support our partners from program initiation to fill-finish. We believe 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 or antibody conjugates. We expect to have completed this facility and to have GMP manufacturing capabilities in commercial use in approximately three to four years. In April 2020, in support of this effort, we received a commitment for up to CAD \$175.6 million (\$125.6 million) in financing from the Canadian government.

Competition

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

We are democratizing the industry by providing our partners of all sizes with access to our centralized operating system. We seek to deliver a complete solution for our partners by providing uniquely integrated proprietary technologies that address each step in the discovery process, including immune RepSeq, single-cell analysis, AI, and transgenic rodent platforms. Many emerging and established life sciences companies have been built around technologies that focus on one or a limited number of these steps. Examples include:

- In the field of single-cell screening, we face technical competition from companies that provide access to similar technologies such as Berkeley Lights Inc., or Berkeley Lights, HiFiBio Inc., Ligand Pharmaceuticals Inc. and Sphere Fluidics Ltd.
- In antibody RepSeq, we face technical competition from 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, we face technical competition primarily 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, we face technical competition from companies that provide access to similar technologies such as Ablexis LLC, Crescendo Biologics Ltd., Harbour Antibodies BV, Kymab Ltd., Ligand Pharmaceuticals Inc. 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 technology stack.

For a discussion of the risks we face relating to competition, see “Risk Factors—Risks Related to our Business and Strategy—The life sciences 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 achieve and sustain profitability.”

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 technology stack 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, 2021, we owned or exclusively licensed over 70 issued or allowed patents and over 70 pending patent applications worldwide, which includes over 30 issued U.S. patents and over 20 pending U.S. patent applications. We own registered trademarks and trademark applications for AbCellera, Channel Bio, Celium, Trianni, the Trianni Mouse and TetraGenetics in the U.S., Canada, Australia and Europe.

Obtaining patent protection is not the only method that we employ to protect our propriety 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 propriety 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 agreement 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 technology stack and fueling machine-learning algorithms. We maintain strict firewall protocols so target-specific data derived from a client cannot be used to inform the discovery on another project by a different client.

Patent Portfolio

We have developed an expansive patent portfolio with claims related to multiple aspects of our technology stack, 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 in 2020, our acquisition of Trianni Inc. in 2020, our acquisition of TetraGenetics, Inc. in 2021, and our license agreement with Alloy Therapeutics in 2020.

Our patent prosecution strategy encompasses the pursuit of protection for our technology stack 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 (\$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 four 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.

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 twelve issued U.S. patents and three pending U.S. non-provisional patent applications. 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 seven 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 an issued U.S. patent and a granted patent 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 technology stack.

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 and one granted patent in Europe, as well as 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 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 one granted patent in Europe, two pending U.S. non-provisional patent applications, and four 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 two 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. This patent family also includes three pending foreign counterpart patent applications. 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 U.S. non-provisional patent application and three pending foreign counterpart applications. 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 a fragment, antigen binding (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 Inc., 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 eight issued patents including in the U.S., Australia, the Russian Federation, Europe, India, and Japan. There are three pending applications, one in the U.S., one in Canada 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 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 six 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 two pending applications, one in the U.S. and one PCT application. 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 one pending PCT application. 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 contains seven pending applications including one in the U.S. and Canada, Australia, China, Europe, Israel and Japan. 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 two pending applications including one in the U.S. one in Europe. 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.

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.”

Commercial

Our partnership agreements commonly include: (i) payments for technology access and performance of research; (ii) downstream payments in the form of clinical and commercial milestones and (iii) royalties on net sales of therapeutics. We also participate in agreements with alternative investment opportunities including equity in our business partner and various rights for deeper involvement in moving molecules forward. We structure our agreements in a way that directly aligns our partners’ economic interest with our own. We believe a long-term value of our business will be driven by downstream milestone and royalty payments.

We forge partnerships with drug developers of all sizes, from large cap pharmaceutical to small biotechnology companies. Our partners are predominantly based in the United States and Europe. As of December 31, 2021, we had a total of 36 partners for whom we were conducting antibody discovery activities. For the year ended December 31, 2020, three of our partners accounted for 35%, 25%, and 14% of our research fees revenue and eight partners accounted for the remaining 26% of research fees revenue. For the year ended December 31, 2020, we recognized our first milestone and royalty revenue streams, totaling \$213.3 million, exclusively from our partnership with Lilly. For the year ended December 31, 2021, four of our partners accounted for 29%, 17%, 11%, and 10% of research fees revenue and twelve partners accounted for the remaining 33% of research fees revenue. For the year ended December 31, 2021, we recognized milestone revenue of \$7.0 million and royalty revenue of \$327.3 million, exclusively from our partnership with Lilly. Our partnership with Lilly constituted one of the partnerships that generated 10% or more of our consolidated revenues during the one or more periods described above. With respect to the other partners, we do not believe the loss of any one or more of such partners would have a material adverse effect on us and our subsidiaries taken as a whole.

Over the past year we have grown our workforce by 87%, moving from 206 to 386 full-time employees. As of December 31, 2021, we had 386 full-time employees in Canada, the United States and Australia, which was comprised of approximately 49% scientists, 32% business professionals, and 19% engineers and data scientists.

Our strategy involves:

- creating more value with our existing partnerships by seeking to expand our single-program partnerships to multi-year, multi-target agreements
- working to forge new partnerships across our target customers, including large pharmaceutical companies, biotechnology companies of all sizes and non-profit and government organizations dedicated to drug development
- adding capabilities and infrastructure to support full CMC activities and GMP manufacturing to provide our partners with a full solution from target to IND submission
- investing in expanding our workforce and our facilities, and increasing efficiency through automation and software solutions
- maintaining our competitive advantage by undertaking extensive research and development to amplify and add capabilities in areas such as computation, protein engineering, immunization technologies, genetically engineered rodents and cell line selection
- leveraging proprietary data sets obtained from our partnership programs and AI to increase the efficiency, speed, and capacity of our discovery programs

Our sales and marketing team is growing in proportion to the needs of the business and has been complemented with research and development staff attending a variety of scientific conferences, which has helped increase the business development pipeline. We

plan to further expand our commercial sales, marketing and business development teams, increase our presence globally and increase marketing activities to drive awareness and adoption of our platform.

Employees and Human Capital Resources

As of December 31, 2021, we had 386 full-time employees in Canada, the United States and Australia, which was comprised of approximately 49% scientists, 32% business professionals, and 19% engineers and data scientists. None of our employees are represented by a labor union or covered under a collective bargaining agreement. As of December 31, 2021, 343 of our employees were employed in Canada, 25 were employed in Australia and 18 were employed in the United States. We consider our relationship with our employees to be excellent.

Our human capital resources objectives include, as applicable, identifying, recruiting, retaining, incentivizing and integrating our existing and additional employees. The principal purposes of our equity incentive plans are to attract, retain and motivate selected employees, consultants, and directors through the granting of stock-based compensation awards.

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 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 FDA or EU approval 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 a national 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 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, 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 Interactive Data Electronic Applications system 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 invest heavily 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 will continue to incur significant losses for the foreseeable future. Our net earnings for the year ended December 31, 2020 was \$118.9 million and our net earnings for the year ended December 31, 2021 was \$153.5 million. As of December 31, 2021, we had accumulated earnings of \$267.7 million. We expect that our operating expenses will continue to increase significantly, including as we:

- invest in research and development activities to improve our technology and platform;
- market our solutions to existing and new 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 good manufacturing practices, or 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 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 year ended December 31, 2020, we received payments from our partnership contracts generated upon the satisfaction of clinical milestones, as well as royalty payments for the first time. During the year ended December 31, 2021, we continued to receive milestone and royalty payments. 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 and 2021, these royalty payments related to our partnership with Eli Lilly upon sales of bamlanivimab, an antibody therapy designed to treat and prevent COVID-19. Therefore, significant amount of 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. As we continue to see new and emerging variants, we would expect the use of bamlanivimab used alone or administered with another therapy, to be subject to future distribution, use pauses and withdrawals of authorization as we have seen in the past. This would correspondingly pause any royalty revenue we earn on the sales of bamlanivimab. 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 platform. 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 platform, 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 platform and solutions, which may vary significantly;
- the timing and cost of, and level of investment in, research, development and commercialization activities relating to our platform and technology, which may change from time to time;
- the start and completion of programs in which our platform is utilized;
- the relative reliability and robustness of our platform, including the data generation and computational tools within our technology stack;
- 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;
- 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 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 Eli Lilly and Company, 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 and 2021. Eli 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 this one program result in milestone and 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. As we continue to see new and emerging variants, we would expect the use of bamlanivimab used alone or administered with another therapy, to be subject to future distribution, use pauses and withdrawals of authorization as we have seen in the past. This would correspondingly pause any royalty revenue we earn on the sales of bamlanivimab. 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 platform 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 and anticipated cash flows from operations, will be sufficient to meet our working capital and capital expenditure needs over at least the next 24 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 platform, 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 platform and address competitive developments;
- fund development and marketing efforts of our current and future programs;
- expand the capabilities of our platform 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 platform 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 COVID-19 pandemic on global social, political and economic conditions;
- 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 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.

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

We utilize our antibody discovery platform to identify antibodies for further development and potential commercialization by our partners. As a result, the quality and sophistication of our platform and technology 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 platform'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 platform 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 platform;
- 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 U.S. Food and Drug Administration, or 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 platform or our technology. If we are unsuccessful in achieving and maintaining market acceptance of our platform, our business, financial condition, results of operations and prospects could be adversely affected.

If we cannot maintain and expand current partnerships and enter into 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 platform, our partners' internal priorities (including fluctuations in research and developments budgets), our partners' resource allocation decisions and competitive opportunities, disagreements with partners, the costs required of either party to the partnerships and related financing needs, and operating, legal and other risks in any relevant jurisdiction.

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 platform. In certain of our partnership programs, we may elect to make additional investments in certain partnership agreements at progressive stages of pre-clinical 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 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.

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 the year ended December 31, 2020, three of our partners accounted for 35%, 25% and 14% of our research fees revenue and eight partners accounted for the remaining 26% of research fees revenue. For the year ended December 31, 2020 we recognized our first milestone and royalty revenue streams, totaling \$213.3 million, exclusively from our partnership with Lilly. For the year ended December 31, 2021, four partners accounted for 29%, 17%, 11% and 10% of our research fees revenue and twelve partners accounted for the remaining 33% of research fees revenue. For the year ended December 31, 2021, we recognized licensing revenue of \$7.0 million and royalty revenue of \$327.4 million exclusively from our partnership with Lilly. Because a significant portion of our revenue in 2020 and 2021 was derived from sales of bamlanivimab, any reduction in sales of this compound may materially and adversely affect our results of operations for future periods. As we continue to see new and emerging variants, we would expect the use of bamlanivimab used alone or administered with another therapy, to be subject to future distribution, use pauses and withdrawals of authorization as we have seen in the past. This would correspondingly pause any royalty revenue we earn on the sales of bamlanivimab.

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.

Biopharmaceutical drug development is inherently uncertain, and it is possible that none of the drug candidates discovered using our platform 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 platform 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 platform. Due to our reliance on our partners, the risks relating to product development, regulatory clearance, authorization or approval and commercialization apply to us derivatively through the activities of our partners. While we believe our platform is capable of identifying high quality antibodies, there can be no assurance that our 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 one AbCellera discovery program and two 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 Eli 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 Eli Lilly will be successful in its further development of bamlanivimab. As we continue to

see new and emerging variants, we would expect the use of bamlanivimab used alone or administered with another therapy, to be subject to future distribution, use pauses and withdrawals of authorization as we have seen in the past. This would correspondingly pause any royalty revenue we earn on the sales of bamlanivimab.

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 pre-clinical 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 platform, 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 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 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 400 employees as of December 31, 2021. 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 platform, or the expected turnaround times of our solutions and support, or to satisfy customer demand as it grows. 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 platform. Such investments in technology are inherently risky and may affect our operating results. If the return on these investments is lower or develops more slowly than we expect, our revenue and operating results may suffer.

We use our technology stack for the discovery of antibodies and, since our inception, we have dedicated a substantial portion of our resources on the development of our platform and the technology that it incorporates to further enhance our antibody discovery platform. These investments may involve significant time, risks, and uncertainties, including the risk that the expenses associated with these investments may affect operating results and that such investments may not generate sufficient technological advantage relative to alternatives in the market which would, in turn, impact revenues to offset liabilities assumed and expenses associated with these new investments. The industry in which we operate changes rapidly as a result of technological and drug developments, which may render our solutions less desirable. We believe that we must continue to invest a significant amount of time and resources in our platform and technology to maintain and improve our competitive position. If we do not achieve the benefits anticipated from these investments, if the achievement of these benefits is delayed, or if our technology stack 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 platform. 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.

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

We face significant competition in the 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 technology stack 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. 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 technology stack. In addition, our partners may also elect to develop their workflows on legacy systems rather than rely on our platform.

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 platform 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 platform. Our partners and potential partners may prefer one or more pricing models employed by our competitors that involve upfront payments rather than downstream revenues. We may not be able to compete effectively against these organizations.

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

current and future competitors, we may be unable to increase market adoption and sales of our platform, which could prevent us from increasing our revenue or sustaining profitability.

Our antibody discovery platform technology 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 platform 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 one program result in clinical milestone and royalty payments to us. While our partnership with Eli Lilly has produced bamlanivimab, an antibody for which Eli Lilly was granted two EUAs by the FDA, for administration alone and together with etesevimab, and a similar authorization by Health Canada for bamlanivimab alone, we have not yet had a program receive full marketing approval. As we continue to see new and emerging variants, we would expect the use of bamlanivimab used alone or administered with another therapy, to be subject to future distribution, use pauses and withdrawals of authorization as we have seen in the past. This would correspondingly pause any royalty revenue we earn on the sales of bamlanivimab. We also believe that pharmaceutical and biotechnology companies are likely to be particularly sensitive to defects and errors in the use of our platform, including if our platform fails to deliver meaningful acceleration of certain research timelines accompanied by results at least as good as the results generated using legacy or other alternative technologies. There can be no guarantee that our platform will meet the expectations of pharmaceutical and biotechnology companies.

If we are unable to support demand for our antibody discovery platform, 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 platform. 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 platform and other of our key performance indicators are based on a number of complex assumptions and estimates and may be inaccurate.

We estimate annual total addressable markets and forecasts of market growth for our platform, 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 platform is smaller than we have estimated or if the key business metrics we utilize to forecast revenue are inaccurate, it may impair our sales growth and have an adverse impact on our business, financial condition, results of operations and prospects.

We 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 platform may become less desirable in the markets we serve, and our partners could move to new technologies offered by our competitors or engage in antibody discovery themselves. 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 platform, our advanced automation systems, and advanced application software. We have installed, and expect to expand, a number of enterprise software systems that affect a broad range of business processes and functional areas, including for example, systems handling human resources, financial controls and reporting, contract management, regulatory compliance and other infrastructure operations. These 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.

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 new California privacy law, the California Privacy Rights Act, or CPRA, was passed by California voters on November 3, 2020. The CPRA will create additional obligations with respect to processing and storing personal information that are scheduled to take effect on January 1, 2023 (with certain provisions having retroactive effect to January 1, 2022). Additionally, some observers have noted that the CCPA and 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, on March 2, 2021, Virginia enacted the Consumer Data Protection Act (the “CDPA”) and, on July 8, 2021, Colorado’s governor signed the Colorado Privacy Act (“CPA”), into law. The CDPA and the CPA will both become effective January 1, 2023. While the CDPA and CPA 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 General Data Protection Regulation 2016/679 (“GDPR”) applies to the processing of personal data in the EEA. The GDPR imposes many requirements for controllers and processors of personal data, including, for example, higher standards for obtaining consent from individuals to process their personal data, more robust disclosures to individuals and a strengthened individual data rights regime, shortened timelines for data breach notifications, limitations on retention and secondary use of information, increased requirements pertaining to health data and pseudonymized (i.e., key-coded) data and additional obligations when contracting third-party processors in connection with the processing of the personal data. The GDPR allows EEA countries to make additional laws and regulations further limiting the processing of genetic, biometric or health data. Failure to comply with the requirements of the GDPR and the applicable national data protection laws of EEA countries may result in fines of up to €20,000,000 or up to 4% of the total worldwide annual turnover of the preceding financial year, whichever is higher, and other administrative penalties; we may also be liable should any individual who has suffered financial or non-financial damage arising from our infringement of the GDPR exercise their right to receive compensation against us. Furthermore, adverse publicity relating to our failure to comply with the GDPR could cause a loss of goodwill, which could have an adverse effect on our reputation, brand, business and financial condition. In addition, further to the UK’s exit from the EU on January 31, 2020, the GDPR ceased to apply in the UK at the end of the transition period on December 31, 2020. However, as of January 1, 2021, the UK’s European Union (Withdrawal) Act 2018 incorporated the GDPR (as it existed on December 31, 2020 but subject to certain UK specific amendments) into UK law, referred to as the UK GDPR. The UK GDPR and the UK Data Protection Act 2018 set out the UK’s data protection regime, which is independent from but aligned to the EU’s data protection regime. Non-compliance with the UK GDPR may result in monetary penalties of up to £17.5 million or 4% of worldwide revenue, whichever is higher. Although the UK is regarded as a third country under the EU’s GDPR, the European Commission (“EC”) has now issued a decision recognizing the UK as providing adequate protection under the EU GDPR and, therefore, transfers of personal data originating in the EU to the UK remain unrestricted. Like the EU GDPR, the UK GDPR restricts personal data transfers outside the UK to countries not regarded by the UK as providing adequate protection. The UK government has confirmed that personal data transfers from the UK to the EEA remain free flowing.

To enable the transfer of personal data outside of the EEA or the UK, adequate safeguards must be implemented in compliance with European and UK data protection laws. 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 (and not subject to the GDPR). 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 a draft version of a UK-specific transfer mechanism, which, once finalized, will enable transfers from the UK. We will be required to implement these new safeguards when conducting restricted data transfers under the EU and UK GDPR and doing so will require significant effort and cost.

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.

In addition, as a result of the COVID-19 pandemic, we may face increased cybersecurity risks due to our reliance on internet technology and the number of our employees who are working remotely, which may create additional opportunities for cybercriminals to exploit vulnerabilities

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 platform 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.

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 inability to attract and retain highly skilled scientists, engineers and salespeople could adversely affect our business.

Our success depends on the skills, experience and performance of key members of our senior management team. The individual and collective efforts of these employees will be important as we continue to develop our platform and our technology, 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. 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 (\$125.6 million), the proceeds of which we plan to use 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 becomes 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 technology and platform, advanced automation systems, and advanced application and workflow software for some period of time. The inability to address system issues could develop if our facilities are inoperable or 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 platform 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 at home during the COVID-19 pandemic, 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 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 biopharmaceutical 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 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.

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.

In November 2020, we consummated the Trianni acquisition. In September 2021, we consummated the TetraGenetics acquisition. As of the date of this document, the integration plan and costs for both acquisitions are running according to the deal model; however, the full integration is not yet complete. We expect that the integration process will require significant time and resources, and we may not be able to manage the process successfully. If we are not able to successfully integrate the businesses with ours, the anticipated benefits of the acquisitions may not be realized fully or may take longer than expected to be realized. We may also incur higher than expected costs as a result of the acquisitions or experience an overall post-completion process that takes longer than originally anticipated. In addition, at times the attention of certain members of our management and resources may be focused on integration of the businesses of the companies and diverted from day-to-day business operations, which may disrupt our ongoing business and the business of the combined company. We expect to incur non-recurring costs in connection with both acquisitions and integrating to our operations. Management cannot ensure that the elimination of duplicative costs or the realization of other efficiencies will offset the transaction and integration costs in the near term or at all. Furthermore, uncertainty about the effect of the acquisitions on our business, employees, customers, third parties with whom we have relationships may have an adverse effect on our business, financial condition, results of operations and prospects. In addition, such challenges in integrating our acquisitions may be magnified by the ongoing COVID-19 pandemic.

Other 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 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.

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 platform, our software and our technologies, without infringing the intellectual property rights of others.

We strive to protect and enhance the proprietary technologies that we believe are important to our business, including seeking patents intended to cover our platform and related technologies and uses thereof, as we deem appropriate. 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, 2021, we owned or exclusively licensed over 70 issued or allowed patents and over 70 pending patent applications worldwide. We own registered trademarks and trademark applications for AbCellera, Channel Bio, Celium, Trianni, the Trianni Mouse, and TetraGenetics 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 licensors' 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 platform and technology 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 platform and our technology, 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 platform technologies. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, regardless of the outcome, it could dissuade companies from collaborating with us to license, develop or commercialize current or future products.

We may not be aware of all third party intellectual property rights potentially relating to our platform or technology. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until approximately 18 months after filing or, in some cases, not until such patent applications issue as patents. We or our licensors might not have been the first to make the inventions 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 technology stack and antibody discovery platform may be negatively and substantially impacted, and if disputes arise, we may be subjected to future litigation as well as the potential loss of or limitations on our ability to incorporate the technology covered by these license agreements.

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

Monitoring unauthorized disclosure and detection of unauthorized disclosure is difficult, and we do not know whether the steps we have taken to prevent such disclosure are, or will be, adequate. If we were to enforce a claim that a third party had illegally

obtained and was using our trade secrets, it would be expensive and time-consuming, and the outcome would be unpredictable. In addition, some courts both within and outside the United States 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 technologies or platform. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names. Further, we have and may in the future enter into agreements with owners of such third party trade names or trademarks to avoid potential trademark litigation which may limit our ability to use our trade names or trademarks in certain fields of business.

We have not yet registered certain of our trademarks in all of our potential markets, 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 platform, 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 platform and technology. 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 platform, 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 one such third party, Berkeley Lights. 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 platform, or the systems, workflows, consumables and reagent kits that comprise our platform, 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 platforms, 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. A determination on all of the Petitions for Inter-Partes Review filed by Berkeley Lights is expected no later than February 2022.

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.

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.

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. 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 platform or technology are obtained, once the patent life has expired, we may be open to competition from others. If our platform or technologies require extended development and/or regulatory review, patents protecting our platform or technologies might expire before or shortly after we are able to successfully commercialize them. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing processes or technologies similar or identical to ours.

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

We use open source software in connection with our technology and computational engine of our platform, 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 establish and 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.

We previously identified and remediated a material weakness in our internal control over financial reporting and if we fail to maintain an effective system of internal control in the future, this could result in future material weaknesses being identified.

As described in Part II, Item 9A, “Controls and Procedures” in our Annual Report on Form 10-K for the fiscal year ended December 31, 2020, we identified a material weakness in internal controls related to an overstatement of lease liability upon adoption of ASU 2016-02, as well as certain other adjustments. During 2021, we completed the remediation measures related to the material weakness and concluded that our internal control over financial reporting was effective as of December 31, 2021. Completion of remediation does not provide assurance that our remediation or other controls will continue to operate effectively. If we are unable to maintain effective internal control over financial reporting or disclosure controls and procedures, our ability to record, process and report financial information accurately, and to prepare financial statements within required time periods could be adversely affected.

which could result in violations of applicable securities laws, stock exchange listing requirements, subject us to litigation and investigations, negatively affect investor confidence in our financial statements, and adversely impact our stock price and ability to access capital markets.

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

Additionally, as of December 31, 2021, 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 2021 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 2021 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 good will 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 transaction. 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, 2021. 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 is evolving, and 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 response to the spread of COVID-19, and in accordance with guidance from provincial and local government authorities, we have restricted access to our facilities mostly to personnel and third parties who must perform critical activities that must be completed on-site, limited the number of such personnel that can be present at our facilities at any one time, and requested that most of our personnel work remotely in compliance with the local government issued guidance. 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, such as the ultimate geographic spread of the disease, the duration of the outbreak, travel restrictions, additional or modified government actions, new information that will emerge concerning the severity and impact of the COVID-19 pandemic and actions to contain the outbreak or treat its impact, such as social distancing, quarantines, lock-downs or business closures.

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; 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 32,000 square feet of space under leases expiring between 2022 and 2028. 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 48,000 square feet of additional lab and office space under a lease expiring in 2031. Channel Bio, our wholly owned subsidiary, occupies approximately 8,000 square feet of office and laboratory space in Sydney, Australia, with a leases that expires between 2022 and 2032. We have the option to elect to acquire additional land for our GMP facility for \$25.0 million. We also lease additional office and laboratory space in 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. A determination on all of the Petitions for Inter-Partes Review filed by Berkeley Lights is expected no later than February 2022.

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.

Post-Grant Review of a Berkeley Lights Patent

In February 2020, we filed a petition seeking post-grant review of Berkeley Lights' U.S. Patent No. 10,646,871 with the United States Patent and Trademark Patent Trial and Appeal Board, or the PTAB. We are seeking to invalidate Berkeley Lights' patent on multiple grounds under 35 U.S.C. Sections 102 and 112. In August 2021, the PTAB declined to institute our Petition.

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 stockholder return on our common stock 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 stock and each index on December 11, 2020 (the first day of trading of our common stock) and its relative performance is tracked through December 31, 2021. Pursuant to applicable SEC rules, all values assume reinvestment of the full amount of all dividends, however no dividends have been declared on our common stock to date. The stockholder 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 stockholder returns.



*\$100.00 invested on December 11, 2020 in stock or index, including reinvestment of dividends.

	12/31/2020	3/31/2021	6/30/2021	9/30/2021	12/31/2021
AbCellera Biologics	\$ 68.32	\$ 57.66	\$ 37.35	\$ 34.02	\$ 24.28
Nasdaq Composite Index	104.12	107.02	117.18	116.73	126.39
Nasdaq Biotechnology Index	100.85	100.13	109.09	107.76	100.21

Holders of Common Shares

As of February 15, 2022, the latest practicable date prior to the date of this Annual Report on Form 10-K, there were approximately 76 holders of record of our common shares.

Dividend Policy

We have never declared or 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 of the 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 the section titled "Selected Consolidated Financial Data" and 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 the section titled "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 the section titled "Risk Factors." Please also see the section titled "Cautionary Note Regarding Forward Looking Statements."

Overview

We believe that the surest path to a better future is through technological advancement and that the new frontier of technology lies at the interface of computation, engineering and biology. Our mission is to improve health with technologies that transform the way that antibody-based therapies are discovered. We aim to become the centralized operating system for next generation antibody discovery.

Our full-stack, artificial intelligence-, or AI, powered antibody discovery platform searches and analyzes the database of natural immune systems to find antibodies that can be developed as drugs. We believe our technology increases the speed and the probability of success of therapeutic antibody discovery, including enabling discovery against targets that may otherwise be intractable. We forge partnerships with drug developers of all sizes, from large cap pharmaceutical to small biotechnology companies. We empower them to move quickly, reduce cost and tackle the toughest problems in drug development. As of December 31, 2021, we had 156 discovery programs that are either completed, in progress or under contract with 36 partners. As a recent example, in a collaboration with Eli Lilly and Company, or Lilly, we applied our technology stack to co-develop bamlanivimab, a potential antibody therapy to treat and prevent COVID-19. Starting from a single blood sample obtained from a convalescent patient, we and our partners identified a viable antibody drug candidate within three weeks that advanced into clinical testing 90 days after initiation of the program. 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 into clinical development on this timeframe again in the future, or at all. We initiated our partnering program in 2015 and have only had this one program result in clinical milestone payments to us to date and we have not yet had a program receive marketing approval.

We structure our agreements in a way that is designed to align our partners' economic interests with our own. We forge partnerships with large cap pharmaceutical companies, biotechnology companies of all sizes and non-profit and government organizations. Our partners select a target and define the antibody properties needed for therapeutic development. We provide discovery solutions to partners that have a range of discovery capabilities, from the highly enabled to the less enabled. 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 therapeutics. 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 partner 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 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 generated revenue of \$233.2 million and \$375.2 million for the years ended December 31, 2020 and 2021, respectively. As of December 31, 2021, we had a total of 36 partners for whom we were conducting antibody discovery activities. For the year ended December 31, 2020, three of our partners accounted for 35%, 25% and 14% of our research fees revenue and eight partners accounted for the remaining 26% of research fees revenue. For the year ended December 31, 2020 we recognized our first clinical milestone payments and royalty revenue streams, totaling \$213.3 million, exclusively from our partnership with Lilly. For the year ended December 31, 2021, four of our partners accounted for 29%, 17%, 11% and 10% of our research fees revenue and 12 partners accounted for the remaining 33% of research fees revenue. For the year ended December 31, 2021, we recognized milestone payments of \$7.0 million and royalty revenue of \$327.3 million exclusively from our partnership with Lilly. Our partnership with Lilly constituted one of the partnerships that generated 10% or more of our consolidated revenues during the one or more periods described above. With respect to the other partners, we do not believe the loss of any one or more of such partners would have a material

adverse effect on us and our subsidiaries taken as a whole. We have also grown the number of programs that we have under contract with our partners, as illustrated by the following charts.



We incurred sales and marketing expenses of \$3.8 million and \$6.9 million for the years ended December 31, 2020 and 2021, respectively. We are increasing investment into our business development team and into marketing our solutions to new and existing partners.

We focus a substantial portion of our resources on research and development efforts towards deepening our technology and expertise along our technology stack, and we expect to continue to make significant investments in this area for the foreseeable future. We incurred research and development expenses of \$29.4 million and \$62.1 million for the years ended December 31, 2020 and 2021, respectively. We incurred general and administrative expenses of \$11.9 million and \$41.8 million for the years ended December 31, 2020 and 2021, respectively. 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 technology stack and platform;
- 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;
- continue to establish, protect and defend our intellectual property and patent portfolio, including our ongoing litigation; and
- operate as a public company.

To date, we have financed our operations primarily from revenue from our antibody discovery partnerships in the form of revenue, government funding from grants, external borrowings, and from the issuance and sale of convertible preferred shares and notes, and common shares.

Our net earnings for the year ended December 31, 2020 was \$118.9 million and our net earnings for the year ended December 31, 2021 was \$153.5 million. As of December 31, 2021, we had accumulated earnings of \$267.7 million and we had balance of cash, cash equivalents, and marketable securities totaling \$723.0 million.

Recent Developments

In February 2022, we announced that bebtelovimab (LY-CoV1404), the second antibody developed through our collaboration with Lilly, received EUA from the FDA for the treatment of mild-to-moderate COVID-19. Lilly announced in February 2022 that they 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.

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 in order 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 the section of this prospectus titled “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, 2021, we had 156 discovery programs that are either completed, in progress or under contract with 36 partners. We are building our business development team across the major biotechnology geographic hubs in order 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 platform. 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 technological 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 may impact revenue recognition.
- **Investing in enhancements to our technology stack.** Our ability to maintain and expand our partnerships is dependent on the advantages our technology stack delivers to our partners. We intend to maintain our leading position through research and development investments to refine and add capabilities in areas such as computation, protein engineering, immunization technologies, genetically engineered rodents and cell line selection. We have successfully closed 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 technological 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 plant, investing in research and development and hiring more talented personnel across functions. We have new facilities under development scheduled to take occupancy in early 2022 and 2023 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. For example, as our business matures and to the extent programs are discontinued, we anticipate updating these metrics to reflect such changes.

Cumulative Metrics	Year Ended December 31,		Change
	2020	2021	%
Number of discovery partners	27	36	33%
Programs under contract	103	156	51%
Program starts	52	78	50%
Programs in the clinic	1	5	400%

The table below outlines the details of molecules in the clinic as of December 31, 2021:

Molecule	Most advanced stage	Partner	Therapy areas	Program type
Bamlanivimab (LY-CoV555)	Marketed, Emergency Use Authorization (EUA)	Eli Lilly and Company	Infectious disease – COVID-19	Discovery partnership
Bebtelovimab (LY-CoV1404)	Phase 2	Eli Lilly and Company	Infectious disease – COVID-19	Discovery partnership
NBL-012	Phase 1	NovaRock Biotherapeutics Inc.	Dermatology, gastrointestinal, immunology	Trianni license
NBL-015	IND approved	NovaRock Biotherapeutics Inc.	Oncology	Trianni license
IVX-01	Clinical field study	Invetx	Animal health	Discovery partnership

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 technology stack and our current level of market penetration. The metric also relates to our opportunities to secure programs under contract from existing customers through repeat business opportunities.

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 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 technology 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.

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 near-term potential to earn research fees. Cumulatively, 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, 2021:

Partner	# of Targets & Duration	Therapeutic Indication or Modality	Date Announced
Everest Medicines	Up to 10 targets, multi-year	Oncology and undisclosed	September 22, 2021
Moderna	Up to 6 targets, multi-year	RNA-encoded antibodies	September 15, 2021
EQRx	Multi-target, multi-year	Oncology and immunology (initially)	August 4, 2021
Tachyon	Single target	Oncology	August 3, 2021
Undisclosed biotech	Up to 4 targets, multi-year	Undisclosed	June 30, 2021*
Angios	Multi-target, multi-year	Ophthalmology	May 6, 2021
Undisclosed biotech	Multi-target, multi-year	Oncology	May 6, 2021*
Empirico	Up to 5 targets, multi-year	Undisclosed	April 14, 2021
Gilead Sciences	8 targets, multi-year	Undisclosed	April 1, 2021
Abdera Therapeutics	9 targets, multi-year	Oncology	January 14, 2021
Invetx	Multi-target, multi-year	Animal Health	November 19, 2020
Kodiak Sciences	Multi-target, multi-year	Ophthalmology	October 29, 2020
IGM Biosciences	Multi-target, multi-year	Oncology and immunology	September 24, 2020
Undisclosed	Single target	Bispecific	June 3, 2020*
Eli Lilly	Up to 9 targets, multi-year	COVID-19 program and additional indications	May 22, 2020*
Regeneron Pharmaceuticals	Multi-target, multi-year	Multiple undisclosed	March 16, 2020*
Invetx	Multi-target, multi-year	Animal health	February 23, 2020
Undisclosed	Multi-target, multi-year	Cell therapy	September 25, 2019*
Gilead Sciences	Single target	Infectious disease	June 13, 2019
Denali Therapeutics	8 targets, multi-year	Neurological diseases	February 28, 2019
Novartis	Up to 10 targets, multi-year	Undisclosed	February 14, 2019
Autolus Therapeutics	Single target	Cell therapy (CAR-T)	November 29, 2018
Denali Therapeutics	Single target	Neurological diseases	June 12, 2018
Undisclosed mid-cap biopharma	Undisclosed	Undisclosed	January 25, 2018
Teva Pharmaceutical Industries	Single target	Membrane protein	June 13, 2017
Pfizer	Multi-target, multi-year	Membrane protein	January 5, 2017
Undisclosed global biotech	Multi-target, multi-year	Undisclosed	November 4, 2016
Kodiak Sciences	Single target	Ophthalmology	August 24, 2016
Teva Pharmaceutical Industries	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. 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, 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 and amortization. Research and development activities consist of discovery research for partners as well as our internal platform development. We derive improvements to our technology stack 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. In addition, we plan to continue to invest in research and development to enhance our solutions and offerings to our partners, including hiring 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 platform. 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, project management, corporate development, 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 anticipated growth in the business and due to incremental costs associated with operating as a public company, including costs to comply with the rules and regulations applicable to companies listed on a securities exchange and costs related to compliance and reporting obligations pursuant to the rules and regulations of the SEC and stock exchange listing standards, public relations, insurance and professional services. We expect these expenses to vary from period to period as a percentage of revenue.

Depreciation and amortization. Depreciation expense consists of the depreciation of property and equipment used actively in the business, primarily by research and development activities. Amortization expense includes the amortization of intangible assets over their respective useful lives.

Other (Income) Expense

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

Interest and other expense. Interest expense consists primarily of financing fees, fair value adjustments of contingent consideration and investments, and includes interest on borrowings under any credit agreements.

Foreign exchange (gain) loss, net. Foreign exchange (gain) loss, net, consists of income or loss due to fluctuation in exchange rates in the foreign jurisdictions that we operate in. All of our historical revenue has been generated in U.S. dollars.

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, 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 financial statements. We expect to continue to benefit from these tax programs in the future.

Results of Operations

The results of operations presented below should be reviewed in conjunction with the consolidated financial statements and notes included elsewhere in this annual report. The following tables set forth our results of operations for the periods presented:

	Year Ended December 31,		
	2019	2020	2021
Revenue:			
Research fees	\$ 11,612	\$ 19,848	\$ 19,076
Licensing revenue	-	-	20,778
Milestone payments	-	15,000	8,000
Royalty revenue	-	198,307	327,349
Total revenue	11,612	233,155	375,203
Operating expenses:			
Royalty fees	-	27,143	45,516
Research and development ⁽¹⁾	10,113	29,393	62,062
Sales and marketing ⁽¹⁾	1,263	3,842	6,913
General and administrative ⁽¹⁾	2,749	11,910	41,848
Depreciation and amortization	1,604	4,836	14,451
Total operating expenses	15,729	77,124	170,790
Income (loss) from operations	(4,117)	156,031	204,413
Other (income) expense:			
Interest income	(155)	(293)	(3,330)
Interest and other expense	209	6,511	5,225
Foreign exchange (gain) loss	(186)	300	855
Grants and incentives	(1,774)	(8,320)	(17,486)
Total other income	(1,906)	(1,802)	(14,736)
Net earnings (loss) before income tax	(2,211)	157,833	219,149
Income tax expense	-	38,915	65,685
Net earnings (loss)	\$ (2,211)	\$ 118,918	\$ 153,464
Foreign currency translation adjustment	-	-	280
Comprehensive income (loss)	\$ (2,211)	\$ 118,918	\$ 153,744
Net earnings (loss) per share attributable to common shareholders			
Basic	\$ (0.01)	\$ 0.53	\$ 0.56
Diluted	\$ (0.01)	\$ 0.45	\$ 0.48
Weighted-average common shares outstanding			
Basic	151,327,560	159,195,023	275,763,745
Diluted	151,327,560	263,129,765	318,294,236

(1) Amounts are exclusive of depreciation and amortization. Amounts include stock-based compensation as follows:

	Year Ended December 31,		
	2019	2020	2021
Research and development expenses	\$ 606	\$ 5,365	\$ 15,663
Sales and marketing expenses	85	1,691	2,120
General and administrative expenses	199	1,341	12,863
Total stock-based compensation	\$ 890	\$ 8,397	\$ 30,646

Comparison of the Years Ended December 31, 2020 and 2021

Revenue

	Year Ended December 31,		Change	
	2020	2021	Amount	%
(in thousands, except percentages)				
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 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	%
(in thousands, except percentages)				
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 and Amortization

	Year Ended December 31,		Change	
	2020	2021	Amount	%
(in thousands, except percentages)				
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 platform. \$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	%
(in thousands, except percentages)				
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	%
	(in thousands, except percentages)			
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	%
	(in thousands, except percentages)			
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	%
	(in thousands, except percentages)			
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	%
	(in thousands, except percentages)			
Interest and other expense	\$ 6,511	\$ 5,225	\$ (1,286)	(20)%

Interest and other expense decreased by \$1.3 million, or 20% 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.

Foreign Exchange (Gain) Loss

	Year Ended December 31,		Change	
	2020	2021	Amount	%
	(in thousands, except percentages)			
Foreign exchange (gain) loss	\$ 300	\$ 855	\$ 555	185%

Foreign exchange (gain) loss increased by \$0.6 million from the year ended December 31, 2020 to the year ended December 31, 2021. Foreign exchange gains and losses are 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	%
	(in thousands, except percentages)			
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	%
	(in thousands, except percentages)			
Income tax expense	\$ 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.

Comparison of the Years Ended December 31, 2019 and 2020

Revenue

	Year Ended December 31,		Change	
	2019	2020	Amount	%
	(in thousands, except percentages)			
Revenue				
Research fees	\$ 11,612	\$ 19,848	\$ 8,236	71%
Licensing revenue	-	-	-	
Milestone payments	-	15,000	15,000	N/A
Royalty revenue	-	198,307	198,307	N/A
Total revenue	\$ 11,612	\$ 233,155	\$ 221,543	1908%

Revenue increased by \$221.5 million from the year ended December 31, 2019 to the year ended December 31, 2020. We received milestone payments upon achieving Phase 1, Phase 2, and Phase 3 clinical milestones and for the first commercial sale in the United States by Lilly relating to molecule bamlanivimab for treatment of COVID-19 in the amount of \$15.0 million. Royalty payments of \$198.3 million are directly associated with the specified percentage of proceeds that Lilly received from the sales of bamlanivimab. Research fees recognized increased by \$8.2 million, or 71%. \$5.3 million of the increase is associated with research fees from new partnerships agreements entered into in 2020. The remaining increase is attributable to additional targets and project activities from ongoing projects or new projects with existing partners.

Operating Expenses

Royalty fees

	Year Ended December 31,		Change	
	2019	2020	Amount	%
	(in thousands, except percentages)			
Royalty fees	\$ —	\$ 27,143	\$ 27,143	N/A

Royalty fees for the year ended December 31, 2020 were \$27.1 million. These were 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 and Amortization

	Year Ended December 31,		Change	
	2019	2020	Amount	%
	(in thousands, except percentages)			
Research and development	\$ 10,113	\$ 29,393	\$ 19,280	191%

Research and development expenses increased by \$19.3 million, or 191%, from the year ended December 31, 2019 to the year ended December 31, 2020. \$5.1 million of the increase relates to licensing fees due in relation to research activity. \$5.1 million of the increase is due to the increase in compensation expense consistent with increased headcount. \$4.3 million of the increase relates to stock-based compensation expense related to Liability Classified Options (LCOs). This \$4.3 million in LCOs will be settled with equity when the employees exercise the associated options. In June 2020, the Company acquired the OrthoMab bispecific platform from Dualogics in the amount of \$4.0 million. This transaction is accounted for as an acquisition of an asset and was expensed upon completion of the transaction, as the platform acquired is intended to be further utilized and expanded in our research and development efforts. The remaining increase is attributed to research materials and supplies consistent with increased research and development activities.

Sales and Marketing

	Year Ended December 31,		Change	
	2019	2020	Amount	%
	(in thousands, except percentages)			
Sales and marketing	\$ 1,263	\$ 3,842	\$ 2,579	204%

Sales and marketing expenses increased by \$2.6 million, or 204%, from the year ended December 31, 2019 to the year ended December 31, 2020. The increase was primarily driven by increased headcount in business development and marketing staff which resulted in an increase of \$2.4 million in compensation expenses, including increased expenditures on new hires, external consultants for public relations and graphic design activities. Sales and marketing expenses related to travel were significantly lower for the year ended December 31, 2020 due to COVID-19 related travel restrictions.

General and Administrative

	Year Ended December 31,		Change	
	2019	2020	Amount	%
	(in thousands, except percentages)			
General and administrative	\$ 2,749	\$ 11,910	\$ 9,161	333%

General and administrative expenses increased by \$9.2 million, or 333%, from the year ended December 31, 2019 to the year ended December 31, 2020. \$1.9 million of the increase is related to the closing of our 2020 preferred share financing and IPO including legal, accounting and other professional services which are not expected to recur in future periods. \$2.9 million of the increase was driven by increased headcount within the general and administrative function and the associated compensation expenses. This investment in the general and administrative function was necessary to support both the overall growth of the Company as well as to prepare for being a listed company. \$2.1 million is attributable to legal fees incurred with respect to Berkeley litigation and legal IP matters.

Depreciation and Amortization

	Year Ended December 31,		Change	
	2019	2020	Amount	%
	(in thousands, except percentages)			
Depreciation and amortization	\$ 1,604	\$ 4,836	\$ 3,232	201%

Depreciation and amortization expense increased by \$3.2 million, or 201%, from the year ended December 31, 2019 to the year ended December 31, 2020. Depreciation expense increased by \$0.7 million due to the depreciation of equipment and facilities related to capital equipment purchases of \$9.7 million in the year. Amortization expense increased by \$2.5 million due to the amortization of acquired intangible assets over their respective useful lives.

Other (Income) Expense

Interest Income

	Year Ended December 31,		Change	
	2019	2020	Amount	%
	(in thousands, except percentages)			
Interest income	\$ (155)	\$ (293)	\$ (138)	89%

Interest income increased by \$0.1 million, or 89%, from the year ended December 31, 2019 to the year ended December 31, 2020. The increase was primarily driven by a larger average cash balance maintained in the year ended December 31, 2020 compared to the prior period.

Interest and Other Expense

	Year Ended December 31,		Change	
	2019	2020	Amount	%
	(in thousands, except percentages)			
Interest and other expense	\$ 209	\$ 6,511	\$ 6,302	3015%

Interest and other expense increased by \$6.3 million, or 3015% from the year ended December 31, 2019 to the year ended December 31, 2020. \$4.2 million of the increase 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. Given the nature of these cancellation costs and the Company not having any material debt due to its strong liquidity position at the end of 2020, these expenses are not expected to recur in future periods.

Foreign Exchange (Gain) Loss

	Year Ended December 31,		Change	
	2019	2020	Amount	%
	(in thousands, except percentages)			
Foreign exchange (gain) loss	\$ (186)	\$ 300	\$ 486	(261)%

Foreign exchange (gain) loss increased by \$0.5 million from the year ended December 31, 2019 to the year ended December 31, 2020. Foreign exchange gains and losses are driven primarily by the Canadian dollar cash balances that we maintain and the relative exchange rates between Canadian dollars and U.S. dollars.

Grants and Incentives

	Year Ended December 31,		Change	
	2019	2020	Amount	%
	(in thousands, except percentages)			
Grants and incentives	\$ (1,774)	\$ (8,320)	\$ (6,546)	369%

Grants and incentives increased by \$6.5 million, or 369%, from the year ended December 31, 2019 to the year ended December 31, 2020. The increase was primarily driven by expenses for which there was cost recovery related to the SIF project

entered into between us and the Government of Canada in April 2020, in the amount of \$6.8 million. Any additional cash from the SIF project that we receive for eligible capital expenditure activities will result in recognition of a deferred credit on the balance sheet. Subsequent to the third quarter, a number of expenditures incurred were identified as not being eligible under the SIF project which directly impacted the grant and incentives recovery amounts recognized in the year. These expenditures did not impact the commitment under the SIF project for \$125.6 million of funding from the Government of Canada to AbCellera. Future eligible expenditures for the project and associated reimbursement will be recognized in a subsequent reporting period.

Liquidity and Capital Resources

As of December 31, 2021, we had \$723.0 million of cash, cash equivalents, and marketable securities, comprising \$476.1 million in cash and cash equivalents and \$246.8 million in marketable securities. The increase of \$128.9 million since December 30, 2020 was primarily from cash flow from operations and driven by the receipt of accounts receivable relating to royalties from bamlanivimab in the year ended December 31, 2021.

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 technology stack, 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 and cash equivalents and anticipated cash flows from operations, will be sufficient to meet our working capital and capital expenditure needs over at least the next 24 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.

Financings and Option Exercises

As of December 31, 2020, we raised a total of \$688.4 million from the issuance of common shares in our IPO, the issuance and sale of convertible preferred shares and notes, common shares, net of costs associated with such financings, and exercises of employee share options. As of December 31, 2021, we raised proceeds of \$4.0 million from the exercise of employee share options.

Government of Canada's Strategic Innovation Fund

In April 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 (\$125.6 million) 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 platform for future pandemic preparedness. The Canadian government has committed up to CAD \$63.9 million (\$45.7 million) towards this stage of the project, based on costs incurred and paid and such funding is non-repayable. As of December 31, 2021, we have claimed a total of \$37.9 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 (\$79.9 million) 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 is expected to occur between 2021 and 2025. Repayment of SIF assistance received for this stage of the project will be calculated as a percentage rate of AbCellera's revenue, with payment made to the Government of Canada on an annual basis during the repayment period of fifteen years starting in 2027. Repayment on this stage of the project is conditional on revenue thresholds being achieved in seven years, a year following the completion of the project and over the subsequent ten-year period. 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, 2021, we have claimed a total of \$21.6 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 at December 31, 2021.

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, 2021, we claimed a total of \$47.1 million under SIF.

Cash Flows

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

	Year Ended December 31,		
	2019	2020	2021
Net cash provided by (used in):			
Operating activities	\$ 2,694	\$ 22,690	\$ 244,584
Investing activities	(5,780)	(119,780)	(332,247)
Financing activities	195	683,653	(3,886)
Effect of exchange rate changes on cash and cash equivalents	-	-	(1,425)
Net increase (decrease) in cash and cash equivalents, and restricted cash	\$ (2,891)	\$ 586,563	\$ (92,974)

Operating Activities

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 Eli Lilly, and continued discovery research activities, as well as upfront payments from securing new multi-year, multi-target contracts with partners.

Net cash provided by operating activities increased by \$20.0 million from \$2.7 million in the year ended December 31, 2019 to \$22.7 million in the year ended December 31, 2020. The increase resulted primarily from increased revenue from discovery research activities, securing new multi-year, multi-target contracts with partners that involved up front technology access fees upon execution of the contract, and payments resulting from the satisfaction of clinical milestones under our partnership with Lilly.

Investing Activities

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.

Net cash used in investing activities was \$5.8 million in the year ended December 31, 2019 compared to \$119.8 million in the year ended December 31, 2020. The increase in cash used was primarily driven by the acquisition of Trianni, an investment in equity investees related to future facility expansion and investment in a fully paid up license for access to a humanized rodent platform for discovery projects with Alloy Therapeutics. By contrast, in the year ended December 31, 2019, investments were limited to equipment used primarily in our research and development activities.

Financing Activities

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.

Net cash provided by financing activities was \$0.2 million for the year ended December 31, 2019 compared to net cash provided by financing activities of \$683.7 million for the year ended December 31, 2020. Net cash provided by financing activities for the year ended December 31, 2020 related primarily to the IPO, SIF funding, convertible note, and the Series A2 financing round closed in March 2020. By contrast, no major equity financing was completed in 2019.

Contractual Obligations and Commitments

The following table summarizes our commitments to settle contractual obligations at December 31, 2021, other than leases which are recognized as operating lease liabilities in our consolidated balance sheet:

	Payments Due by Period				
	Total	Less than 1 year	1 to 3 Years	3 to 5 Years	More than 5 years
Commitments(1)	257,711	314	10,434	24,538	222,425
Royalty fees payable	22,506	22,506	-	-	-
Contingent consideration payable(2)	58,820	22,934	30,595	2,360	2,931
Total	<u>\$ 339,037</u>	<u>\$ 45,754</u>	<u>\$ 41,029</u>	<u>\$ 26,898</u>	<u>\$ 225,356</u>

(1) Includes several leased facilities where the lease commencement dates are subsequent to December 31, 2021.

(2) As of December 31, 2021, the contingent consideration payable had an estimated fair value of approximately \$58.8 million, which has been included as a liability on our consolidated balance sheet.

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, 2021.

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, 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 applies 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.

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. The fair value of the aggregate intangible assets was determined to be \$103.6 million and \$43.3 million and goodwill was \$30.9 million and \$16.9 million at the acquisition dates related to Trianni and TetraGenetics, respectively.

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. At December 31, 2021, our IPR&D was \$72.4 million. 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, we determined there were no potential indicators of impairment of our indefinite-lived intangible assets at October 1, 2021 and during the remainder of 2021.

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, 2021, 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 2021.

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, 2021, the contingent consideration payable had an estimated fair value of approximately \$22.9 million, which has been included as a current liability on our consolidated balance sheet. In connection with our acquisition of TetraGenetics, contingent consideration payable at December 31, 2021 is 35.9 million, all of which is a long-term liability. 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 statement of income (loss) and comprehensive income (loss).

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 21 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.

Stock-based compensation expense is classified in our consolidated statements of income (loss) and comprehensive income (loss) 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 has 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 takes into account 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, in contemplation of this offering, 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 the 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 Eli Lilly on October 7, 2020 for 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 Eli 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, the awards 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 are determined based on the quoted market price of our common shares.

See Note 12 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, 2019, 2020 and 2021.

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 the COVID-19 Pandemic

In March 2020, the World Health Organization declared the outbreak of a novel coronavirus, or COVID-19, as a pandemic, which continues to spread throughout the world. As with many companies around the world, our day to day operations evolved to include work from home policies and requirements for physical distancing for any personnel present in our offices and laboratories. The pandemic impacted our business development activities as shelter-in-place orders, quarantines, travel restrictions and other public health safety measures limited our ability to interact with our existing and potential partners. The impact of the pandemic continues to raise uncertainties which may impact our business going forward. We could be materially and adversely affected by the risks, or the public perception of the risks, related to the COVID-19 pandemic or similar public health crises. Such crises could adversely impact our ability to conduct on-site laboratory activities, expand our laboratory facilities, secure critical supplies such as reagents, laboratory tools or immunized animals required for discovery research activities, and hire and retain key personnel. In addition, the sustainability of an economic recovery remains unclear as inflationary pressures have increased in Canada, U.S. and globally and efforts to combat the virus have been complicated by new variants. The ultimate extent of the impact of any epidemic, pandemic, outbreak, or other public health crisis on our business, financial condition and results of operations will depend on future developments, which are highly uncertain and cannot be predicted, including new information that may emerge concerning the severity of such epidemic, pandemic, outbreak, or other public health crisis and actions taken to contain or prevent the further spread, among others. Accordingly, we cannot predict the extent to which our business, financial condition and results of operations will be affected. We remain focused on maintaining our operations, liquidity and financial flexibility and continue to monitor developments as we deal with the disruptions and uncertainties from the COVID-19 pandemic.

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

As of December 31, 2021, we had cash and cash equivalents of \$476.1 million, restricted cash of \$25.0 million, and marketable securities of \$246.8 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 our investments are short-term in nature. Due to record low interest rates and 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.

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, 2021 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, 2021, using the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control—Integrated Framework (2013).

As disclosed in Part II Item 9A Controls and Procedures in our Annual Report on Form 10-K for the year ended December 31, 2020, a material weakness in internal control over financial reporting was identified in prior periods which was the result of a material adjustment in our financial statements, due to an overstatement of lease liability upon adoption of ASU 2016-02, as well as certain other adjustments as of and for the years ended December 31, 2018 and 2019.

During 2021, to remediate the previously reported material weakness in internal controls over financial reporting, we designed and implemented new controls, enhanced existing controls, hired additional accounting and finance resources with public company and US GAAP experience, improved reporting processes, and enhanced related supporting technology. During the fourth quarter of 2021, we completed our testing of the operating effectiveness of the implemented controls and found them to be effective. As a result, the CEO and CFO have concluded that the material weakness has been remediated as of December 31, 2021.

Attestation Report of Independent Registered Public Accounting Firm

The effectiveness of our internal control over financial reporting as of December 31, 2021 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

Except for changes in connection with the implementation of our remediation efforts, described above, there have been no other changes to internal control over financial reporting, that occurred during the fourth quarter of 2021 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 2021 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 2021 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 2021 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 2021 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 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 2021 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	<u>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).</u>
4.1	<u>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).</u>
4.2	<u>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).</u>
4.3	<u>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).</u>
10.1	<u>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).</u>
10.2†	<u>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).</u>
10.3†	<u>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).</u>
10.4†	<u>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).</u>
10.5†	<u>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).</u>
10.6†	<u>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).</u>
10.7†	<u>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).</u>

10.8#	<u>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).</u>
10.9#	<u>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).</u>
10.10#	<u>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).</u>
10.11#	<u>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).</u>
10.12#	<u>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).</u>
10.13#	<u>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).</u>
10.14#	<u>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).</u>
10.15#	<u>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).</u>
10.16#	<u>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).</u>
10.17#	<u>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).</u>
21.1	<u>Subsidiaries of the Registrant (incorporated by reference to Exhibit 21.1 of the Registrant's Registration Statement on Form S-1, as amended (File No. 333-250838) filed on December 7, 2020).</u>
23.1*	<u>Consent of KPMG LLP, Independent Registered Public Accounting Firm</u>
31.1*	<u>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.</u>
31.2*	<u>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.</u>
32.1*	<u>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.</u>
32.2*	<u>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.</u>
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 25, 2022

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.

<u>Name</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Carl L. G. Hansen</u> Carl L. G. Hansen, Ph.D.	Chief Executive Officer and Director (<i>Principal Executive Officer</i>)	February 25, 2022
<u>/s/ Andrew Booth</u> Andrew Booth	Chief Financial Officer (<i>Principal Financial Officer and Principal Accounting Officer</i>)	February 25, 2022
<u>/s/ Véronique Lecault</u> Véronique Lecault, Ph.D.	Director	February 25, 2022
<u>/s/ Andrew Lo</u> Andrew Lo, Ph.D.	Director	February 25, 2022
<u>/s/ Michael Hayden</u> Michael Hayden, Ph.D.	Director	February 25, 2022
<u>/s/ John S. Montalbano</u> John S. Montalbano	Director	February 25, 2022
<u>/s/ Peter Thiel</u> Peter Thiel	Director	February 25, 2022

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

<u>Report of Independent Registered Public Accounting Firm</u>	F-2
<u>Consolidated Balance Sheets as of December 31, 2020 and 2021</u>	F-5
<u>Consolidated Statements of Income (Loss) and Comprehensive Income (Loss) for the Years ended December 31, 2019, 2020 and 2021</u>	F-6
<u>Consolidated Statements of Stockholders' Equity for the Years ended December 31, 2019, 2020 and 2021</u>	F-7
<u>Consolidated Statements of Cash Flows for the Years ended December 31, 2019, 2020 and 2021</u>	F-8
<u>Notes to Consolidated Financial Statements</u>	F-9

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, 2021 and 2020, the related consolidated statements of income (loss) and comprehensive income (loss), stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2021, 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, 2021 and 2020, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2021, 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, 2021, 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 25, 2022 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 a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Initial measurement of the fair value of contingent consideration and acquired intangible assets related to a business combination

As discussed in Note 21 to the consolidated financial statements, the purchase consideration associated with the business combination with TetraGenetics, Inc. (TetraGenetics) included potential milestone payments based on the achievement of specified technical milestones and additional development and commercial milestone payments related to successfully developed therapeutics (contingent consideration). The aggregate fair value of the purchase consideration is allocated across the estimated net tangible assets acquired, intangible assets with the residual amount allocated to goodwill. The Company estimated the fair value of the contingent consideration to be \$35,100 thousand, and estimated the fair value of the intangible assets, which includes technology and in process research and development intangibles, to be \$43,300 thousand (acquired intangible assets).

We identified the assessment of the initial measurement of the fair value of contingent consideration and the acquired intangible assets in the TetraGenetics business combination 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, forecasted revenues and discount rates involved a high degree of auditor judgment. Changes in these key

assumptions could have a significant impact on the measurement of the contingent consideration and of the acquired intangible assets recognized on acquisition.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to the Company's process for determining the fair value of the contingent consideration and of the acquired intangible assets. These included an internal control related to the development of the key assumptions. 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. We performed sensitivity analyses and assessed the impact of possible changes to the key assumptions on the fair value of the contingent consideration and the acquired intangible assets. We involved valuation professionals with specialized skills and knowledge, who assisted in evaluating the Company's discount rates by comparing them against discount rate ranges that were independently developed using publicly available market data for comparable entities.

/s/ KPMG LLP

Chartered Professional Accountants

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

Vancouver, Canada

February 25, 2022

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, 2021, 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, 2021, 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, 2021 and 2020, the related consolidated statements of income (loss) and comprehensive income (loss), stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2021, and the related notes (collectively, the consolidated financial statements), and our report dated February 25, 2022 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 25, 2022

AbCellera Biologics Inc.
Consolidated Balance Sheets
(Expressed in thousands of U.S. dollars except share data)

	December 31, 2020	December 31, 2021
Assets		
Current assets:		
Cash and cash equivalents	\$ 594,116	\$ 476,142
Marketable securities	-	246,835
Total cash, cash equivalents, and marketable securities	594,116	722,977
Accounts and accrued receivable	213,239	160,576
Restricted cash	-	25,000
Other current assets	5,970	21,247
Total current assets	813,325	929,800
Long-term assets:		
Property and equipment, net	17,923	111,616
Intangible assets, net	115,153	148,392
Goodwill	31,500	47,806
Investments in and loans to equity accounted investees	19,247	50,313
Other long-term assets	8,388	30,642
Total long-term assets	192,211	388,769
Total assets	\$ 1,005,536	\$ 1,318,569
Liabilities and shareholders' equity		
Current liabilities:		
Accounts payable and other liabilities	\$ 20,195	\$ 32,017
Current portion of contingent consideration payable	13,411	22,934
Income taxes payable	36,152	35,683
Accrued royalties payable	27,143	22,506
Deferred revenue	6,589	7,536
Total current liabilities	103,490	120,676
Long-term liabilities:		
Operating lease liability	3,715	36,413
Deferred revenue and grant funding	25,894	60,758
Contingent consideration payable	9,148	35,886
Deferred tax liability	26,161	37,370
Other long-term liabilities	6,620	1,733
Total long-term liabilities	71,538	172,160
Total liabilities	175,028	292,836
Commitments and contingencies		
Shareholders' equity:		
Common shares: no par value, unlimited authorized shares at December 31, 2020 and 2021: 269,497,768 and 283,257,104 shares issued and outstanding at December 31, 2020 and 2021 respectively	710,387	722,430
Additional paid-in capital	5,919	35,357
Accumulated other comprehensive income	-	280
Accumulated earnings	114,202	267,666
Total shareholders' equity	830,508	1,025,733
Total liabilities and shareholders' equity	\$ 1,005,536	\$ 1,318,569

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

AbCellera Biologics Inc.
Consolidated Statements of Income (Loss) and Comprehensive Income (Loss)
(Expressed in thousands of U.S. dollars except share and per share data)

	Year Ended December 31,		
	2019	2020	2021
Revenue:			
Research fees	\$ 11,612	\$ 19,848	\$ 19,076
Licensing revenue	-	-	20,778
Milestone payments	-	15,000	8,000
Royalty revenue	-	198,307	327,349
Total revenue	11,612	233,155	375,203
Operating expenses:			
Royalty fees	-	27,143	45,516
Research and development ⁽¹⁾	10,113	29,393	62,062
Sales and marketing ⁽¹⁾	1,263	3,842	6,913
General and administrative ⁽¹⁾	2,749	11,910	41,848
Depreciation and amortization	1,604	4,836	14,451
Total operating expenses	15,729	77,124	170,790
Income (loss) from operations	(4,117)	156,031	204,413
Other (income) expense			
Interest income	(155)	(293)	(3,330)
Interest and other expense	209	6,511	5,225
Foreign exchange (gain) loss	(186)	300	855
Grants and incentives	(1,774)	(8,320)	(17,486)
Total other income	(1,906)	(1,802)	(14,736)
Net earnings (loss) before income tax	(2,211)	157,833	219,149
Income tax expense	-	38,915	65,685
Net earnings (loss)	\$ (2,211)	\$ 118,918	\$ 153,464
Foreign currency translation adjustment	-	-	280
Comprehensive income (loss)	\$ (2,211)	\$ 118,918	\$ 153,744
Net earnings (loss) per share attributable to common shareholders			
Basic	\$ (0.01)	\$ 0.53	\$ 0.56
Diluted	\$ (0.01)	\$ 0.45	\$ 0.48
Weighted-average common shares outstanding			
Basic	151,327,560	159,195,023	275,763,745
Diluted	151,327,560	263,129,765	318,294,236

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

¹Exclusive of depreciation and amortization

AbCellera Biologics Inc.
Consolidated Statements of Stockholders' Equity
(Expressed in thousands U.S. dollars except share data)

	Series A1 Preferred Shares		Series A2 Preferred Shares		Common Shares		Additional Paid-in Capital	Accumulated Earnings (Deficit)	Accumulated Other Comprehensive Income	Total Shareholders' Equity
	Shares	Amount	Shares	Amount	Shares	Amount				
December 31, 2018	2,105,264	\$ 7,557	-	\$ -	150,941,382	\$ 5,074	\$ 1,483	\$ (2,505)	\$ -	\$ 11,609
Shares issued under stock option plan	-	-	-	-	740,000	48	(23)	-	-	25
Issuance costs	-	(11)	-	-	-	-	-	-	-	(11)
Stock-based compensation expense	-	-	-	-	-	-	840	-	-	840
Net loss	-	-	-	-	-	-	-	(2,211)	-	(2,211)
December 31, 2019	2,105,264	\$ 7,546	-	\$ -	151,681,382	\$ 5,122	\$ 2,300	\$ (4,716)	\$ -	\$ 10,252
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
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
December 31, 2021	-	\$ -	-	\$ -	283,257,104	\$ 722,430	\$ 35,357	\$ 267,666	\$ 280	\$ 1,025,733

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, 2019	December 31, 2020	December 31, 2021
Cash flows from operating activities:			
Net earnings (loss)	\$ (2,211)	\$ 118,918	\$ 153,464
Cash flows from operating activities:			
Depreciation of property and equipment	1,604	2,317	4,403
Amortization of intangible assets	-	2,519	10,062
Amortization of operating lease right-of-use assets	243	435	2,785
Stock-based compensation	890	8,397	30,646
Deferred tax expense	-	2,098	(2,018)
Other	194	4,707	3,570
Changes in operating assets and liabilities:			
Accounts and accrued research fees receivable	(1,803)	(5,467)	(37,386)
Accrued royalties receivable	-	(197,553)	59,864
Income taxes payable	-	36,412	(13,530)
Accounts payable and accrued liabilities	150	6,601	1,400
Operating lease liabilities	2,784	(350)	(778)
Deferred revenue	(6)	21,810	8,624
Accrued royalties payable	-	27,143	(4,637)
Deferred grant revenue	-	(6,763)	30,718
Other operating assets and liabilities	849	1,466	(2,603)
Net cash provided by operating activities	2,694	22,690	244,584
Cash flows from investing activities:			
Purchases of property and equipment	(3,997)	(9,673)	(58,452)
Purchase of intangible assets	-	(5,000)	-
Repayment (issuance) of related party loans	(1,783)	1,783	-
Purchase of marketable securities	-	-	(274,710)
Proceeds from marketable securities	-	-	27,608
Receipt of grant funding	-	-	32,621
Acquisitions, net of cash acquired	-	(87,643)	(11,457)
Long-term investments and other assets	-	-	(17,534)
Investment in and loans to equity accounted investees	-	(19,247)	(30,323)
Net cash used in investing activities	(5,780)	(119,780)	(332,247)
Cash flows from financing activities:			
Repayment of long-term debt	(399)	(19,942)	(1,823)
Proceeds from long-term debt	193	15,490	872
Proceeds from convertible debentures	-	89,990	-
Payment of contingent consideration	-	-	(2,550)
Payment of liability for in-licensing agreement	-	-	(5,000)
Short-term borrowings	387	(387)	-
Issuance of common shares pursuant to exercise of stock options and other	25	1,000	4,615
Net proceeds from issuance of common shares	-	522,840	-
Proceeds from issuance of preferred shares - series A1 and A2 financing	(11)	74,662	-
Net cash provided by (used in) financing activities	195	683,653	(3,886)
Effect of exchange rate changes on cash and cash equivalents	-	-	(1,425)
Increase (decrease) in cash and cash equivalents	(2,891)	586,563	(92,974)
Cash and cash equivalents and restricted cash, beginning of year	10,444	7,553	594,116
Cash and cash equivalents and restricted cash, end of year	\$ 7,553	\$ 594,116	\$ 501,142
Supplemental disclosure of non-cash investing and financing activities:			
Property and equipment purchases in accounts payable	35	656	5,397
Right-of-use assets obtained in exchange for operating lease obligation	2,830	1,679	36,638
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 improve health with technologies that transform the way that antibody-based therapies are discovered. The Company aims to become the centralized operating system for next generation antibody discovery. The Company's full-stack, AI-powered antibody discovery platform searches and analyzes the database of natural immune systems to find antibodies that can be developed as drugs. The Company believes its technology increases the speed and the probability of success of therapeutic antibody discovery, including enabling discovery against targets that may otherwise be intractable. Rather than advancing its own clinical pipeline of drug candidates, the Company forges partnerships with drug developers of all sizes, from large cap pharmaceutical to small biotechnology companies.

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 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 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

With the global spread of the ongoing COVID-19 pandemic, the Company has implemented business continuity plans designed to address and mitigate the impact of the COVID-19 pandemic on its employees and its business. The Company has taken measures to secure its research and development activities, while work in its laboratories and facilities has been re-organized to reduce risk of COVID-19 transmission. Given the global economic impact, the overall disruption of global healthcare systems and the other risks and uncertainties associated with the pandemic, the Company's business, financial condition, and results of operations could be materially adversely affected. The Company continues to closely monitor the COVID-19 pandemic as it evolves its business continuity plans and response strategy. As of the date of these 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 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 to 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.

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.

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 2019 and 2020. In 2021, \$353.4 million and \$21.8 million of revenues originated from services in Canada and the U.S., respectively.

Of the Company's long-term assets at December 31, 2020, \$133.7 million was in the U.S. and \$58.5 million was in Canada. Of the Company's long-term assets at December 31, 2021, \$200.3 million was in the US, \$159.5 million in Canada, and \$28.9 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 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 judgement 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 (loss).

The functional currency of the Dayhu JV and Beedie JV 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 "Other 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 sheet. At December 31, 2020 we had \$593.7 million cash, \$0.4 million cash equivalents, and \$ nil restricted cash. At December 31, 2021 we had \$100.5 million cash, \$375.6 million cash equivalents and \$25.0 million restricted cash.

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 unrealized gains and losses reported as other (income) expense on the consolidated statement of income (loss) and comprehensive income (loss).

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, 2020 and 2021.

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 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. Based on our qualitative assessment, the Company determined there were no potential indicators of impairment of our indefinite-lived intangible assets.

Leases

The Company determines if an arrangement is a lease at its inception. After determination of lease arrangement, the Company identifies whether the lease arrangement consists of any non-lease component. The company account for lease components (e.g., rental payments) separately from non-lease components (e.g., common area maintenance costs). Lease component is considered in operating leases, whereas non-lease component is accounted for separately in profit and loss. Such non-lease component is accounted for ratably over a straight-line basis over the duration of lease period. Operating leases are included in operating lease right-of-use assets, accrued liabilities, and long-term operating lease liabilities in our consolidated balance sheet. Right-of-use assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. Operating lease liabilities and right-of-use assets are recognized at commencement date based on the present value of lease payments over the lease term. The Company uses its incremental borrowing rate based on the information available at the commencement date in determining the present value of lease payments if an explicit rate is not available. Rent expense, included as part of general and administrative expense, for lease payments is recognized on a straight-line basis over the lease term. The operating lease right-of-use assets also includes any rent prepayments, lease incentives upon receipt, and straight-line rent expense impacts, which represent the differences between its operating lease liabilities and right-of-use assets. The initial recognition of the lease obligation and right-of-use asset excludes leases that have a remaining lease term of 12 months or less on the date of acquisition. For the years ended December 31, 2020 and December 31, 2021, 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 events that have been included in the financial statements. Under this method, DTAs and DTLs are determined on the basis of the differences between the financial statement and tax bases of assets and liabilities by using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on DTAs and DTLs is recognized in income in the period that includes the enactment date.

A valuation allowance against deferred tax assets is recorded if, based on the weight of the available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized.

The Company recognizes uncertain tax positions in accordance with Accounting Standards Codification (“ASC”) 740 on the basis of a two-step process in which (1) the Company determines whether it is more likely than not that the tax positions will be sustained on the basis of the technical merits of the position and (2) for those tax positions that meet the more-likely-than-not recognition threshold, they are measured as the largest amount of tax benefit that is more than 50 percent likely to be realized upon ultimate settlement with the related tax authority.

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. 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.

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.

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. At October 1, 2021, 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 during the remainder of 2021.

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 (loss).

Net earnings (loss) per share

The Company follows the two-class method when computing net earnings (loss) per share as the Company has issued shares that meet the definition of participating securities. The two-class method determines net earnings (loss) 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 (loss) per share attributable to common shareholders is computed by dividing the net income (loss) attributable to common shareholders by the weighted-average number of common shares outstanding for the period. Diluted net earnings (loss) attributable to common shareholders is computed by adjusting net income (loss) attributable to common shareholders to reallocate undistributed earnings based on the potential impact of dilutive securities. Diluted net earnings (loss) per share attributable to common shareholders is computed by dividing the diluted net income (loss) 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 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. Accordingly, in periods in which the Company reports a net loss attributable to common shareholders, such losses are not allocated to such participating securities. In periods in which the Company reported a net loss attributable to common shareholders, diluted net loss per share attributable to common shareholders is the same as basic net loss per share attributable to common shareholders, since dilutive common shares are not assumed to have been issued if their effect is anti-dilutive.

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 (loss) per share

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

	Year Ended December 31,		
	2019	2020	2021
Basic earnings (loss) per share			
Net earnings (loss)	\$ (2,211)	\$ 118,918	\$ 153,464
Less: earnings allocated to Preferred Shareholders ⁽¹⁾	-	(33,817)	-
Net earnings (loss) attributable to common shareholders - basic	\$ (2,211)	\$ 85,101	\$ 153,464
Weighted-average common shares outstanding - basic	151,327,560	159,195,023	275,763,745
Net earnings (loss) per share attributable to common shareholders - basic	\$ (0.01)	\$ 0.53	\$ 0.56
Diluted earnings (loss) per share			
Net earnings (loss) attributable to common shareholders - diluted	\$ (2,211)	\$ 118,918	\$ 153,464
Weighted-average common shares outstanding - basic	151,327,560	159,195,023	275,763,745
Convertible Preferred Shares	-	63,260,090	-
Stock options and RSUs	-	40,674,652	42,530,491
Weighted-average common shares outstanding - diluted	151,327,560	263,129,765	318,294,236
Net earnings (loss) per share attributable to common shareholders - diluted	\$ (0.01)	\$ 0.45	\$ 0.48

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

The Company excluded the following potential common shares, presented based on amounts outstanding at each period end, from the computation of diluted net earnings (loss) per share attributable to common shareholders for the periods indicated because including them would have had an anti-dilutive effect:

	Year Ended December 31,		
	2019	2020	2021
Options to purchase common shares and RSUs	37,359,000	-	908,409
Convertible preferred shares	21,052,640	-	-
Total potential common shares excluded	58,411,640	-	908,409

6. Other assets

Other current assets consisted of the following:

	December 31,	
	2020	2021
Taxes receivable	\$ 489	\$ 14,282
Prepaid expenses and other	4,073	5,293
Materials and supplies	1,408	1,672
Total other current assets	\$ 5,970	\$ 21,247

Other long-term assets consisted of the following:

	December 31,	
	2020	2021
Investments - other	\$ 780	\$ 6,764
Prepaid expenses	675	2,875
Security deposit	1,035	13,595
Deferred tax asset	5,898	7,408
Total other long-term assets	\$ 8,388	\$ 30,642

7. Property and equipment, net

Property and equipment, net consisted of the following:

	December 31,	
	2020	2021
Computers	\$ 6,324	\$ 7,843
Land	-	33,044
Laboratory equipment	9,542	18,805
Leasehold improvements	3,708	23,962
Operating lease right-of-use assets	3,935	37,788
Property and equipment	23,509	121,442
Less accumulated depreciation	(5,586)	(9,826)
Property and equipment, net	\$ 17,923	\$ 111,616

At December 31, 2020 and December 31, 2021, leasehold improvements include tenant improvements in progress that have not commenced depreciation in the amount of \$nil and \$19.8 million, respectively. Depreciation expense on property and equipment for the years ended December 31, 2019, 2020 and 2021 was \$1.6 million, \$2.3 million and \$4.4 million, respectively.

8. Intangible assets and goodwill

Intangible Assets

Intangible assets consisted of the following:

	December 31, 2020		
	Gross carrying amount	Accumulated amortization	Net book value
License	\$ 35,873	\$ 2,191	\$ 33,682
Technology	41,400	329	41,071
IPR&D	40,400	-	40,400
	<u>\$ 117,673</u>	<u>\$ 2,520</u>	<u>\$ 115,153</u>

	December 31, 2021		
	Gross carrying amount	Accumulated amortization	Net book value
License	\$ 35,873	\$ 9,994	\$ 25,879
Technology	52,700	2,587	50,113
IPR&D	72,400	-	72,400
	<u>\$ 160,973</u>	<u>\$ 12,581</u>	<u>\$ 148,392</u>

There was no balance of intangible assets, or related amortization expense, for the year ended 2019. Amortization expense related to intangible assets was \$2.5 million and \$10.1 million for the years ended December 31, 2020 and 2021, respectfully, and is reflected within Depreciation and amortization expense on the consolidated statement of income (loss) and comprehensive income (loss).

At December 31, 2021, amortization expense on intangible assets is estimated to be as follows for each of the next five years:

	Amortization Expense
2022	\$ 10,425
2023	10,425
2024	5,610
2025	4,041
2026	4,041
	<u>\$ 34,542</u>

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 biotech and pharma 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 consists 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%. Amortization expense is reflected within Depreciation and amortization expense on the consolidated statement of income (loss).

Goodwill

Goodwill consisted of the following:

		Net carry amount
Balance at December 31, 2019	\$	-
Additions		31,500
Balance at December 31, 2020 ¹	\$	31,500
Additions		16,306
Balance at December 31, 2021¹	\$	47,806

¹Accumulated impairment as at December 31, 2020 and 2021 was \$nil.

9. Investments in and loans to equity accounted investees

The Company has entered into two joint ventures as part of the construction of future office and laboratory headquarters. During 2020, the Company entered into a joint venture with Dayhu (Dayhu JV). At December 31, 2021, the equity investment balance of \$19.6 million represents the contributions made since inception. In March, 2021, the Company entered into the Beedie joint venture (Beedie JV). To date the equity investment balance of \$12.7 million represents contributions made since inception into the Beedie JV. To date, the Company has recorded immaterial amounts of proportionate income or loss with respect to either venture.

In March, 2021, the Company made a commitment of up to CAD \$82.7 million (\$61.5 million) to the Dayhu JV to fund the construction at a rate referenced to an applicable Canadian bank prime rate plus 0.6%, 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 joint venture. At December 31, 2021, the outstanding related party loan balance was \$18.0 million to the joint venture.

10. Accounts payable and other liabilities

Accounts payable and other liabilities consisted of the following:

	December 31,	
	2020	2021
Accounts payable and accrued liabilities	\$ 7,320	\$ 14,924
Liability for in-licensing agreement	5,000	4,933
Operating lease liability	675	3,652
Liability classified options	4,270	-
Payroll liabilities	1,988	4,035
Current portion of deferred grant funding	942	4,473
Total accounts payable and other liabilities	\$ 20,195	\$ 32,017

11. Other long term liabilities

OrbiMed Debt Facility

In March 2020, the Company entered into a senior secured credit agreement (the “Credit Agreement”) with OrbiMed Royalty & Credit Opportunities III, LP (“OrbiMed”), which provided for term debt in an aggregate amount of \$30.0 million, which matures on March 23, 2025 (a 5 year term). As of June 30, 2020, the Company had \$15.0 million of borrowings outstanding under the Credit Agreement. Borrowings under the Credit Agreement bear interest at a rate per annum equal to an applicable margin of 6.00% plus the higher of (a) the London Inter-bank Offered Rate (LIBOR) for the applicable interest period and (b) 1.75%.

In July 2020, the outstanding loan was repaid in full, the Credit Agreement retired, and all associated security with the Credit Agreement was released. The Company incurred approximately \$3.7 million in combined cancellation fees and legal fees on early retirement of the Credit Agreement which has been classified in interest and other (income) expense on the consolidated statements of income (loss) and comprehensive income (loss). The Company was in compliance with all covenants under the Credit Agreement up to the date of retirement.

12. Shareholders’ Equity

Common Shares

As of December 31, 2020 and 2021, 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, 2020		December 31, 2021	
	Shares authorized	Shares issued and outstanding	Shares authorized	Shares issued and outstanding
Common shares	Unlimited	269,497,768	Unlimited	283,257,104

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, 2021, no cash dividends had been declared or paid by the Company.

Series A1 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 shares. Total proceeds received net of financing costs were \$7.6 million.

The Series A1 preferred shares are voting and are 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 is mandatory in the event of a Qualified Initial Public Offering with proceeds of at least \$70.0 million.

The holders of the Series A1 preferred shares are 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 are entitled to the number of votes equal to the number of common shares into which the Series A1 preferred shares could convert on the record date for determination of shareholders entitled to vote.

The holders of the Series A1 preferred shares are 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 preferred share and a dividend on each outstanding Series A1 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 Preferred Shares then outstanding are entitled to a 1x non-participating liquidation preference. Due to the various rights and privileges within the existing Series A1 Preferred and Common shareholder agreements, the Company concluded triggering a deemed liquidation event is within the control of the Company, and therefore the Series A1 Preferred Shares are classified as permanent equity.

Series A2 preferred shares

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 shares. Total proceeds received net of financing costs were \$74.7 million.

The Series A2 preferred shares are voting and are 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 is mandatory in the event of a Qualified Initial Public Offering with proceeds of at least \$70.0 million.

The holders of the Series A2 preferred shares are 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 are entitled to the number of votes equal to the number of common shares into which the Series A2 preferred shares could convert on the record date for determination of shareholders entitled to vote.

The holders of the Series A2 preferred shares are 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 A2 preferred share and a dividend on each outstanding Series 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 A2 Preferred Shares then outstanding are entitled to a 1x non-participating liquidation preference. In addition, holders of the Series A2 Preferred Shares are eligible to demand redemption of their shares in the event of certain deemed liquidation events, as defined the agreement. Due to the various rights and privileges within the existing Series A2 Preferred and Common shareholder agreements, the Company concluded triggering a deemed liquidation event is within the control of the Company, and therefore the Series A2 Preferred Shares are 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 most recently 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 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 Share option and Incentive Plan, or 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 following our IPO.

The shares we issue under the 2020 Plan will be authorized but unissued shares or shares that we reacquire. 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, 2021, the number of shares available for issuance under the 2020 Plan was 15,154,407, which includes awards granted and outstanding under the Pre-IPO Plan that are forfeited after December 10, 2020.

Restricted Share Units

During the year ended December 31, 2021, the Company granted 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 stock options granted under the Pre-IPO Plan:

	Number of Shares	Weighted- Average Exercise Price ¹	Weighted- Average Contractual Term (years)
Outstanding as of December 31, 2020	53,204,810	\$ 0.71	7.67
Granted	-	-	-
Exercised	(13,759,336)	0.29	-
Forfeited	(239,167)	0.54	-
Outstanding as of December 31, 2021	39,206,307	\$ 0.86	7.02
Options exercisable as of December 31, 2021	19,063,249	\$ 0.54	6.04

¹Pre-IPO plan options were historically granted in CAD. In 2021, all Pre-IPO employee option holders converted the currency of their option exercise price from Canadian dollars to U.S. dollars for administrative convenience.

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, 2020	1,260,840	\$ 20.00	9.95
Granted	4,063,703	18.98	-
Exercised	-	-	-
Forfeited	(40,196)	23.12	-
Outstanding as of December 31, 2021	5,284,347	\$ 19.19	9.56
Options exercisable as of December 31, 2021	302,510	\$ 20.00	8.94

The weighted average grant date fair value per share of options granted during 2019, 2020, and 2021 was \$0.26, \$3.95 and \$12.31, respectively. The intrinsic value of options exercised during 2019, 2020, and 2021 was \$nil, \$6.8 million and \$295.6 million, respectively. As of December 31, 2021, there was \$100.3 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 1.84 years.

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, 2020	-	\$ -
Granted	1,093,517	23.65
Vested and settled	-	-
Forfeited	(13,104)	26.15
Outstanding as of December 31, 2021	1,080,413	\$ 23.62

As of December 31, 2021, there was \$22.0 million of unamortized RSU expense that will be recognized over a weighted average period of 3.65 years.

Stock-based compensation expense was classified in the consolidated statements of income (loss) and comprehensive income (loss) as follows:

	Year ended December 31,		
	2019	2020	2021
Research and development expenses	\$ 606	\$ 5,365	\$ 15,663
Sales and marketing expenses	85	1,691	2,120
General and administrative expenses	199	1,341	12,863
	<u>\$ 890</u>	<u>\$ 8,397</u>	<u>\$ 30,646</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,		
	2019	2020	2021
Average risk-free interest rate ¹	1.60%	0.64%	1.23%
Expected volatility ²	100%	79%	72%
Average expected term (years) ³	6.25	6.11	6.21
Expected dividend yield ⁴	0.00%	0.00%	0.00%
Weighted average fair value of options granted ⁵	\$ 0.34	\$ 5.60	\$ 12.31

The weighted-average valuation assumptions for liability classified stock options outstanding at December 31, 2021 are as follows:

	Year ended December 31,		
	2019	2020	2021
Average risk-free interest rate ¹	-	0.46%	-
Expected volatility ²	-	75%	-
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.

At December 31, 2020, there were 1,012,000 liability classified options outstanding, of which \$4.3 million was included in other liabilities. At December 31, 2021 there were no liability classified options outstanding.

13. Revenue

The disaggregated revenue categories are presented on the face of the statements of income (loss) and comprehensive income (loss).

Deferred Revenue

Deferred revenue represents payments received for performance obligations not yet satisfied and are presented as current or long-term in the accompanying 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,	
	2020	2021
Deferred revenue	(26,321)	(34,954)

During the years ended December 31, 2019, 2020 and 2021, the Company recognized \$2.1 million, \$3.0 million and \$4.7 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. The Company recognized \$3.2 million of revenue in the year ended December 31, 2021. The Company expects to recognize approximately \$4.9 million in revenue in the next 12 months related to these payments under the agreement.

Of the remaining deferred revenue balance of \$14.5 million, which is related to various other agreements, approximately \$2.7 million is expected to be recognized in revenue in the next 12 months.

License Revenue

For the years ended December 31, 2020 and December 31, 2021, the Company recognized \$nil and \$20.8 million, respectively, from license revenue relating to license of the Trianni platform.

14. 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 (\$125.6 million) which is intended to support research and development efforts related to the discovery of antibodies for use drugs to treat COVID-19, and to build technology and manufacturing infrastructure for antibody therapies against future pandemic threats.

Since inception, the Company incurred \$59.5 million in expenditures in respect of the SIF grant funding. \$37.9 million relates to spending under phase 1 of the agreement and such amounts are not repayable, and \$21.6 million was claimed in respect of phase 2 of the funding commitment. Repayment on phase 2 of the funding is conditional on achieving certain revenue thresholds over a specified period of time as prescribed in the agreement. 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, 2021, no amounts have been accrued related to the repayment terms as the conditions are estimated to be non-probable at December 31, 2021.

For the year ended December 31, 2021, the Company incurred \$47.1 million in expenditures in respect of the SIF grant funding. Of the total spend during the year, \$13.8 million relates to research and development expenditures and is reflected in other income on the consolidated statements of income (loss) and comprehensive income (loss). The remaining \$33.3 million is attributable to capital asset expenditures and is amortized into other income over the average asset life of five years. Unamortized amounts are included in other liabilities and other long-term liabilities on the consolidated balance sheets.

The balance of SIF grant funding included in the balance of accounts and accrued receivable is \$12.9 million and \$14.8 million at December 31, 2020 and 2021, respectively.

15. Income taxes

a. For financial reporting purposes, income before income taxes includes the following components:

	December 31,		
	2019	2020	2021
Canadian	\$ (2,015)	\$ 163,077	\$ 211,471
Foreign	(196)	(5,244)	7,678
Total	\$ (2,211)	\$ 157,833	\$ 219,149

The expense (benefit) for income taxes consists of:

	December 31,		
	2019	2020	2021
Current			
Canadian	\$ -	\$ 36,931	\$ 60,498
Foreign	-	(114)	7,248
	-	36,817	67,746
Deferred and other:			
Canadian	-	2,461	(1,342)
Foreign	-	(363)	(719)
	-	2,098	(2,061)
Income tax expense	\$ -	\$ 38,915	\$ 65,685

	December 31,		
	2019	2020	2021
Current tax expense	\$ -	\$ 36,817	\$ 67,746
Deferred tax expense (benefit)	-	2,098	(2,061)
Total tax expense	\$ -	\$ 38,915	\$ 65,685

b. The consolidated effective income tax rate differs from the expected Canadian statutory tax rate of 27% (2019, 2020, 2021: 27%). Reconciliation between the expected tax rate on income from operations and the statutory tax rate was as follows:

	December 31,		
	2019	2020	2021
Net earnings (loss) before income taxes	\$ (2,211)	\$ 157,833	\$ 219,149
Combined statutory tax rate	27%	27%	27%
Expected income tax expense (recovery) at statutory rates	(597)	42,615	59,170
Stock-based compensation	254	1,934	7,007
Change in valuation allowance	854	(680)	5,007
Change for under accrual	49	36	1
Change due to SR&ED	(510)	(1,698)	(4,809)
Foreign exchange	(9)	(4,048)	47
Other	(41)	756	(738)
Income tax expense	\$ -	\$ 38,915	\$ 65,685

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,	
	2020	2021
Deferred tax assets:		
Long-term debt	\$ 2,590	\$ 6,293
Financing fee	6,786	6,575
Operating lease liability	1,182	5,299
Deferred revenue	-	4,768
Net operating losses carried forward	408	4,996
Research and development deductions and credits	-	-
Other	949	3,019
	<u>11,915</u>	<u>30,950</u>
Deferred tax liabilities:		
Property and equipment	\$ (707)	\$ (3,256)
Land	-	(2,135)
Intangibles	(26,300)	(36,866)
Operating lease right-of-use assets	(1,084)	(4,732)
Government funding receivable	(3,279)	(3,029)
Other	(41)	(1,661)
	<u>(31,411)</u>	<u>(51,679)</u>
	(19,496)	(20,729)
Less: valuation allowance	(767)	(9,233)
Net deferred tax asset (liability)	(20,263)	(29,962)
Deferred tax asset	11,148	21,717
Deferred tax liability	(31,411)	(51,679)
Net deferred tax assets (liability)	\$ (20,263)	\$ (29,962)

Amounts recognized in the Company's consolidated balance sheet as of December 31, 2020 and 2021 comprise of \$5.9 and \$7.4 million, respectively, included in other long-term assets and \$26.2 and \$37.4 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, 2021 in the United States. 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 \$0.8 million and \$9.2 million as of December 31, 2020 and 2021, 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. The Company does not have any Canadian non-capital loss carried forward and has utilized all investment tax credits from the prior taxation years in 2020. 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, \$1.5 million and \$18.2 million as of December 31, 2019, 2020 and 2021 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	7,284
Total amount	\$ 12,834

e. As of December 31, 2021, 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, 2019, 2020 and 2021 were as follows:

	2019	2020	2021
January 1 balance	\$ 448	\$ 387	\$ 109
Gross increase - tax position in prior period	-	-	-
Gross increase - tax position in current period	387	109	-
Gross decrease - tax position in current period	(448)	(387)	(109)
December 31 balance	<u>\$ 387</u>	<u>\$ 109</u>	<u>\$ -</u>

Included in the balance of unrecognized tax benefits at December 31, 2019, 2020 and 2021 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 and the United States. 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 2017 to 2021 remain subject to Canadian income tax examinations. Tax years ranging from 2017 to 2021 remain subject to U.S. 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.

16. Leases

The Company leases office and laboratory facilities in Vancouver, Canada and Sydney, Australia, and Cambridge, United Kingdom and Boston, USA.

The majority of the Company's operating leases have a fixed term with a remaining life between one month and 20 years, with renewal options included in the contracts. 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. At the inception of a lease, the Company determines whether it is reasonably certain to exercise a renewal option and includes the options in the determination of the lease term and the lease liability where it is reasonably certain to exercise the option. If the Company's intention is to exercise an option subsequent to the commencement of the lease, the Company will re-assess the lease term.

The balance sheet classification of the Company's lease liabilities was as follows:

	December 31, 2020	December 31, 2021
Operating lease liabilities:		
Current portion	\$ 675	\$ 3,652
Long-term portion	3,715	36,413
Total operating lease liabilities	<u>\$ 4,390</u>	<u>\$ 40,065</u>

At December 31, 2021, the future minimum lease payments of the Company's operating lease liabilities were as follows:

	Amount
2022	\$ 4,623
2023	4,796
2024	5,070
2025	4,980
2026	4,694
Thereafter	22,133

As of December 31, 2021, the weighted-average remaining lease term is 9.3 years and the discount rate used to determine the operating lease liabilities was approximately 3.3%.

The Company incurred total operating lease expenses, including fixed lease payments and non-lease components, of \$0.6 million, \$1.1 million and \$4.1 million during the years ended December 31, 2019, 2020 and 2021, respectively.

17. 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 to related parties, 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, and related party loans 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 21. There were no changes to the valuation technique and inputs used in these fair value measurements since acquisition.

The following table presents the changes in fair value of the liability for contingent consideration:

December 31, 2021 (in thousands)	Liability at beginning of the period	Additions	Increase (decrease) in fair value of liability for contingent consideration	Repayment of contingent consideration	Liability at end of the year
Trianni	\$ 22,559	\$ -	\$ 2,925	\$ (2,550)	\$ 22,934
TetraGenetics	\$ -	\$ 35,100	\$ 786	\$ -	\$ 35,886

Contingent consideration balance as of December 31, 2020 was \$22.6 million with immaterial fair value changes for the year ended December 31, 2020.

Marketable Securities

In the third quarter of 2021, the Company purchased high credit quality marketable securities as part of the Company's cash management strategy, as these securities are viewed as being available to support the Company's current 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
	<u>\$ 10,100</u>	<u>\$ 236,735</u>	<u>\$ -</u>	<u>\$ 246,835</u>

18. 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 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. During 2020, the Company expensed approximately \$27.1 million related to such obligations, of which \$27.1

million is included in current liabilities. For the year ended December 31, 2021, the Company expensed \$45.5 million related to such obligations, of which \$22.5 million is included in current liabilities. There were no such payments prior to 2020.

Excluding the lease arrangements as accounted for in Note 16 – Leases, the Company has the following additional commitments in respect of several leased facilities where the lease commencement dates are subsequent to December 31, 2021:

	Amount
2022	\$ 314
2023	5,362
2024	5,072
2025	12,268
2026	12,270
Thereafter	222,425

19. 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, restricted cash, and accounts and accrued receivable. Cash and cash equivalents and restricted cash are invested with the primary objective being the preservation of capital and maintenance of liquidity. The guidelines on the quality of financial instruments that the Company believes minimizes the exposure to concentration of credit risk. The Company 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, 2020 and 2021, accounts and accrued royalty receivable amounts were due from seven and thirteen customers, respectively.

For the year ended December 31, 2020, we recognized milestone and royalty revenue totaling \$213.3 million, exclusively from our partnership with Lilly, of which \$198.3 million was receivable at December 31, 2020. 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 a receivable at December 31, 2021.

Interest Rate Risk

The Company's 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, 2021, the Company had cash and cash equivalents of \$476.1 million, restricted cash of \$25.0 million, and marketable securities of \$246.8 million, a majority of which was maintained in high credit quality and liquid held for trading marketable securities, bank accounts and term deposits. The Company's interest rate risk is affected by changes in the general level of interest rates, particularly because the majority the Company's investments are short-term in nature. Due to record low interest rates and 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 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. 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 trading or 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 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

The Company holds cash primarily in U.S. and Canadian dollars. The Company had Canadian denominated cash and cash equivalents of CAD \$0.9 million and CAD \$8.2 million at December 31, 2020 and 2021, 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 (loss) and shareholders' equity in the Company's consolidated financial statements.

Counterparty Risk

For the year ended December 31, 2020, three of our partners accounted for 35%, 25% and 14% 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, 2021, four of our partners accounted for 29%, 17%, 11%, and 10% of our research fee revenue. Our partnership with Lilly constituted one of the partnerships that generated 10% or more of our consolidated revenues.

20. Related party transactions

Other than the related party loan between the Company and the Dayhu JV disclosed in Note 9, the Company had the following transactions with related parties:

- a) Chief Executive Officer ("CEO") of the Company was the recipient of a personal loan of CAD \$2.0 million (\$1.5 million) from the Company during the year ended December 31, 2019 for the purposes of financing the purchase of a residential property. The loan is interest bearing at an annual interest rate of 3.54%. The loan was repaid in full in 2020.
- b) The General Counsel of the Company was the recipient of a loan of \$0.2 million during the year ended December 31, 2019. The loan is interest bearing at an annual interest rate of 3.95% and has a term to maturity of 3.33 years. The loan was repaid in full in 2020.

21. Acquisitions

OrthoMab

In June 2020, the Company acquired rights to the OrthoMab bispecific platform from Dualogics, LLC for \$4.0 million. The acquisition represents a group of similar assets sourced from the agreement. All the fair value associated with the agreement is concentrated in a group of similar assets and is not considered a business in accordance with ASC 805-10-55-5A. The Company does not reasonably expect the platform acquired will be used to receive economic benefit in an alternative manner, nor does the acquisition agreement provide for any future economic benefit to the Company from the rights retained by Dualogics, LLC. The Company therefore accounted for the right to the Dualogics, LLC platform acquired under the agreement as an acquisition of an asset and recognized \$4.0 million as research and development expenses under ASC 730.

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.

The acquisition date fair value of the final purchase price consideration transferred consisted of the following:

Estimated Purchase Price Consideration

	Estimated Fair Value	
Closing Payment	\$	97,432 (i)
Earn-out payment		21,782 (ii)
	\$	<u>119,214</u>

- (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 statement of income (loss) and comprehensive income (loss) 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 (loss) for the period in the Consolidated Statement 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,	
	2019	2020
Sales	\$ 15,770	\$ 239,410
Net income (loss)	(10,878)	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 preliminary purchase price consideration.

The acquisition date fair value of the preliminary purchase price consideration consisted of the following:

	Estimated Fair Value	
Closing consideration	\$ 12,926	(i)
Contingent consideration	35,100	(ii)
	<u>\$ 48,026</u>	

- 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.

As of December 31, 2021, the Company had not yet fully completed the analysis to assign fair values to all assets acquired and liabilities assumed, and therefore the purchase price allocation is preliminary. The remaining items include the finalization of working capital adjustments, income taxes, and resulting impacts to goodwill. The preliminary purchase price allocation will be subject to further refinement as the Company continues to refine its estimates and assumptions based on information available at the acquisition date. These refinements may result in material changes to the estimated fair value of assets acquired and liabilities assumed. The purchase price allocation adjustments can be made throughout the end of the Company's measurement period, which is not to exceed one year from the acquisition date. Total transaction costs expensed in the statement of income (loss) and comprehensive income (loss) were immaterial. During the three-months ended December 31, 2021, the Company has refined immaterial adjustments to the preliminary allocation of the purchase price for finalization of intangible assets, working capital adjustments, income taxes, and the resulting impact to goodwill.

The following table summarizes the preliminary purchase price allocation for the TetraGenetics transaction as of September 10, 2021:

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>62,838</u>	
Other liabilities	2,984	
Deferred tax liability	11,830	
Total liabilities	<u>14,814</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>\$ 43,300</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.

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the registration statement (No. 333-251341) on Form S-8 of our reports dated February 25, 2022, with respect to the consolidated financial statements of AbCellera Biologics Inc. and the effectiveness of internal control over financial reporting

/s/ KPMG LLP

Chartered Professional Accountants

Vancouver, Canada
February 25, 2022

**CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Carl L. G. Hansen, certify that:

1. I have reviewed this annual report of AbCellera Biologics Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) (Paragraph omitted pursuant to SEC Release Nos. 33-8238/34-47986 and 33-8392/34-49313);
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 25, 2022

By: /s/ Carl L. G. Hansen
Carl L. G. Hansen, Ph.D.
Chief Executive Officer and Director
(Principal Executive Officer)

**CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Andrew Booth, certify that:

1. I have reviewed this annual report of AbCellera Biologics Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) (Paragraph omitted pursuant to SEC Release Nos. 33-8238/34-47986 and 33-8392/34-49313);
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 25, 2022

By: /s/ Andrew Booth
Andrew Booth
Chief Financial Officer
(Principal Financial Officer)

Carl L. G. Hansen
Chief Executive Officer and Director
(Principal Executive Officer)

