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, 2020

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	**Not Applicable**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
2215 Yukon Street	**V5Y 0A1**
Vancouver, BC	
(Address of principal executive offices)	

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 registrant's common shares were not publicly traded as of the last business day of the registrant's most recently completed second fiscal quarter. The registrant's common shares began trading on the Nasdaq Global Select Market on December 11, 2020.

The number of shares of Registrant's Common Stock outstanding as of March 23, 2021 was 269,497,768.

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, 2020 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 drug-discovery platform;
- companies and technologies in our industry that we compete with;
- our ability to manage and grow our business by expanding our sales to existing partners or introducing our drug-discovery platform to new partners;
- our ability to provide our partners with a full solution from target to IND submission;
- 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, including with respect to our intellectual property litigation with Berkeley Lights, or avoid or defend against claims of 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;
- our expectations regarding the period during which we qualify as an emerging growth company under the JOBS Act;
- business disruptions affecting our operations and the development of our platform due to the global COVID-19 pandemic;
- our ability to remediate our material weaknesses;
- our expectations regarding our PFIC status for our taxable year ending December 31, 2020 or any future taxable year;
- our expectations regarding the Trianni acquisition and our ability to realize the intended benefits of such transaction;
- our expectations regarding the use of proceeds from our initial public offering; and
- our expectations about market trends.
- 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 the forward-looking statements we make. 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 the forward-looking statements that we make. Moreover, we operate in a competitive and rapidly changing environment. 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 be materially different 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.

In addition, statements that "we believe" and similar statements reflect our 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 of the 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

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.
- 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.
- 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, 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 success depends on our ability to protect our intellectual property.
- In connection with the audit of our financial statements as of and for the years ended December 31, 2019 a material weakness in our internal control over financial reporting was identified and we may identify additional material weaknesses in the future.

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 drug 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. Rather than advancing our own clinical pipeline of drug candidates, 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, 2020, we had 103 discovery programs that are either completed, in progress or under contract with 27 partners. As a recent example, in a collaboration with Eli Lilly and Company, or Lilly, we applied our technology stack to co-develop bamlanivimab, also known as LY-CoV555, 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.

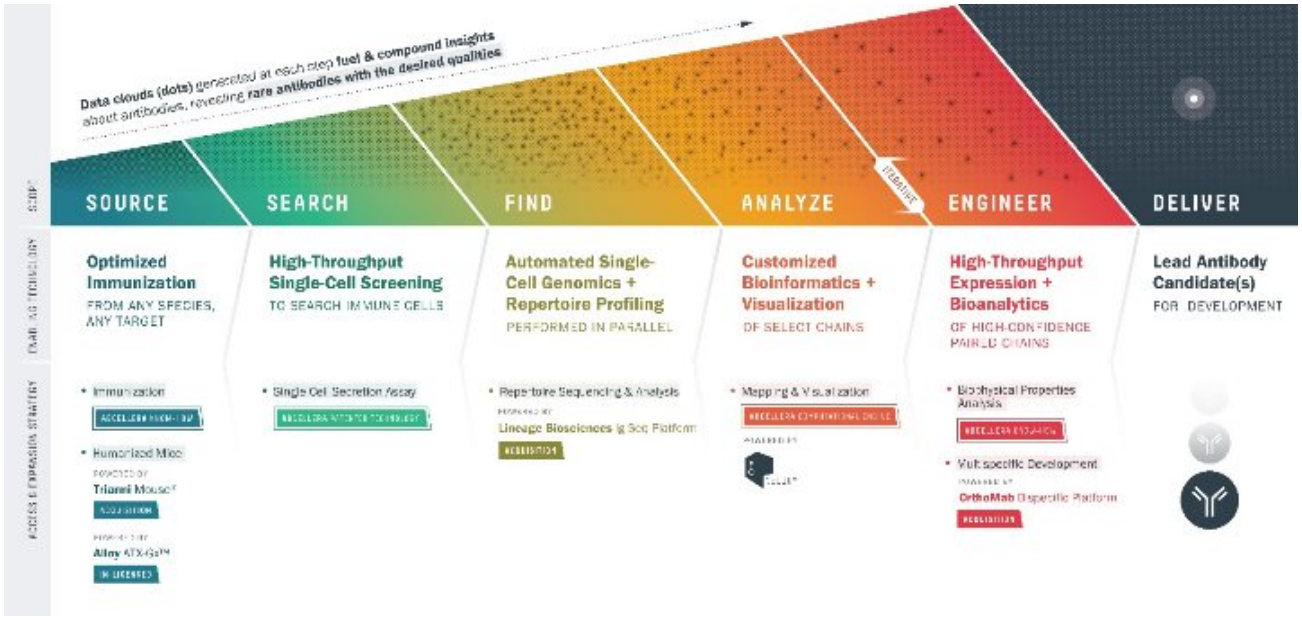
Antibodies, which are proteins generated by natural immune systems to fight infection and disease, are amongst the fastest growing class of drugs and are used across multiple therapeutic areas, including oncology, inflammation, neurodegeneration and many others. In 2019, antibody-based therapeutics accounted 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 eight 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 another antibody called etesevimab in more than 5,000 patients across multiple clinical trials for the treatment and prevention of mild-to-moderate COVID-19. Bamlanivimab is authorized in more than 15 countries, including the United States, Canada, Germany, France, Italy and Israel, and has been used to treat approximately 360,000 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) is ongoing. A Phase 3 study of bamlanivimab for the prevention of COVID-19 in residents and staff at long-term care facilities (BLAZE-2, NCT04497987) is also ongoing. 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.

Key findings from the clinical trials show the following, according to the press releases issued by Lilly on the indicated dates:

- September 16, 2020: Bamlanivimab reduced hospitalizations by 72% in high-risk patients recently diagnosed with mild-to-moderate COVID-19 (BLAZE-1 interim data).
- October 26, 2020: Bamlanivimab is unlikely to help hospitalized COVID-19 patients recover from advanced stages of their disease, and no additional patients were enrolled for treatment with bamlanivimab in the ACTIV-3 study.
- January 21, 2021: Bamlanivimab may prevent COVID-19 in nursing homes by reducing the risk of contracting COVID-19 by up to 80% in people exposed to the virus (BLAZE-2 Phase 3 data).
- January 26, 2021: Bamlanivimab together with etesevimab reduced hospitalizations and death by 70% in high-risk patients recently diagnosed with mild-to-moderate COVID-19 (BLAZE-1 Phase 3 data).
- March 10, 2021: Bamlanivimab together with etesevimab reduced hospitalizations and death by 87% in high-risk patients recently diagnosed with mild-to-moderate COVID-19 (BLAZE-1 Phase 3 data).

Bamlanivimab received Emergency Use Authorization from the U.S. Food and Drug Administration, or FDA, on November 9, 2020. 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. Bamlanivimab together with etesevimab received EUA from the FDA for the treatment of mild-to-moderate COVID-19 in high-risk patients on February 9, 2021. 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.

Lilly has announced the following details regarding the purchase of bamlanivimab alone and together with etesevimab on the indicated dates:

- October 28, 2020: A purchase agreement with the U.S. government to supply 300,000 vials of bamlanivimab for $375.0 million.
- October 29, 2020: A fixed price contract for procurement of bamlanivimab in the amount of $312.5 million with the U.S. Army Contracting Command.
- November 24, 2020: An agreement with the Canadian government to supply 26,000 doses of bamlanivimab for the three-month period between December 2020 and February 2021, for $32.5 million.
- December 2, 2020: Purchase of an additional 650,000 doses of bamlanivimab by the U.S. government for $812.5 million.
- February 26, 2021: A purchase agreement with the U.S. government to supply 100,000 doses of bamlanivimab and etesevimab for $210 million through to March 31, 2021. The U.S. government will have the option to purchase up to an additional 1,100,000 doses through November 25, 2021, under the same terms as the base agreement and subject to agreement from Lilly, product availability, and the medical need in the U.S.

- February 26, 2021: Lilly reports that the aggregate number of doses of bamlanivimab as a single agent therapy that has been committed for purchase by the U.S. government is 1,450,000. Lilly confirms that more than 1 million doses have been delivered, and agrees to deliver 450,000 additional doses by March 31, 2021.

Under our partnership with Lilly, we are entitled to receive a specified percentage of proceeds that Lilly receives from these sales. In 2020 we recognized a total of $198.3 million 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 drug discovery.

Our business has historically been both high growth and capital efficient. Revenues have grown at an approximately 200% CAGR since 2014. 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. While the vast majority of our historical revenue reflects upfront payments from research programs, we believe the long-term value of our business will be driven by downstream milestone and royalty payments. For the years ended December 31, 2019 and 2020, our revenue was $11.6 million and $233.2 million, respectively. For the years ended December 31, 2019 and 2020 our net income (loss) was $(2.2) million and $118.4 million, respectively. As of December 31, 2020, we have entered into agreements for 103 partnered discovery programs, 80 of which include the potential for milestone and royalty payments from our partners. As of December 31, 2020, we had 206 full-time employees in Canada, the United States and Australia, which was comprised of approximately 51% scientists, 26% business professionals, and 23% engineers and data scientists.

Impact of COVID-19

At the onset of the pandemic in March 2020, the Company took proactive measures to protect the health and safety of our employees, business partners, vendors, and contractors. Some of the actions taken include the following:

- We implemented a comprehensive COVID-19 policy and communication platform and provided real-time updates company-wide relying on directives from local health authorities. As the situation progressed, we adapted accordingly, including adjusting all administrative staff to work from home.
- We implemented protocols for employees necessary to carryout Company functions in the office and laboratory facilities including physical distancing, personal and protective equipment, signage, erecting barriers between desks and lab benches, and implementing space restrictions for different areas of the facilities.
- Consistent with national and local health authorities, we restricted business travel and implemented procedures to control and monitor all office and facility access.
- We have not been required to stop laboratory and 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:

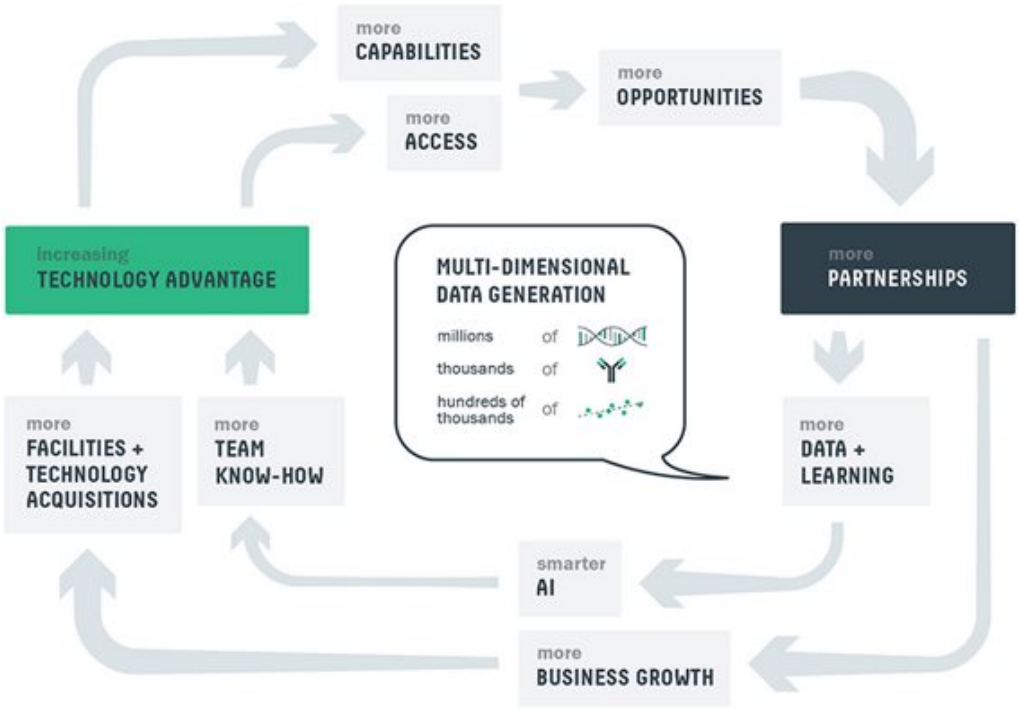
- ***Create more value with our existing partnerships.*** We have entered into contracts for more than 100 antibody discovery programs. Our partners include large cap pharmaceutical companies, biotechnology companies of all sizes and non-profit and government organizations. Where appropriate, we seek to expand our single-program partnerships to multi-year, multi-target agreements. As of December 31, 2020, over 80% of partnerships with royalty-bearing 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. Over the past year we have grown our workforce by 93%, moving from 107 to 206 full-time employees as of December 31, 2020. Over this period, we entered into leases to expand our facilities from 21,000 square feet to 80,000 square feet, including a new 48,000 square feet research headquarters that is expected to open in the fourth quarter of 2021, are building a new GMP facility and are planning for a further facility expansion of approximately 200,000 square feet that will support cell line development, process development and GMP manufacturing of antibody therapeutics.
- ***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 drug 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 drug 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. Because we focus on improving the process of drug discovery rather than developing an internal pipeline, we will continue to make critical investments in technology that benefit the entire industry. As of December 31, 2020, we have entered into 103 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. In 2020, we were named to Fierce Biotech's Fierce 15 list and received three awards from Fast Company, including Innovative Team of the Year.
- ***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 blue chip 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, 2020, we employed 206 people, over two-thirds of whom are scientists, engineers, and data scientists.

Industry Background

Nature's database of antibodies

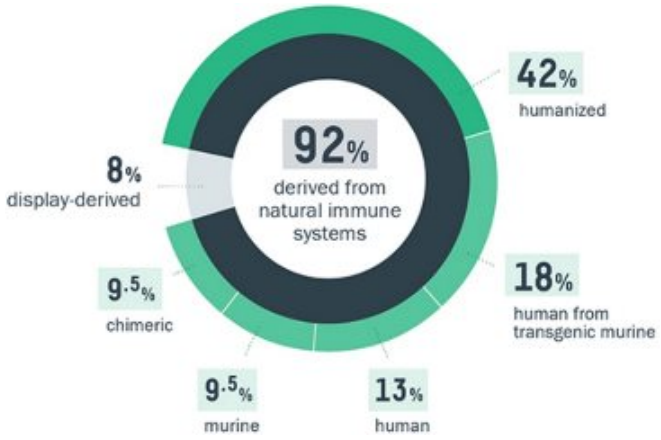
Antibodies are the body's solution for fighting infection and disease. Antibodies are Y-shaped proteins, made by the immune system, that circulate in the blood. Their function is to specifically recognize foreign targets (viruses, bacteria, proteins or cancer cells), bind to them and then eliminate them. 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 drug 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.

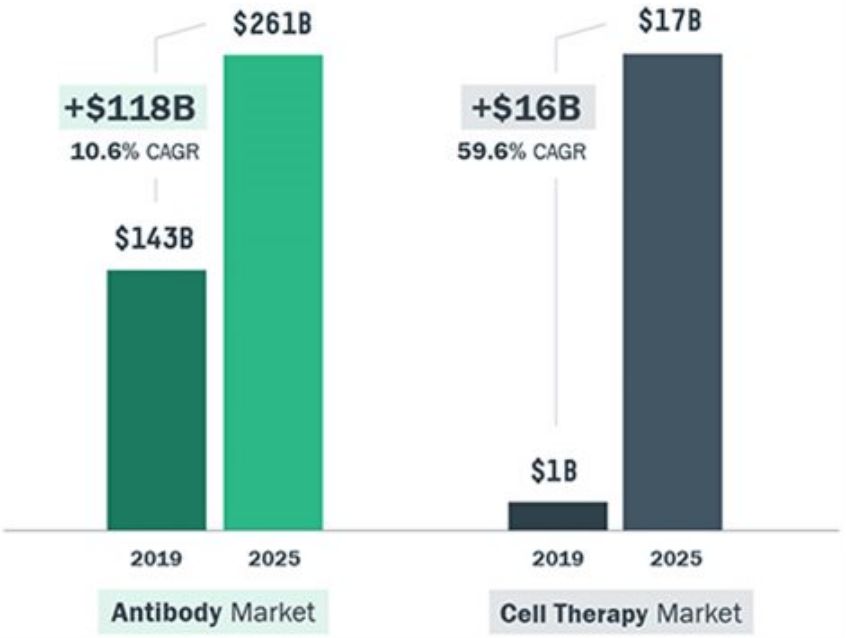
The probability for a biologic drug discovery program to succeed in reaching Phase 1 clinical trials has been estimated at approximately 37%. Monoclonal antibody and monoclonal conjugate antibody drugs have had an approximately 18.5% likelihood of receiving market authorization from the start of Phase 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, 2020, we had 103 discovery programs that are either completed, in progress or under contract with 27 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:
- ***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.
- ***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:
- ***High entry barrier***. The time and capital-intensive nature of building internal drug discovery capabilities limits the number of firms that can effectively participate in drug development.
- ***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.

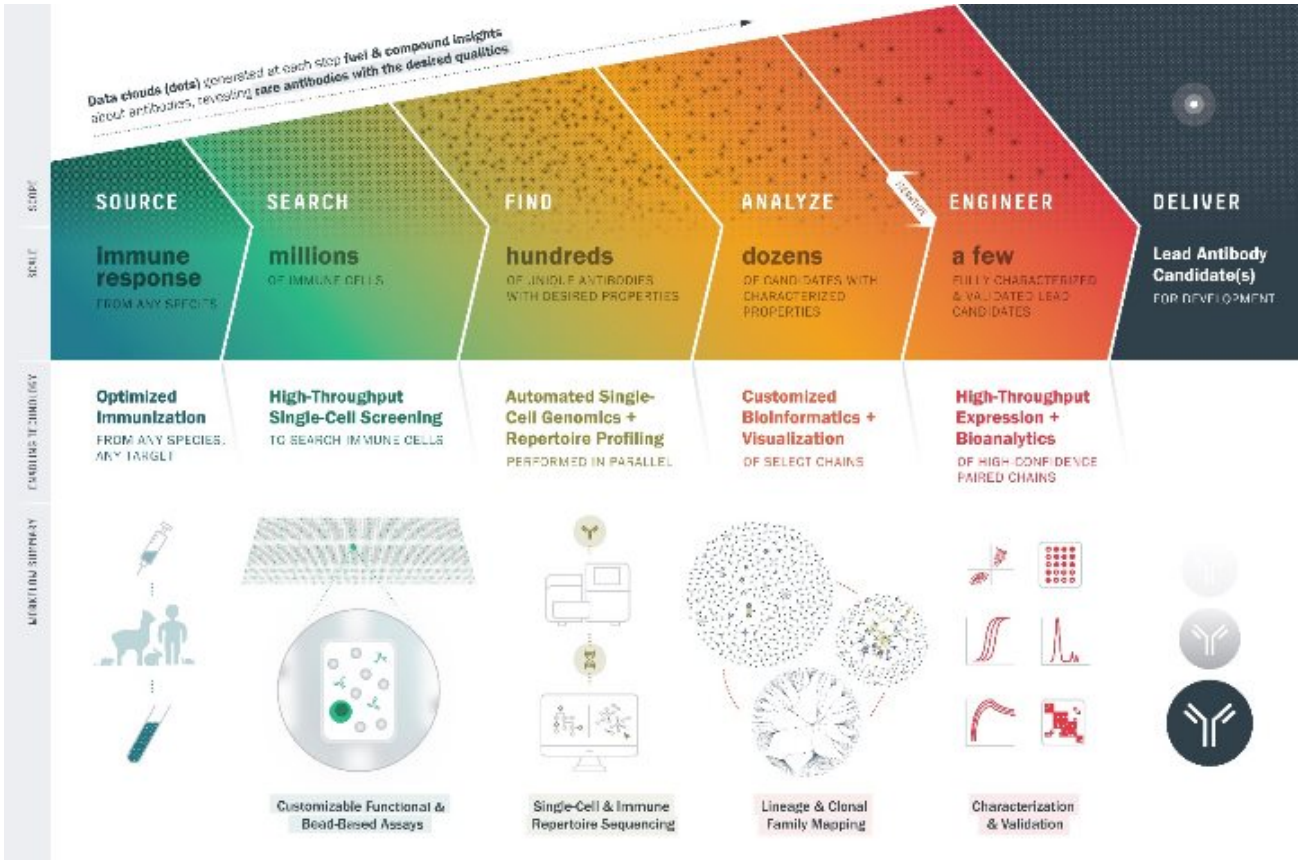
Our Platform

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 drug 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.

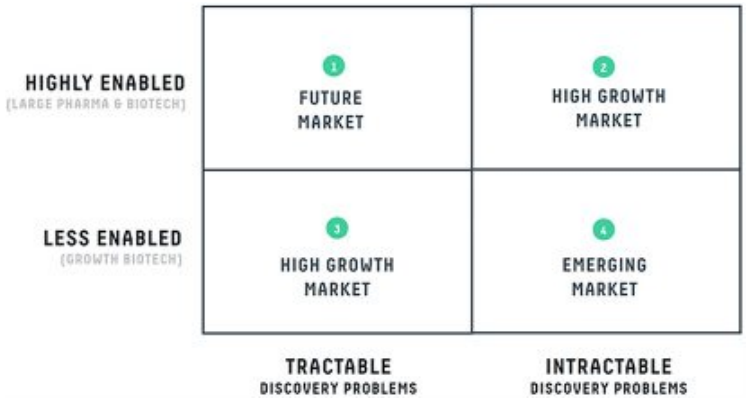
Our Partnership Business

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, and downstream payments in the form of clinical and commercial milestones, and royalties on net sales.

As of December 31, 2020, we had 103 discovery programs that were either completed, in progress or under contract, including 80 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 from 2018 to 2020*

Partner	# of Targets & Duration	Therapeutic Indication or Modality	Date Announced
Abdera Bioinnovations	9 targets, multi-year	Oncology	January 24, 2021
Invetx	Multi-target, multi-year	Animal Health	November 19, 2020
Kodiak Sciences	Single target	Ophthalmology	October 29, 2020
IGM Biosciences	Multi-target, multi-year	Oncology and immunology	September 24, 2020
Lilly	9 targets, multi-year	COVID-19 program Additional indications	May 22, 2020
Regeneron	Multi-target, multi-year	Multiple undisclosed	March 16, 2020 **
Invetx	Multi-target, multi-year	Animal health	February 23, 2020
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	Single target	Cell therapy (CAR-T)	November 29, 2018
Undisclosed	Multi-target, multi-year	Cell therapy	Undisclosed
Undisclosed	Single target	Bispecific	Undisclosed

* All agreements include upfront payments and potential downstream milestone payments and commercial royalties.

** Effective date of agreement

Table 3: Summary of Partnership Agreements with Non-Profit & Government Organizations from 2018 to 2020

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

Non-Profit & Government	Summary	Therapeutic Indication or Modality	Date Announced
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, we have received $15.0 million 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. As of December 31, 2020, we have recorded $198.3 million for royalty payments related to sales of bamlanivimab.

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 drug 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%.

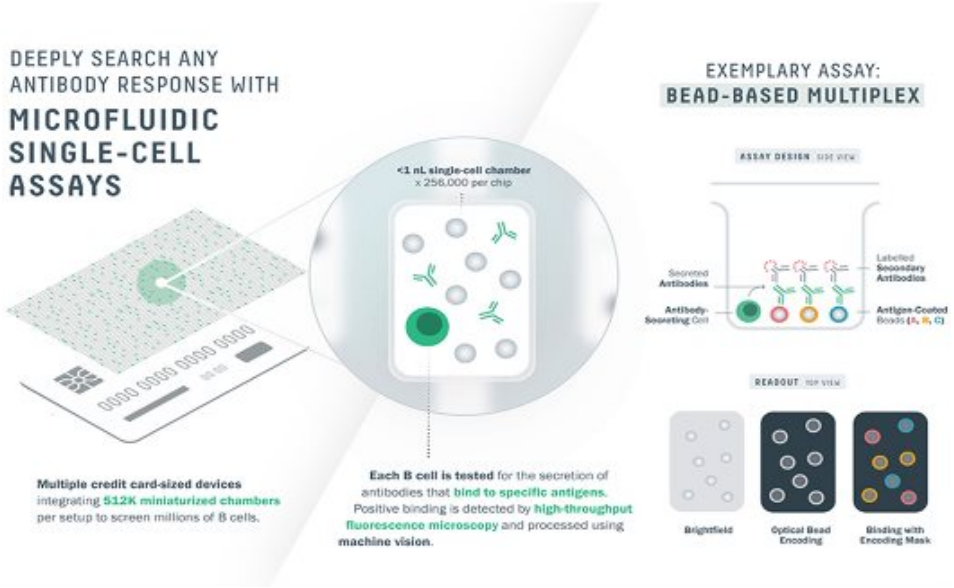
Our Approach to Search Natural Antibodies. To solve these challenges, our founders pioneered and developed a nano-liter volume single-cell microfluidic screening technology that provides the sensitivity, resolution and scalability needed to perform a deep search of any antibody response.

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.

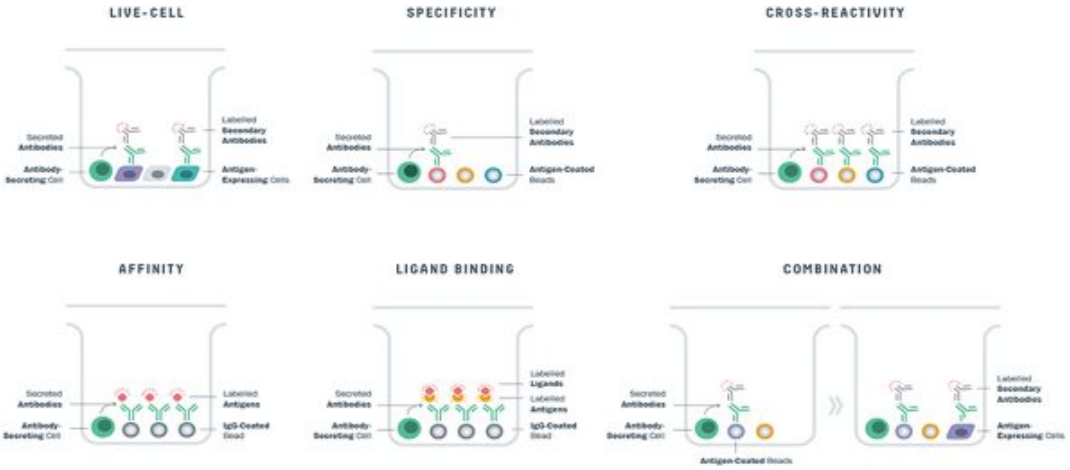
Our microfluidic devices are operated using proprietary high-throughput imaging instruments that incorporate custom robotics, fluid control, software systems and AI-based image analysis. Each instrument can run two microfluidic chips in parallel for a total of 512,000 chambers per instrument run. In 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.

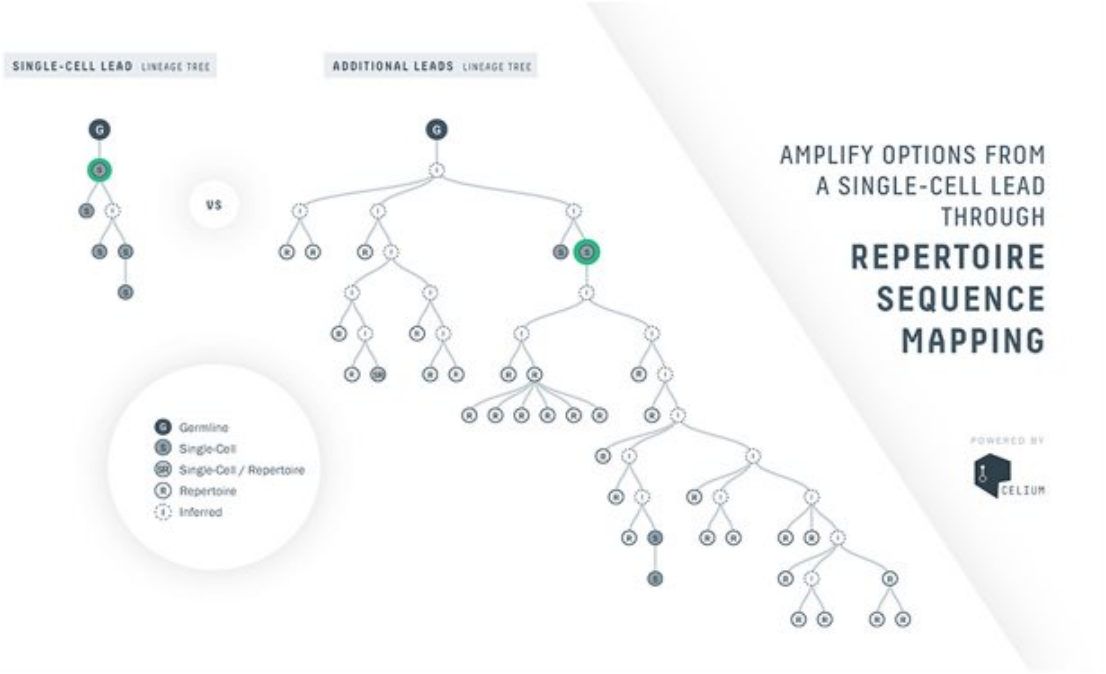
Automated single-cell sequencing. Our microfluidic single-cell screening technology allows us to evaluate the binding and/or functional properties of antibodies made by millions of single cells at the first step of analysis. For each screening run on each instrument, up to 768 individual cells that exhibit 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.

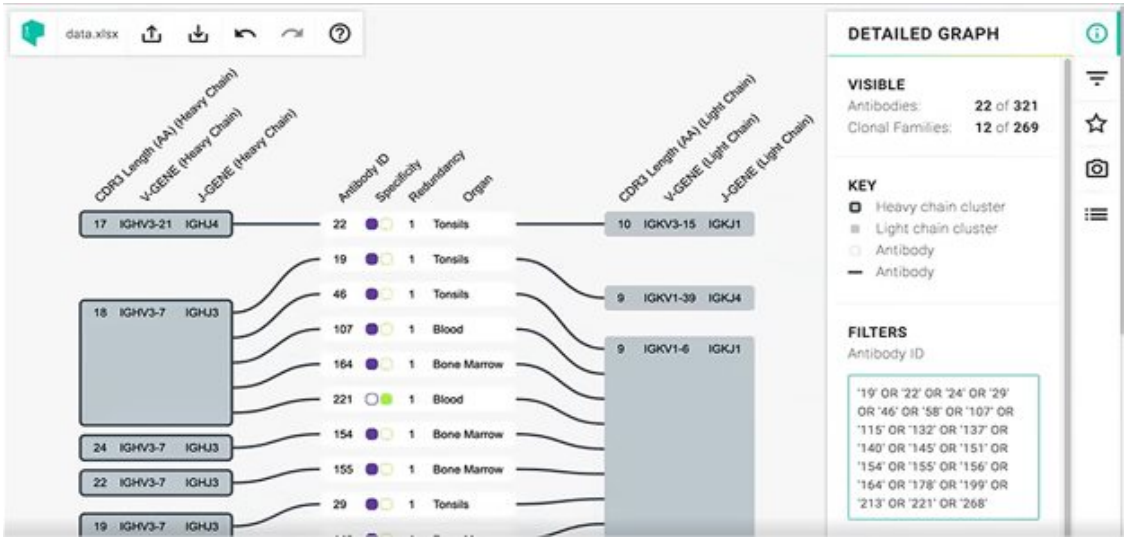
Our Approach to Analyzing Complex Antibody Data. To address these challenges, we have built a computational engine called Celium that integrates data collection, standardization and storage with a suite of computational tools and an interactive visualization interface that allows scientists to quickly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

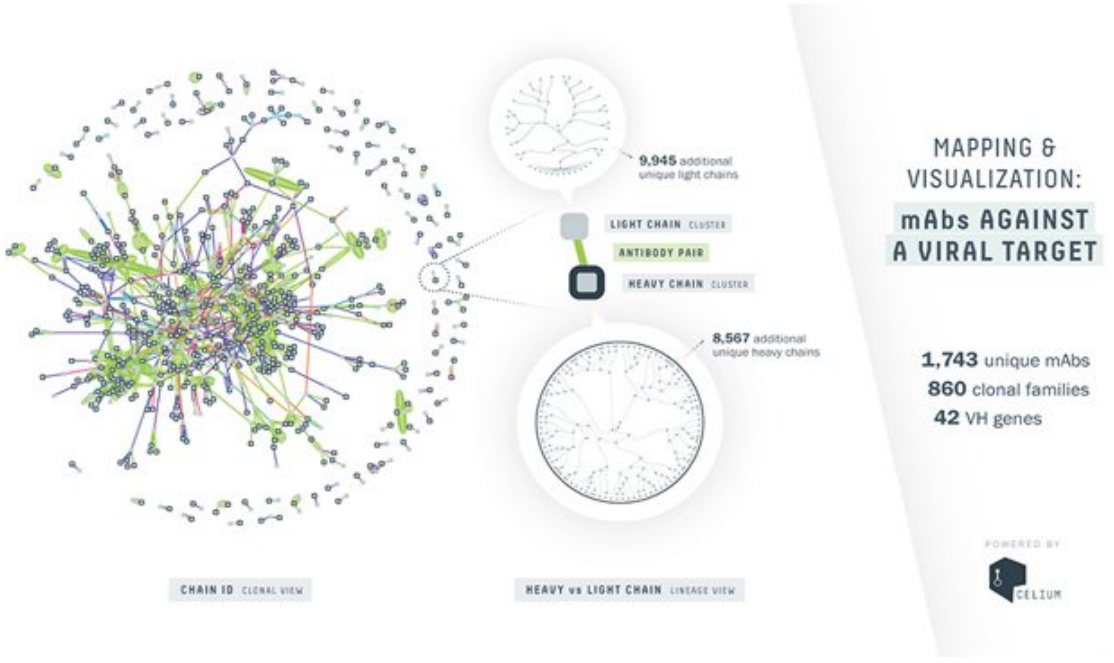
We believe the value of data and computation is greatly amplified by intuitive tools that enable scientists to interactively explore and query complex data sets. Celium achieves this with a dynamic visualization interface that presents each unique antibody as a connection between two unique DNA sequences 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. 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

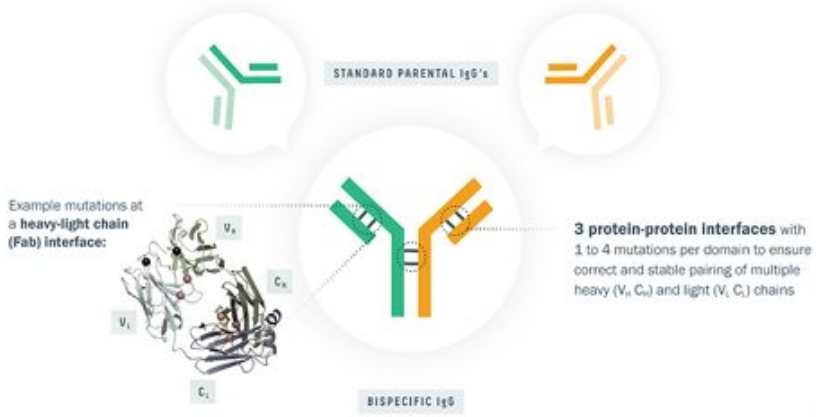
To realize this potential, it is important to develop capabilities to:

- 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.

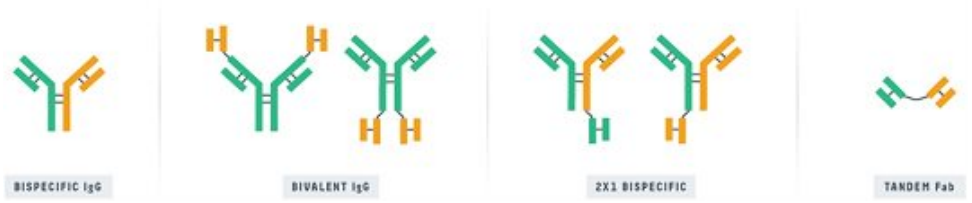
OrthoMab is a clinically validated protein engineering technology that enables the creation of a bispecific antibody from any two source antibodies, each comprised of a unique heavy chain and a unique light chain. The key innovation of OrthoMab is a set of patented DNA mutations that have been computationally 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 toutstandingo 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 is authorized in more than 15 countries, including the United States, Canada, Germany, France, Italy and Israel, and has been used to treat approximately 360,000 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 drug 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-ß3, that could also discriminate between closely related homologs, transforming growth factor beta-1, or TGF-ß1, and transforming growth factor beta-2, or TGF-ß2. 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-ß3 that could differentiate between TGF-ß1 and TGF-ß2. 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.

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.
- 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. 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, 2020, we owned or exclusively licensed over 50 issued or allowed patents and over 85 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, Celium, Trianni and the Trianni Mouse in the U.S., Canada 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 recent acquisition of Trianni Inc. 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 $57 ($53) 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 $140,000. 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

A vast majority of our historical revenue reflects upfront payments from research programs. 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 therapeutics. We structure our agreements in a way that directly aligns our partners' economic interest with our own. We believe the 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, 2020, we had a total of 27 partners for whom we were conducting drug discovery activities. For the year ended December 31, 2019, two of our partners accounted for 47% and 15% of revenue, and eleven partners accounted for the remaining 38% of revenue. 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. 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 93%, moving from 107 to 206 full-time employees. As of December 31, 2020, we had 206 full-time employees in Canada, the United States and Australia, which was comprised of approximately 51% scientists, 26% business professionals, and 23% 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, 2020, we had 206 full-time employees in Canada, the United States and Australia, which was comprised of approximately 51% scientists, 26% business professionals, and 23% 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, 2020, 189 of our employees were employed in Canada, 13 were employed in Australia and 4 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 drug discovery efforts; however, we ourselves are not currently involved in drug 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, Emergency Use Authorizations, or EUAs, for the use of specific products based on criteria established by statute, including that the product at issue may be effective in diagnosing, treating, or preventing serious or life-threatening diseases when there are no adequate, approved, and available alternatives. An EUA is subject to additional conditions and restrictions and is product-specific. An EUA terminates when the emergency determination underlying the EUA terminates. An EUA is not a long-term alternative to obtaining FDA approval, licensure, or clearance for a product. The FDA may revoke an EUA where it is determined that the underlying health emergency no longer exists or warrants such authorization, so it is not possible to predict how long an EUA may remain in place.

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

Additional Regulation

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

Anti-Corruption Laws

We are subject to the U.S. Foreign Corrupt Practices Act of 1977, as amended, or the FCPA, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT Act, the Canadian Corruption of Foreign Public Officials Act and possibly other state and national anti-bribery and anti-money laundering laws in countries in which we conduct activities, such as the UK Bribery Act 2010 and the UK Proceeds of Crime Act 2002, 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.

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.

Our plan is to enter a phase of accelerated growth and we will be investing heavily in our business. We expect to experience variability in revenue and in expenses which makes it difficult to evaluate our business or our prospects. As such, 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. For the years ended December 31, 2019 and 2020, we incurred a net loss of $2.2 million and net earnings of $118.9 million, respectively. As of December 31, 2020, we had accumulated earnings of $114.2 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 and sell our solutions to existing and new partners;
- acquire businesses or technologies to support the growth of 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 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 as a result of 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.

For the year ended December 31, 2019, a substantial portion of our revenue was generated by upfront technology access and research discovery fees through performing research activities for our partners. 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. 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, these royalty payments related to our partnership with 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. For example, demand for and sales of bamlanivimab may fall as new COVID-19 treatments or vaccines enter the market. As a result, 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 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, or Lilly, has undergone clinical testing and has received Emergency Use Authorization from the FDA, and we have received associated clinical milestone payments and royalties on net sales in 2020. 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 clinical milestone and royalty payments to us to date and we have not yet had a program receive marketing approval.

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 drug-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 Canadian Ministry of Western Economic Diversification, or WD Canada, under the Western Innovation Initiative and the Business Scale-up and Productivity programs, as well as our agreement with the Strategic Innovation Fund, or SIF, requires us to obtain the consent of WD Canada or SIF, as applicable, before being able to engage in certain change of control and asset disposition transactions during the term of the agreement. In particular, our agreement with the 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 WD Canada and 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 drug-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.

We do not have our own pipeline of drug candidates, and instead we focus our efforts 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.

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, 2019, two of our partners accounted for 47% and 15% of revenue, and eleven partners accounted for the remaining 38% of revenue. 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. Because a significant portion of our revenue in 2020 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. For example, demand for and sales of bamlanivimab may fall as new COVID-19 treatments or vaccines enter the market. Therefore, there can be no assurance that we will generate similar levels of revenue from sales of bamlanivimab in future periods. These partnerships cover a large number of 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 antibody drug-discovery programs to partners who are engaged in drug 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 partners to successfully develop and commercialize therapies based on antibodies discovered using our platform. Due to our reliance on our partners, the risks relating to product development, regulatory clearance, authorization or approval and commercialization apply to us derivatively through the activities of our partners. While we believe our platform is capable of identifying high quality antibodies, there can be no assurance that our partners will successfully develop, secure marketing approvals for and commercialize any 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 program result in two clinical milestone 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, our partners may not successfully develop any drug candidates with the antibodies that we discover, or 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 collaboration agreement with Lilly, we are eligible to receive and have received payments upon the achievement of certain development milestones, and are eligible to receive royalties resulting from sales of both COVID-19 and non-COVID-19 products that incorporate antibodies we discovered. While we have received milestone and royalty payments from this collaboration, there can be no assurance that we will receive additional milestone payments or any royalties in the future. Furthermore, there can be no assurance that Lilly will be successful in its further development of bamlanivimab. For example, based on trial data that suggested that bamlanivimab is unlikely to help hospitalized COVID-19 patients recover from this advanced stage of their disease, Lilly announced on October 26, 2020 that it has stopped enrolling additional patients for treatment with bamlanivimab in this study. Lilly is continuing its BLAZE-1 trial, a randomized, double-blind, placebo-controlled Phase 2 study conducted by Lilly that is designed to assess the efficacy and safety of bamlanivimab and an additional Lilly product candidate for the treatment of symptomatic COVID-19 in the outpatient setting. In the fall of 2020, Lilly received Emergency Use Authorization, or EUA, for bamlanivimab from the FDA and similar emergency authorization from Health Canada, and began sales of the antibody. As

a result, during the year ended December 31, 2020, we recognized an aggregate of $198.3 million in royalty payments on net sales of bamlanivimab. The FDA has the authority to grant an EUA to allow unapproved medical products to be used in an emergency to diagnose, treat, or prevent serious or life-threatening diseases or conditions when there are no adequate, approved, and available alternatives. Pursuant to the EUA by the FDA for bamlanivimab, Lilly is able to distribute bamlanivimab under the conditions set forth in the Emergency Use Authorization prior to FDA approval. Furthermore, the FDA may revoke an EUA where it is determined that the underlying health emergency no longer exists or warrants such authorization, and we cannot predict how long, if ever, an EUA would remain in place. Similarly, in Canada, 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. 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. If the EUA or authorization issued under the Interim Order granted to Lilly are subsequently revoked, such revocation could adversely impact our business.

In addition, even if these drug candidates receive regulatory approval in the United States, our partners 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, our partners have to make decisions about which clinical stage and pre-clinical drug candidates to develop and advance, and 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.

Our partners' 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 a total of 206 employees as of December 31, 2020. 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. For example, in connection with the preparation and audits of our financial statements as of and for the years ended December 31, 2018 and 2019, a material weakness was identified in our internal control over financial reporting, as described elsewhere in this “Risk Factors” section. 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 drug 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' drug 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:[1]

- 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.
- 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. 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 Lilly has produced bamlanivimab, an antibody for which Lilly was granted an EUA by the FDA and a similar authorization by Health Canada, we have not yet had a program receive full marketing approval. As a result, the relatively limited experience of our partners with our platform may reduce their confidence in our platform. We also believe that pharmaceutical and biotechnology companies are likely to be particularly sensitive to defects and errors in the use of our platform, including if our platform fails to deliver meaningful acceleration of certain research timelines accompanied by results at least as good as the results generated using legacy or other alternative technologies. There can be no guarantee that our platform will meet the expectations of pharmaceutical and biotechnology companies.

If we are 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 investigating expansion of facilities in Vancouver. As limited facilities with

appropriate capabilities are available in Vancouver, 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 drug 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.

Our sales and marketing organization is currently limited, and if we are unable to expand our marketing and salesforce to reach our existing and potential partners, our business may be adversely affected.

Until 2019, our sales and marketing team has been limited, with only one dedicated business development person supported by two to three marketing staff who are primarily focused on scientific writing. This activity has been complemented with research and development staff attending a variety of scientific conferences which has helped increase the business development pipeline. We will need 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, including Carl Hansen, Ph.D., our founding Chief Executive Officer, Véronique Lecault, Ph.D., our co-founder and Chief Operating Officer, Andrew Booth, our Chief Financial Officer, Tryn Stimart, our Chief Legal Officer, and Ester Falconer, Ph.D., our Chief Technology Officer. 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, including our acquisition of Lineage in March 2017, our acquisition of the OrthoMab bispecific platform from Dualogics, LLC in June 2020 and our acquisition of Trianni in November 2020, 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 the clearance or approval of the FDA. However, our business could in 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 facility becomes damaged or inoperable or we are required to vacate our 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 at a single facility located in Vancouver, British Columbia. Our facility 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 facility is 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 facility 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 facility, to locate and qualify a new facility or license or transfer our proprietary technology to a third party. Even in the event we are able to find a third party to assist in research and development efforts, we may be unable to negotiate commercially reasonable terms to engage with the third party.

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

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

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

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

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 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. We do not know, however, if we will be able to maintain existing insurance with adequate levels of coverage. Any significant uninsured liability may require us to pay substantial amounts, which would adversely affect our business, financial condition, results of operations and prospects.

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

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

Additionally, although we maintain cybersecurity insurance coverage, we cannot be certain that such coverage will be adequate for data security liabilities actually incurred, will cover any indemnification claims against us relating to any incident, will continue to be available to us on economically reasonable terms, or at all, or that any insurer will not deny coverage as to any future claim. The

successful assertion of one or more large claims against us that exceed available insurance coverage, or the occurrence of changes in our insurance policies, including premium increases or the imposition of large deductible or co-insurance requirements, could adversely affect our reputation, business, financial condition and results of operations.

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 limited operations outside of Canada and the United States, but our business strategy incorporates potentially significant international expansion. We currently maintain relationships with partners outside of Canada and the United States, and may in the future enter into new relationships. We also have a wholly owned subsidiary in Australia. 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 plan to build 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 that the acquisition of Trianni 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. As of the date of this document, the Trianni integration plan and costs 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 Trianni's businesses with ours, the anticipated benefits of the Trianni acquisition may not be realized fully or may take longer than expected to be realized. 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. We may also incur higher than expected costs as a result of the acquisition 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 two 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 the acquisition of Trianni and integrating our operations with Trianni's. 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 Trianni acquisition 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 acquisition of Trianni 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 Trianni 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 acquisition, including costs to integrate Trianni's business that may exceed the costs that we currently anticipate. 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, 2020, we owned or exclusively licensed over 50 issued or allowed patents and over 85 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, Celium, Trianni and the Trianni Mouse in the U.S., Canada and Europe. It is possible that none of our pending patent applications will result in issued patents in a timely fashion or at all, and even if patents are granted, they may not provide a basis for intellectual property protection of commercially viable products or services, may not provide us with any competitive advantages, or may be challenged and invalidated by third parties. It is possible that others will design around our current or future patented technologies. As a result, our owned and licensed patents and patent applications comprising our patent portfolio may not provide us with sufficient rights to exclude others from commercializing technology and products similar to any of our technology.

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

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

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

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

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

Assuming that other requirements for patentability are met, prior to March 16, 2013, in the United States, the first to invent the claimed invention was entitled to the patent, while outside the United States, the first to file a patent application was entitled to the patent. On or after March 16, 2013, under the Leahy-Smith America Invents Act, or the America Invents Act, enacted in September 16, 2011, the United States transitioned to a first inventor to file system in which, assuming that other requirements for patentability are met, the first inventor to file a patent application will be entitled to the patent on an invention regardless of whether a third party was the first to invent the claimed invention. A third party that files a patent application in the USPTO on or after March 16, 2013, but before us could therefore be awarded a patent covering an invention of ours even if we had made the invention before it was made by such third party. This will require us to be cognizant of the time from invention to filing of a patent application. Since patent applications in the United States and most other countries are confidential for a period of time after filing or until issuance, we cannot be certain that we or our licensors were the first to either (i) file any patent application related to our technology or (ii) invent any of the inventions claimed in our or our licensor's patents or patent applications.

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

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

Issued patents covering our 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 drug-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, Berkley 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. The Company is opposing the request to amend and should the court allow the amendment, we intend to seek dismissal of the counterclaims. In March 2021, the court set this matter down for a jury trial with a December 12, 2022 start date. These lawsuits remain pending.

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 Berkley Lights' request for declaratory judgment on the '839 patent. The lawsuit remains pending.

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. 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. In connection with our initial public offering, or IPO, we began the process of documenting, and reviewing and improving our internal controls and procedures for compliance with 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.

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.

In connection with the audit of our financial statements as of and for the years ended December 31, 2018 and 2019, a material weakness in our internal control over financial reporting was identified and we may identify additional material weaknesses in the future.

In connection with the preparation and audits of our financial statements as of and for the years ended December 31, 2018 and 2019, a material weakness (as defined under the Exchange Act and by the auditing standards of the U.S. Public Company Accounting Oversight Board, or "PCAOB"), was identified in our internal control over financial reporting. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual financial statements will not be prevented or detected on a timely basis.

Specifically, there was a material adjustment in our financial statements required due to an overstatement of lease liability upon adoption of ASU 2016-02, *Leases* (Topic 842), as well as certain other adjustments. In the aggregate, such adjustments amounted to a material weakness. The material weakness resulted from a lack of resources and experience within our finance function with respect to our transition to U.S. GAAP, and our change in measurement currency from Canadian dollars to U.S. dollars. The material weakness has not been remediated as of December 31, 2020. There were no material adjustments required in the 2020 annual consolidated financial statements due to this material weakness.

Neither our management nor our independent registered public accounting firm has performed an evaluation of our internal control over financial reporting in accordance with the provision of the Sarbanes-Oxley Act because no such evaluation has been required. Had we or our independent registered public accounting firm performed an evaluation of our internal control over financial reporting in accordance with the provisions of the Sarbanes-Oxley Act, additional material weaknesses may have been identified.

We have begun taking significant measures, and plan to continue to take measures, to remediate this material weakness. These measures include hiring and engaging additional accounting personnel with familiarity with reporting under U.S. GAAP, and implementing and adopting additional controls and procedures. However, the implementation of these measures may not fully address this material weakness in our internal control over financial reporting, and, if so, we would not be able to conclude that they have been fully remedied. If we are unable to successfully remediate our existing or any future material weaknesses in our internal control over financial reporting, or if we identify any additional material weaknesses, the accuracy and timing of our financial reporting may be

adversely affected, we may be unable to maintain compliance with securities law requirements regarding timely filing of periodic reports in addition to applicable stock exchange listing requirements, investors may lose confidence in our financial reporting, and our share price may decline as a result. We also could become subject to investigations by Nasdaq, the SEC, or other regulatory authorities.

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 stock options 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 approximately 46% of our common shares. 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 by our existing shareholders in the public market could cause our share price to fall.

If our existing shareholders sell, or indicate an intention to sell, substantial amounts of our common shares in the public market after the lock-up and other legal restrictions on resale imposed during our IPO lapse, the trading price of our common shares could decline. Based on the number of common shares outstanding as of December 31, 2020, we have outstanding a total of 269,497,768 common shares. In connection with our IPO, our officers, directors and substantially all of our securityholders agreed to be subject to a contractual lock-up with the underwriters, which will expire 180 days after the date of the final prospectus used in our IPO. Credit Suisse Securities (USA) LLC, Stifel, Nicolaus & Company, Incorporated, Berenberg Capital Markets LLC, SVB Leerink LLC and BMO Capital Markets Corp., however, may, in their sole discretion, permit our officers, directors and other shareholders who are subject to these lock-up agreements to sell shares prior to the expiration of the lock-up agreements.

Common shares that are either subject to outstanding options reserved for future issuance under our EIP that we adopted in connection with our IPO, will become eligible for sale in the public market to the extent permitted by the provisions of various vesting schedules, the lock-up agreements and Rule 144 and Rule 701 under the Securities Act of 1933, as amended, or the Securities Act. Additionally, common shares that are issuable upon the exercise of share options will become eligible for sale in the public market to the extent permitted by the lock-up agreements and Rule 144 and Rule 701 under the Securities Act. If these additional common 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. Significant assumptions and estimates used in preparing our consolidated financial statements include the estimated variable consideration included in the transaction price in our contracts with customers, stock-based compensation, and valuation of our equity investments in early-stage biotechnology companies. Our results of operations may be adversely affected if our assumptions change or if actual circumstances differ from those in our assumptions, which could cause our results of operations to fall below the expectations of securities analysts and investors, resulting in a decline in the trading price of our common 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 or indirectly, 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. subsidiary being attributed to our U.S. subsidiary, which could result in our non-U.S. subsidiary being treated as a CFC and certain

U.S. Holders of our common shares being treated as Ten Percent Shareholders of such non-U.S. subsidiary CFC. 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. subsidiary will not be treated as CFCs in the 2020 taxable year. 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. subsidiary that may be treated as a CFC 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. 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.

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 our IPO or in any other financing transaction. If we are treated as a non-publicly traded CFC for the year being tested for purposes of the PFIC rules, the value of our assets will be measured by the adjusted tax basis of our assets. 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, 2020. 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.

General Risk Factors

The COVID-19 pandemic could adversely impact our business.

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 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.

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

We are an emerging growth company, as defined in the JOBS Act. For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002 reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, exemptions from the requirements of holding nonbinding advisory votes on executive compensation and shareholder approval of any golden parachute payments not previously approved, and an exemption from compliance with the requirement of the Public Accounting Oversight Board regarding the communication of critical audit matters in the auditor's report on the financial statements. We could be an emerging growth company for up to five years following the year in which we completed our IPO, although circumstances could cause us to lose that status earlier. We will remain an emerging growth company until the earlier of

(1) the last day of the fiscal year (a) following the fifth anniversary of the date of the closing of our IPO, (b) in which we have total annual gross revenue of at least $1.07 billion or (c) in which we are deemed to be a large accelerated filer, which requires the market value of our common shares that are held by non-affiliates to exceed $700.0 million as of the prior June 30th, and (2) the date on which we have issued more than $1.0 billion in non-convertible debt during the prior three-year period.

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

In addition, based on our current market capitalization, we may lose emerging growth company status in the near future, and the loss of such status may require us to incur significant additional costs as we transition to complying with the various reporting requirements applicable to other public companies that are not emerging growth companies.

We have incurred and will continue to incur significant increased costs as a result of operating as a public company, and our management has and will be required to devote substantial time to new compliance initiatives.

As a public company, we have incurred and will incur significant legal, accounting, insurance and other expenses that we did not incur as a private company. We are subject to the reporting requirements of the Exchange Act, which requires, among other things, that we file with the SEC annual, quarterly and current reports with respect to our business and financial condition. In addition, the Sarbanes-Oxley Act, as well as rules subsequently adopted by the SEC, and The Nasdaq Global Select Market to implement provisions of the Sarbanes-Oxley Act, impose significant requirements on public companies, including requiring establishment and maintenance of effective disclosure and financial controls and changes in corporate governance practices. Further, in July 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, was enacted. There are significant corporate governance and executive compensation related provisions in the Dodd-Frank Act that require the SEC to adopt additional rules and regulations in these areas, such as "say-on-pay" and proxy access. Recent legislation permits emerging growth companies to implement many of these requirements over a longer period and up to five years from the pricing of our IPO. We intend to take advantage of this new legislation but cannot guarantee that we will not be required to implement these requirements sooner than budgeted or planned and thereby incur unexpected expenses. Shareholder 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.

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

Pursuant to Section 404, in our second annual report due to be filed with the SEC after becoming a public company, we will be required to furnish a report by our management on our internal control over financial reporting. To achieve compliance with Section 404 within the prescribed period, we will be engaged in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we will need to continue to dedicate internal resources, potentially engage outside consultants, adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing whether such controls are functioning as documented, and implement a continuous reporting and improvement process for internal control over financial reporting. Despite our efforts, there is a risk that we will not be able to conclude, within the prescribed timeframe or at all, that our internal control over financial reporting is effective as required by Section 404. In addition, investors' perceptions that our internal controls are inadequate or that we are unable to produce accurate financial statements on a timely basis may harm the market price of our shares.

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. Securities and industry analysts do not currently, and may never, publish research on our company. If no securities or industry analysts commence coverage of our company, the trading price for our common shares would likely be

negatively impacted. In the event securities or industry analysts initiate coverage, if one or more of the analysts who cover us downgrades our common shares or publishes inaccurate or unfavorable research about our business, our share price may decline. 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, we will be 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 a 2,100 square feet research and development lab in Sydney, Australia, with a lease that expires 2022. 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.

(a) **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, Berkley 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. The Company is opposing the request to amend and should the court allow the amendment, we intend to seek dismissal of the counterclaims. In March 2021, the court set this matter down for a jury trial with a December 12, 2022 start date. These lawsuits remain pending.

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 Berkley Lights' request for declaratory judgment on the '839 patent. The lawsuit remains pending.

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. Berkeley Lights' preliminary response to our Petition is due no later than May 18, 2022. The PTAB then has three months to decide whether 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.

Holders of Common Shares

As of March 23, 2021, the latest practicable date prior to the date of this Annual Report on Form 10-K, there were approximately 200 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. In addition, under the terms of our contribution agreements with Western Economic Diversification Canada, we are restricted from paying any dividends until we have repaid the contributions thereunder in full.

Recent Sales of Unregistered Equity Securities

Set forth below is information regarding securities issued by us during the period covered by this report that were not registered under the Securities Act. Included is the consideration, if any, we received for such securities.

- In March 2020, we sold an aggregate of 6,017,784 convertible preferred shares at a purchase price of $12.4631 per share for an aggregate amount of approximately $75.0 million.
- In October 2020, we issued the convertible notes in the aggregate amount of $90.0 million. In connection with the completion of our IPO, the principal amount of the convertible notes and accrued interest thereon converted into an aggregate of 6,093,524 common shares.
- Prior to the filing of our registration statement on Form S-8 covering our equity incentive plans, we granted options to purchase an aggregate of 20,800,520 common shares with a weighted-average exercise price of $2.81 per share, to certain of our employees, consultants and directors in connection with services provided to us by such persons.
- Prior to the filing of our registration statement on Form S-8, we issued and sold an aggregate of 2,719,870 common shares with a weighted-average purchase price of $0.37 per share to employees, directors and consultants for aggregate proceeds to us of approximately $999,607 upon the exercise of stock options.

None of the foregoing transactions involved any underwriters, underwriting discounts or commissions, or any public offering. The sales of the above securities were deemed to be exempt from registration under the Securities Act in reliance upon Section 4(a)(2) of the Securities Act (or Regulation D or Regulation S promulgated thereunder) or Rule 701 promulgated under Section 3(b) of the Securities Act as transactions by an issuer not involving any public offering or pursuant to benefit plans and contracts relating to compensation as provided under Rule 701. The recipients of the securities in each of these transactions represented their intentions to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof and appropriate legends were placed upon the share certificates issued in these transactions. All of the foregoing securities are deemed restricted securities for purposes of the Securities Act.

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.

As of December 31, 2020, we have used $8.1 million of the net proceeds from the IPO. 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.

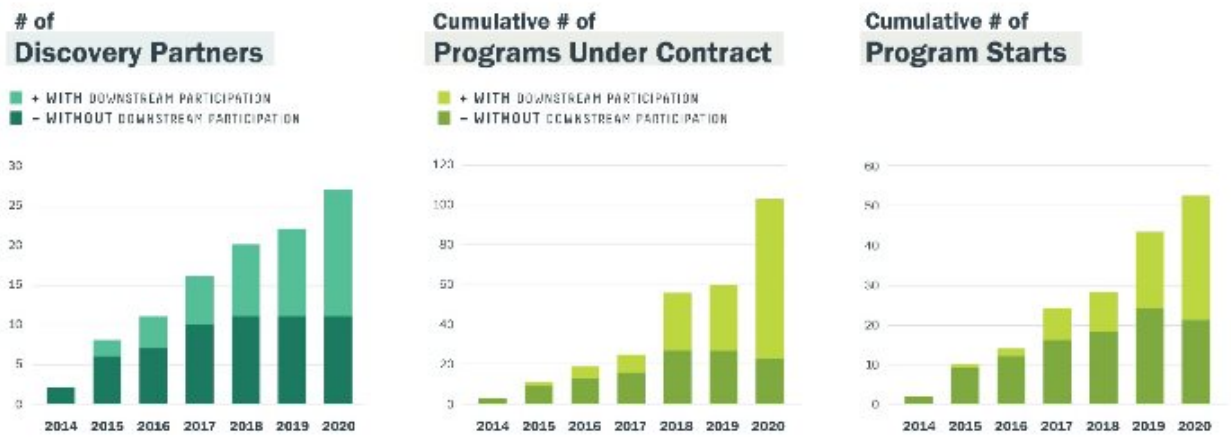
Our full-stack, artificial intelligence-, or AI, powered drug discovery platform searches and analyzes the database of natural immune systems to find antibodies that can be developed as drugs. We believe our technology increases the speed and the probability of success of therapeutic antibody discovery, including enabling discovery against targets that may otherwise be intractable. Rather than advancing our own clinical pipeline of drug candidates, 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, 2020, we had 103 discovery programs that are either completed, in progress or under contract with 27 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. 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 $11.6 million and $233.2 million for the years ended December 31, 2019 and 2020, respectively. As of December 31, 2020, we had a total of 27 partners for whom we were conducting drug discovery activities. For the year ended December 31, 2019, two of our partners accounted for 47% and 15% of revenue, and eleven partners accounted for the remaining 38% of revenue. 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. 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 have achieved such growth in our business with a modest sales and marketing infrastructure, consisting of a limited number of business development personnel supported by marketing staff that have historically been primarily focused on scientific writing. We incurred sales and marketing expenses of $1.3 million and $3.8 million for the years ended December 31, 2019 and 2020, respectively. We are significantly increasing investment into our business development team and into marketing our solutions to new and existing partners.

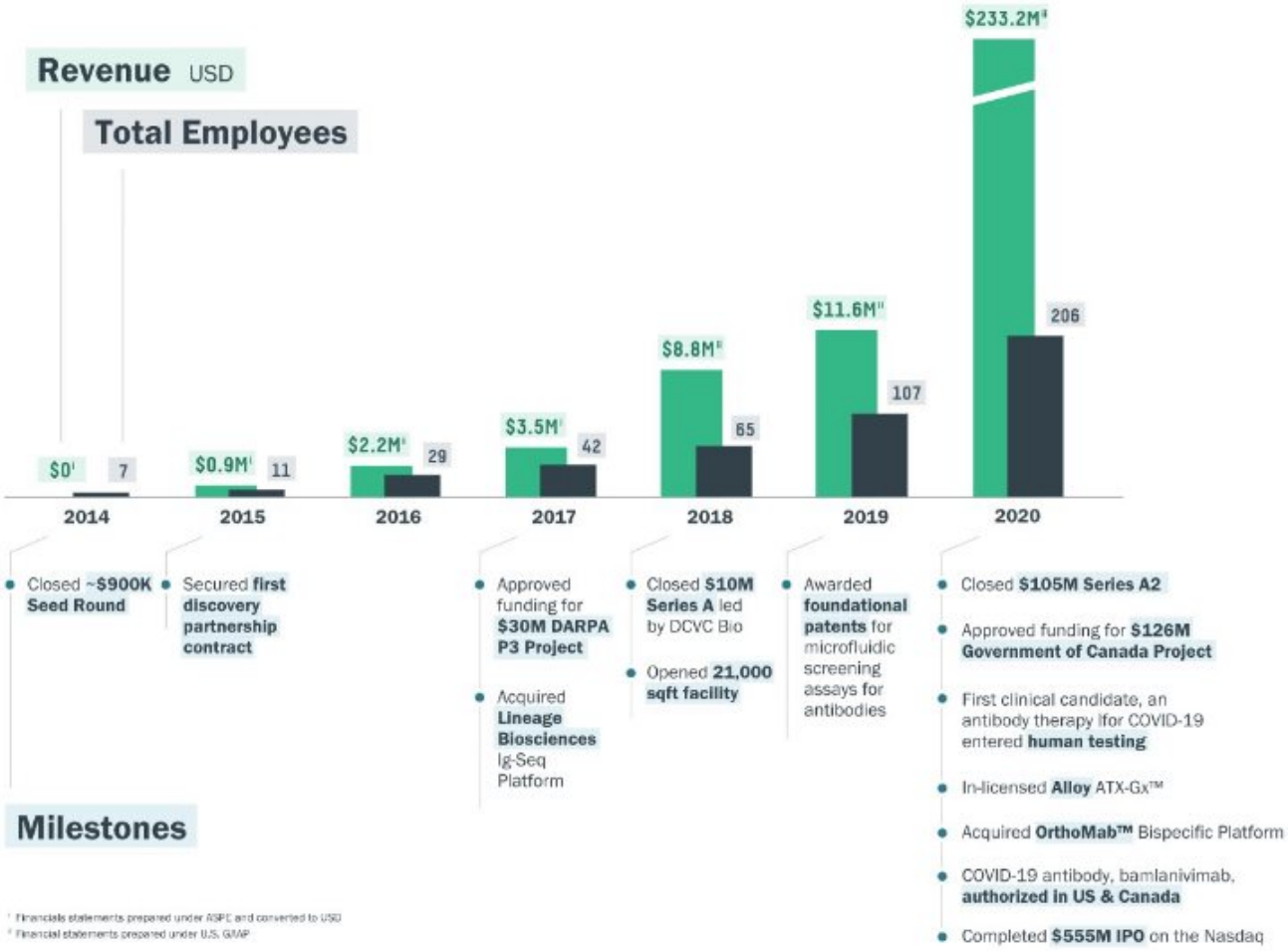
We focus a substantial portion of our resources on research and development efforts towards deepening our technology and expertise along our technology stack, and we expect to continue to make significant investments in this area for the foreseeable future. We incurred research and development expenses of $10.1 million and $29.4 million for the years ended December 31, 2019 and 2020, respectively. We incurred general and administrative expenses of $2.7 million and $11.9 million for the years ended December 31, 2019 and 2020, respectively. We have also experienced significant growth in our workforce in recent periods, increasing from 107 employees as of December 31, 2019 to 206 employees as of December 31, 2020. 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 drug discovery partnerships in the form of research fees, government funding from grants, external borrowings, and from the issuance and sale of convertible preferred shares and notes, and common shares.

Our net loss for the year ended December 31, 2019 was $2.2 million and our net earnings for the year ended December 31, 2020 was $118.9 million. As of December 31, 2020, we had accumulated earnings of $114.2 million and we had cash and cash equivalents totaling $594.1 million.

The following chart illustrates key milestones achieved since our inception.



Recent Developments

In March 2020, we entered into a discovery partnership agreement with Eli Lilly and Company, or Lilly, pursuant to which we will perform discovery research for a number of targets for Lilly that will result in antibodies for Lilly to develop and potentially commercialize. This partnership includes the licensing of bamlanivimab, a monoclonal antibody designed to block viral attachment of the COVID-19 virus and its entry into human cells as well as other candidate antibodies against COVID-19 discovered by AbCellera. On June 1, 2020, 90 days after program initiation, bamlanivimab moved to first-in-human testing and progressed to Phase 3 clinical trials by July 2020. For the year ended December 31, 2020, we received an aggregate of $15.0 million upon the satisfaction of clinical and approval milestones by Lilly and recognized $198.3 million in royalty revenue related to bamlanivimab.

Royalty revenues of $198.3 are reduced by the associated royalty fees payable to the National Institutes of Health of $27.1, resulting in a final amount received of $171.2 after royalty fee payments. This royalty impact, incorporating the related royalty fees payable, is based on our royalty arrangements of low- to mid-teens for aggregate sales for COVID-19 therapeutics below $125.0 million and mid-teens to mid-twenties on aggregate sales above $125.0 million.

In March 2020, we completed an equity financing, raising an aggregate of $75.0 million in gross proceeds through the sale and issuance of Series A2 convertible preferred shares. In connection with this financing, we also entered into a senior secured credit agreement with OrbiMed Royalty & Credit Opportunities III, LP, or OrbiMed, which provided for term debt in an aggregate amount of $30.0 million. In July 2020, we repaid funds borrowed under the credit agreement facility in full and retired the credit facility with OrbiMed. Immediately prior to the completion of our IPO, our convertible preferred shares and notes were converted to common shares.

In April 2020, we entered into a multi-year agreement with the Canadian government's Strategic Innovation Fund, or SIF. Under this agreement, CAD $175.6 million ($125.6 million) was committed by the Government of Canada. To date, our business has required only minimal expenditures for manufacturing activities. As part of our strategy to expand our market by delivering a full solution through forward integration, we plan to add capabilities and infrastructure to support GMP manufacturing, and we intend to apply such SIF funding towards this goal.

In November 2020, we acquired Trianni. In connection with the acquisition, our U.S. subsidiary entered into an agreement and plan of merger for an initial purchase price of $90.0 million, subject to certain adjustments for working capital, indebtedness and expenses. Upon consummation of the merger, Trianni became our wholly-owned subsidiary. We paid the purchase price for the acquisition using the proceeds from the issuance of the Convertible Notes in an aggregate amount of $90.0 million. The Convertible Notes will mature on October 30, 2025, unless prepaid or converted earlier, and will bear interest from October 30, 2021 at an annual rate of 5%, payable annually in arrears on October 30 of each year, beginning on October 30, 2022. Interest on the Convertible Notes is payable in cash or in the form of additional nonconvertible notes. The Convertible Notes are convertible at the option of the noteholders into our common shares under certain circumstances, including upon the closing of this offering. Convertible Notes converted upon the closing of this offering will convert at a price of 85% of the IPO price.

In December 2020, we completed Abcellera's IPO on the Nasdaq. The Company completed the sale of 27,772,500 shares of its common shares in the IPO at a price to the public of $20.00 per share. The Company raised gross proceeds of $555.5 million, or aggregate net proceeds of $522.8 million, after deducting underwriting discounts and commissions and estimated offering expenses payable by the Company. Immediately prior to the completion of our IPO, our convertible preferred shares and notes were converted to common shares.

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, 2020, we had 103 discovery programs that are either completed, in progress or under contract with 27 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 have historically generated nearly all of our revenue from research fees. 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. For example, recent public announcements by our partner Lilly have indicated that the bamlanivimab antibody is advancing through late stage clinical trials. We received development milestone payments of $15.0 million from this partnership during year ended December 31, 2020. If this product candidate receives marketing approval and is successfully commercialized by Lilly, we are entitled to receive approval milestones payments and royalties on such sales. The total aggregate amount of clinical and approval milestones related to this partnership is up to $29.0 million. On October 7, 2020, Lilly submitted a request for an EUA for the bamlanivimab single agent therapy to the FDA, which was granted on November 9, 2020. On October 28, 2020, Lilly announced an agreement with the U.S. government to supply 300,000 vials of bamlanivimab for $375.0 million and on December 2, 2020, Lilly announced the purchase by the U.S. government of an additional 650,000 doses of bamlanivimab for $812.5 million. On October 29, 2020, Lilly also announced a fixed price contract for procurement of bamlanivimab in the amount of $312.5 million with the U.S. Army Contracting Command. On November 22, 2020, Lilly was granted authorization for the bamlanivimab single agent therapy by Health Canada under the Interim Order Respecting the Importation, Sale and Advertising of Drugs for Use in Relation to COVID-19. On November 24, 2020, Lilly announced an

agreement with the Canadian government to supply 26,000 doses of bamlanivimab for the three month period between December 2020 and February 2021, for $32.5 million. Under our partnership with Lilly, we are entitled to receive a specified percentage of proceeds that Lilly receives from these sales.

- ***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. Because the vast majority of research fees that we are entitled to recognize under our partnerships depend on our delivery of antibodies for development by our partners, any delays by our partners in selecting targets and agreeing on statements of work will 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 drug 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, 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 2021 that are intended to materially expand capacity. Over the past twelve months, we have grown our workforce by 93%, moving from 107 to 206 full time employees as of December 31, 2020. 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.

	Year Ended December 31,		Change
Metric	2019	2020	%
Number of discovery partners	22	27	23%
Programs under contract, cumulative	60	103	72%
Program starts, cumulative	43	52	21%
Programs in the clinic	-	1	N/M

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.

Programs in the clinic represent the count of unique programs for which an Investigational New Drug, or IND, New Animal Drug or Pre-Market Approval, or PMA, application, or equivalents under other regulatory regimes, has been filed based on an antibody that was discovered by us. Where the date of such application is not known to us, the date of the first public announcement of clinical trials will be used instead 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.

Components of Results of Operations

Revenue

Our revenue is comprised of partnership research fees, 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. 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 revenue to increase over time as we secure additional programs under contract and conduct discovery efforts for our partners, and as our partners continue the development of the antibodies that we deliver. We expect that our 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 and our dependence on the program decisions of our partners.

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, 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. This activity has been complemented with research and development staff attending a variety of scientific conferences, which has helped increase the business development pipeline. The associated expenses are included in research and development expenses as scientific conference attendance is primarily related to our research and development efforts. 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 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 of interest earned on cash balances in our Bank of Montreal cash accounts. In 2020, following the closing of our preferred share financing, interest income also included interest earned on money market funds administered by Bank of Montreal.

Interest and Other (Income) Expense. Interest expense consists primarily of interest related to borrowings under our credit agreements. For the years ended December 31, 2018 and 2019, we had credit and overdraft agreements with Bank of Montreal. In 2020, prior to the closing of our preferred share financing, we repaid and terminated all material Bank of Montreal credit agreements. In connection with our preferred share financing, we entered into a new credit agreement with OrbiMed. In the third quarter of 2020, we repaid this credit agreement with OrbiMed and retired all of the credit facility.

Foreign Exchange (Gain) Loss, Net. Foreign exchange (gain) loss, net, consists primarily of income or loss due to fluctuation in exchange rates between the Canadian dollar and the U.S. dollar. 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, such as their Industrial Research Assistance Program, which impacts 2018 and 2019, and the Strategic Innovation Fund, which impacts the twelve months ended December 31, 2020. 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. Depending on our Canadian tax status, either a refundable cash or tax credit is accrued for every dollar spent in eligible research and development activities. In Australia, government investment tax credits are in the form of a tax credit for our Australian entity Channel Biologics Pty Ltd. U.S. federal and state tax credits are a general business credit based on eligible research and development expenditures for our U.S. subsidiaries. Refundable tax credits are included in grants and incentives. Tax credits 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,		
	2018	2019	2020
Revenue:			
Research fees	$ 8,831	$ 11,612	$ 19,848
Milestone payments	-	-	15,000
Royalty revenue	-	-	198,307
Total revenue	8,831	11,612	233,155
Operating expenses:			
Royalty fees	-	-	27,143
Research and development(1)	5,803	10,113	29,393
Sales and marketing(1)	712	1,263	3,842
General and administrative(1)	2,151	2,749	11,910
Depreciation and amortization	918	1,604	4,836
Total operating expenses	9,584	15,729	77,124
Income (loss) from operations	(753)	(4,117)	156,031
Other (income) expense:			
Interest income	(42)	$ (155)	(293)
Interest and other expense	212	209	6,511
Foreign exchange (gain) loss	362	(186)	300
Grants and incentives	(1,594)	(1,774)	(8,320)
Total other income	(1,062)	(1,906)	(1,802)
Net earnings (loss) before income tax	309	(2,211)	157,833
Provision for income tax	-	-	38,915
Net earnings (loss) for the year	$ 309	$ (2,211)	$ 118,918
Net earnings (loss) per share attributable to common shareholders			
Basic	$ 0.00	$ (0.01)	$ 0.53
Diluted	$ 0.00	$ (0.01)	$ 0.45
Weighted-average common shares outstanding			
Basic	149,436,370	151,327,560	159,195,023
Diluted	171,336,110	151,327,560	263,129,765

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

	Year Ended December 31,		
	2018	2019	2020
	(in thousands)		
Research and development	$ 593	$ 606	$ 5,365
Sales and marketing	6	85	1,341
General and administrative	16	199	1,691
Total stock-based compensation	$ 615	$ 890	$ 8,397

Comparison of the Years Ended December 31, 2018 and 2019

Revenue

	Year Ended December 31,		Change	
	2018	2019	Amount	%
	(in thousands, except percentages)			
Revenue				
Research fees	$ 8,831	$ 11,612	$ 2,781	31%
Total revenue	$ 8,831	$ 11,612	$ 2,781	31%

Revenue increased by $2.8 million, or 31%, from the year ended December 31, 2018 to the year ended December 31, 2019. The increase was primarily driven by a higher number of programs under contract executed in 2019 for which we received research fees associated with discovery work conducted for our partners. There was no clinical milestone payment revenue in the years ended December 31, 2018 and 2019.

Operating Expenses

Research and Development

	Year Ended December 31,		Change	
	2018	2019	Amount	%
	(in thousands, except percentages)			
Research and development	$ 5,803	$ 10,113	$ 4,310	74%

Research and development expenses increased by $4.3 million, or 74%, from the year ended December 31, 2018 to the year ended December 31, 2019. The increase was primarily driven by increased headcount in the research and development function and associated expenses consisting primarily of personnel compensation in the amount of $2.5 million. In addition, expenses related to materials supporting research and development activities increased $0.9 million.

Sales and Marketing

	Year Ended December 31,		Change	
	2018	2019	Amount	%
	(in thousands, except percentages)			
Sales and marketing	$ 712	$ 1,263	$ 551	77%

Sales and marketing expenses increased by $0.6 million, or 77%, from the year ended December 31, 2018 to the year ended December 31, 2019. The increase was primarily driven by increased compensation expense in the amount of $0.3 million and the engagement of a public relations consulting firm of $0.2 million.

General and Administrative

	Year Ended December 31,		Change	
	2018	2019	Amount	%
	(in thousands, except percentages)			
General and administrative	$ 2,151	$ 2,749	$ 598	28%

General and administrative expenses increased by $0.6 million, or 28%, from the year ended December 31, 2018 to the year ended December 31, 2019. The increase was primarily driven by increased headcount within the general and administrative function and associated expenses consisting primarily of personnel compensation in the amount of $0.7 million.

Depreciation

	Year Ended December 31,		Change	
	2018	2019	Amount	%
	(in thousands, except percentages)			
Depreciation	$ 918	$ 1,604	$ 686	75%

Depreciation expense increased by $0.7 million, or 75%, from the year ended December 31, 2018 to the year ended December 31, 2019. The increase was primarily driven by a significant investment in capital assets made in 2018 and 2019 for laboratory space at our Vancouver Yukon Street facility and associated equipment in that facility in the amount of $5.3 million and $4.0 million, respectively.

Other (Income) Expense

Interest Income

	Year Ended December 31,		Change	
	2018	2019	Amount	%
	(in thousands, except percentages)			
Interest income	$ (42)	$ (155)	$ (113)	269%

Interest income increased by $0.1 million, or 269%, from the year ended December 31, 2018 to the year ended December 31, 2019. The increase was primarily driven by a larger average cash balance maintained in the year ended December 31, 2019 compared to the prior period.

Interest and Other Expense

	Year Ended December 31,		Change	
	2018	2019	Amount	%
	(in thousands, except percentages)			
Interest and other expense	$ 212	$ 209	$ (4)	(2)%

There was no material change in interest and other expenses for the year ended December 31, 2018 compared to the year ended December 31, 2019. Some interest was charged on the Bank of Montreal loan carried during these two periods.

Foreign Exchange (Gain) Loss

	Year Ended December 31,		Change	
	2018	2019	Amount	%
	(in thousands, except percentages)			
Foreign exchange (gain) loss	$ 362	$ (186)	$ (548)	NM

Foreign exchange (gain) loss decreased by $0.5 million from the year ended December 31, 2018 to the year ended December 31, 2019. 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	
	2018	2019	Amount	%
	(in thousands, except percentages)			
Grants and incentives	$ (1,594)	$ (1,774)	$ (180)	11%

Grants and incentives increased by $0.2 million, or 11%, from the year ended December 31, 2018 to the year ended December 31, 2019. This amount is associated with the Canadian SR&ED refundable tax credit program. With this program, we are able to claim eligible research and development expenses and earn a refundable tax credit after applying the applicable rate. The 2018 refundable tax credit was $1.4 million and the 2019 refundable tax credit was $1.1 million. This change in the effective claim amount

is largely due to our growth. As a larger enterprise we no longer qualify for the enhanced claim rate extended to smaller businesses in Canada.

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%
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 Berkley 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 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, 2020, we had $594.1 million of cash and cash equivalents. During 2020, we raised gross proceeds of $75.0 million through the sale and issuance of Series A2 convertible preferred shares in March 2020, a convertible note of $90.0 million to fund the acquisition of Trianni, and gross proceeds of $555.5 million, or $522.8 million net, from our IPO in December 2020. We also secured an additional CAD$175.6 million ($125.6 million) in SIF funding from the Government of Canada for future infrastructure investment to grow the business. In addition to our financings, we also have amounts receivable of $198.3 million at December 31, 2020 that were received subsequent to year end.

Immediately prior to the completion of our IPO, our convertible preferred shares and notes were converted to common shares.

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, as well as building our business development team and marketing our solutions to new and existing partners. Based on our current business plan, we believe the net proceeds from this offering, together with 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.

Our future capital requirements will depend on many factors, including, but not limited to our ability to successfully secure additional programs under contract with new and existing partners, the successful identification and discovery of antibodies for our partners and the successful development and commercialization by our partners of the antibodies that we deliver. If we are unable to execute on our business plan and adequately fund operations, or if the business plan requires a level of spending in excess of cash resources, we may be required to negotiate partnerships in which we receive greater near-term payments at the expense of potential downstream revenue. Alternatively, we may need to seek additional equity or debt financing, which may not be available on terms acceptable to us or at all. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interest of our shareholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our common shareholders. Debt financing and preferred equity financing, if available, may 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. If we are unable to generate sufficient revenue or raise additional capital when desired, our business, financial condition, results of operations and prospects would be adversely affected.

Sources of Liquidity

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

Revenue from Research Fees

We receive payments from our partnerships in the form of technology access and discovery research fees as we conduct discovery activities for our partners. Such fees are recognized as revenue in the period when the discovery work is performed.

Revenue from Milestone and Royalty Payments

We are entitled to additional payments with respect to discovery programs with our partners upon the satisfaction of development and approval milestones, as well as royalties upon sales, if any, by our partners of the antibodies that we discover.

In 2020, we received the first milestone and royalty payments related to bamlanivimab, a molecule discovered by us in connection with our partnership with Lilly. Bamlanivimab received Emergency Use Authorization by from the U.S. Food and Drug Administration, or FDA, on November 9, 2020. 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. Bamlanivimab together with etesevimab received EUA from the FDA for the treatment of mild-to-moderate COVID-19 in high-risk patients on February 9, 2021. 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. Under our partnership with Lilly, we are entitled to receive a specified percentage of proceeds that Lilly receives from these sales. In 2020, we recognized a total of $198.3 million in royalty revenue related to sales of bamlanivimab.

Financings and Option Exercises

As of December 31, 2020, we have 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.

Prior Credit Agreements

In 2018, we entered into a credit agreement with Bank of Montreal that provided for a term loan, a revolving credit facility and a facility for travel expenses. Interest on this facility accrued at a prime floating rate plus 1.5% per annum. In March 2020, we retired our term loan and revolving credit facility with Bank of Montreal. We continue to maintain a credit facility for travel expenses.

As part of our $105.0 million Series A2 financing in March 2020, we entered into a senior secured credit agreement with OrbiMed, which provided for a term loan in an aggregate amount of $30.0 million for a five-year term. Borrowings under this facility bore interest at a rate per annum equal to an applicable margin of 6% plus the higher of LIBOR for the applicable interest period and

1.75%. In July 2020, we repaid funds borrowed under this facility in full and retired the credit facility with OrbiMed. All associated security interests with this credit facility were released.

Ministry of Western Economic Diversification under the Western Innovation Initiative

Starting in April 2015, we have obtained funding from the Canadian Ministry of Western Economic Diversification, or WD Canada, under the Western Innovation Initiative, or WINN, and the Business Scale-up and Productivity, or BSP, programs. WINN and BSP are Canadian federal government initiatives which provide financing to projects that meet certain program criteria. The funding covers project expenditures for the purchase of capital equipment and the payment of project-related expenses. The terms of these WD Canada loans include a draw of the loan over the three years of a project, one year of no repayments for the loan followed by repayment over five years in equal installments of the principal amount of the loan. These loans are provided at zero interest and are unsecured. As of December 31, 2020, we have three loans with WD Canada for projects started in 2015, 2016, and 2019, representing total available funding of $5.7 million. As of December 31, 2020, approximately $2.4 million remained outstanding that was borrowed under this initiative, and these loans are repayable in installments through to 2028.

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, 2020, we have claimed a total of $12.3 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. Completion and approval of a feasibility study is required to further advance this project and prior to any SIF reimbursement for this stage. 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 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. As of December 31, 2020, we have claimed a total of $0.1 million under this second stage of the project.

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. As of December 31, 2020, we have claimed a total of $12.4 million under SIF.

Cash Flows

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

	Year Ended December 31,		
	2018	2019	2020
Net cash provided by (used in):			
Operating activities	$ 3,565	$ 2,694	$ 22,691
Investing activities	(5,307)	(5,780)	(119,780)
Financing activities	12,186	195	683,653
Net increase (decrease) in cash and cash equivalents, and restricted cash	$ 10,444	$ (2,891)	$ 586,564

Operating Activities

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.

Net cash provided by operating activities decreased by $0.9 million from $3.6 million in the year ended December 31, 2018 to $2.7 million in the year ended December 31, 2019. The decrease resulted primarily from fewer large contracts with technology access fees entered into in 2019 as compared to 2018.

Investing Activities

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.

Net cash used in investing activities was $5.3 million during the year ended December 31, 2018 compared to $5.8 million in the year ended December 31, 2019. The increase in cash used was primarily driven by issuance of related party loans.

Financing Activities

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.

Net cash provided by financing activities was $12.2 million for the year ended December 31, 2018 compared to $0.2 million for the year ended December 31, 2019. Net cash provided by financing activities for the year ended December 31, 2018 resulted primarily from the Series A preferred share financing, common share equity issuances, and drawdowns from the Bank of Montreal credit agreement to fund facilities expansion in 2018. Net cash provided by financing activities during the year ended December 31, 2019 resulted primarily from the proceeds from debt at Bank of Montreal used to help finance equipment at our Vancouver Yukon Street facility.

Contractual Obligations and Commitments

The following table summarizes our commitments to settle contractual obligations at December 31, 2020, 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**
Long-term debt obligations, including interest(1)	$ 3,334	$ 389	$ 1,025	$ 1,212	$ 708
Commitments(2)	113,721	368	11,190	15,831	86,332
Royalty fees payable	27,143	27,143	-	-	-
Contingent consideration payable(3)	22,559	13,411	9,148	-	-
Total	$ 166,757	$ 41,311	$ 21,363	$ 17,043	$ 87,040

(1) Includes obligations outstanding as of December 31, 2020 related to funding obtained from WD Canada under the WINN and BSP programs. The funding covers project expenditures for the purchase of capital equipment and the payment of project-related expenses. The terms of these WD Canada loans include a draw of the loan over the three years of a project, one year of no repayments for the loan followed by repayment over five years in equal installments of the principal amount of the loan. These loans are provided at zero interest and are unsecured.

(2) Includes several leased facilities where the lease commencement dates are subsequent to December 31, 2020.

(3) As of December 31, 2020, the contingent consideration payable had an estimated fair value of approximately $22.6 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, 2020.

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

In July, August and September 2020, we filed suits against Berkeley Lights, in the U.S. District Court for the District of Delaware alleging that Berkeley Lights directly infringes and indirectly causes infringement of one or more of our patents. 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 August 2020, Berkeley Lights filed suit against us and our subsidiary Lineage Biosciences Inc. in the U.S. District Court for the Northern District of California seeking (i) declaratory judgment of non-infringement of U.S. Patent No. 10,058,839, or the 839 patent; (ii) a finding of unfair competition and false advertising under the Lanham Act; and (iii) a finding of unfair business practices under the California Business and Professions Code. We believe the action filed by Berkeley Lights is without merit and have moved to dismiss the above 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. See Item 3 “Legal Proceedings” for additional 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.

Off-Balance Sheet Arrangements

We have no undisclosed off-balance sheet arrangements that have, or are reasonably likely to have, a current or future effect on our results of operations or financial condition.

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 currently primarily consists of research fees, milestone payments and royalty revenue, which are generated through our performance of antibody discovery research for our partners. Promised deliverables to our global partners include research and development. The Company applied ASC 606 to all arrangements to date.

In accordance with Accounting Standards Codification Topic 606, *Revenue from Contracts with Customers*, or ASC 606, we account for revenue from contracts with partners, whom we view as customers under ASC 606, which includes the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when or as we satisfy a performance obligation. For instances where promises are not distinct at contract inception, they 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 the customer 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.

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; allocating transaction price to performance obligations within a contract; determining when performance obligations have been met; assessing the recognition and future reversal of variable consideration; and when determining and applying appropriate methods of measuring progress for performance obligations satisfied over time.

We allocate the transaction price to each performance obligation identified in the contract on a relative standalone selling price basis. 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 generally use output methods to measure the progress toward satisfaction of performance obligations that are satisfied over time. Due to different types of end customers and differences in the 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 our performance.

Research Fees. We negotiate technology access fees and discovery research fees in our partnership contracts that are recognized as revenue in the period when the discovery work is performed. 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. We utilize 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.

Milestone Payments. At the inception of the arrangement, 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. In determining the transaction price, we constrain 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 process of successfully achieving the criteria for the milestone payments is highly uncertain. Consequently, there is a significant risk that we may not earn all of the milestone payments from each of our arrangements. Management applies significant judgment when assessing the likelihood of milestones being achieved and when allocating the transaction price to each performance obligation for revenue recognition purposes.

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

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. Goodwill is subject to a two-step impairment test on an annual basis. The first step compares the fair value of the reporting unit to its carrying amount, which includes the goodwill. When the fair value of a reporting unit exceeds its carrying amount, goodwill of the reporting unit is considered not to be impaired, and the second step of the impairment test is unnecessary. If the carrying amount exceeds the implied fair value of the reporting unit, the second step measures the amount of the impairment loss. If the carrying amount exceeds the fair value of the reporting unit, an impairment loss is recognized equal to that excess.

As part of our acquisition of Trianni on November 3, 2020, 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 goodwill was $31.5 million at the acquisition date. IPR&D is classified as indefinite-lived and is not amortized. IPR&D becomes definite-lived upon the completion or abandonment of the associated research and development efforts. License and Technology intangible assets with finite useful lives are amortized on a straight-line basis over their estimated useful lives, which 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. Amortization begins when intangible assets with finite lives are put into use. 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. The costs incurred in establishing and maintaining patents for intellectual property developed internally are expensed in the period incurred.

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, 2020, the contingent consideration payable had an estimated fair value of approximately $22.6 million, which has been included as a long-term liability on our consolidated balance sheet. 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).

See Note 19 to our consolidated financial statements detailing the accounting for the Trianni acquisition, including the valuation methodology and key assumptions we used in estimating the fair value of the assets acquired, liabilities assumed, and contingent consideration payable.

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 the Bank of Canada Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award. 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.

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 11 to our consolidated financial statements concerning additional stock-based compensation expense and certain specific assumptions we used in applying the Black-Scholes option pricing model to determine the estimated fair value of our stock options granted in the years ended December 31, 2018, 2019 and 2020.

Recent Accounting Pronouncements

See Note 3 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 United States and worldwide. As with many companies around the world, our day to day operations were disrupted with the imposition of work from home policies and requirements for physical distancing for any personnel present in our offices and laboratories. The pandemic has also disrupted our sales and marketing activities as shelter-in-place orders, quarantines, travel restrictions and other public health safety measures have impacted our ability to interact with our existing and potential partners for our solutions. There is significant uncertainty as to the trajectory of the pandemic and its impacts on our business in the future. 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. 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.

JOBS Act Accounting Election

We qualify as an "emerging growth company" as defined in the JOBS Act. An emerging growth company may take advantage of reduced reporting requirements that are not otherwise applicable to public companies. These provisions include, but are not limited to:

- not being required to comply with the auditor attestation requirements on the effectiveness of our internal controls over financial reporting;
- not being required to comply with any requirement that may be adopted by the PCAOB regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements (auditor discussion and analysis);

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

We may use these provisions until the last day of our fiscal year in which the fifth anniversary of the completion of this offering occurs. However, if certain events occur prior to the end of such five-year period, including if we become a "large accelerated filer," our annual gross revenue exceeds $1.07 billion, or we issue more than $1.0 billion of non-convertible debt in any three-year period, we will cease to be an emerging growth company prior to the end of such five-year period.

The JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards, until those standards apply to private companies. We have elected to take advantage of the benefits of this extended transition period and, therefore, we will not be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies. Our financial statements may therefore not be comparable to those of companies that comply with such new or revised accounting standards. Until the date that we are no longer an emerging growth company or affirmatively and irrevocably opt out of the exemption provided by Section 7(a)(2)(B) of the Securities Act upon issuance of a new or revised accounting standard that applies to our financial statements and that has a different effective date for public and private companies, we will disclose the date on which we will adopt the recently issued accounting standard.

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

Concentration of Credit Risk

For the year ended December 31, 2019, two of our partners accounted for 47% and 15% of revenue, and eleven partners accounted for the remaining 38% of revenue. 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, of which $198.3 million was a receivable at December 31, 2020 and collected subsequent to year end. 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.

Interest Rate Risk

As of December 31, 2020, we had a cash balance of $594.1 million, a majority of which was maintained in bank accounts and term deposits. Our primary exposure to market risk is to interest income volatility, which is affected by changes in the general level of interest rates. As such rates are at a near record low, a 10% change in the market interest rates would not have a material effect on our business, financial condition or results of operations.

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 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.

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO) (our principal executive officer and principal financial officer, respectively), evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2020. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act means controls and other procedures of an issuer that 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 include, without limitation, controls and procedures 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 accumulated and communicated to the issuer's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Based upon our evaluation of the Company's disclosure controls and procedures, as of December 31, 2020, the CEO and the CFO concluded that the disclosure controls were not effective, due to the material weaknesses in internal control over financial reporting described below, to provide reasonable assurance that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is accumulated and communicated to management, including the CEO and CFO, as appropriate, to allow timely decisions regarding required disclosure and were not effective to provide reasonable assurance that such information is recorded, processed, summarized and reported within the time periods specified by the SEC's rules and forms.

Internal Control Over Financial Reporting

Management's Report on Internal Control Over Financial Reporting

This Annual Report on Form 10-K does not include a report of management's assessment regarding internal control over financial reporting or an attestation report of our independent registered public accounting firm due to a transition period established by rules of the SEC for newly public companies.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d 15(f) under the Exchange Act) that occurred during the period covered by this annual report that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Ongoing Remediation of Material Weakness in Internal Control over Financial Reporting

As previously disclosed in our Registration Statement on Form S-1 (File No. 333-250838), which was declared effective by the SEC on December 10, 2020, and in connection with the preparation and audits of our financial statements as of and for the years ended December 31, 2018 and 2019, a material weakness (as defined under the Exchange Act and by the auditing standards of the U.S. Public Company Accounting Oversight Board, or "PCAOB"), was identified in our internal control over financial reporting. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual financial statements will not be prevented or detected on a timely basis.

Specifically, there was a material adjustment in our financial statements required due to an overstatement of lease liability upon adoption of ASU 2016-02, Leases (Topic 842), as well as certain other adjustments to our financial statements as of and for the years ended December 31, 2018 and 2019. In the aggregate, such adjustments amounted to a material weakness. The material weakness resulted from a lack of resources and experience within our finance function with respect to our transition to U.S. GAAP, and our change in measurement currency from Canadian dollars to U.S. dollars. The material weakness has not been remediated as of December 31, 2020. There were no material adjustments required in the 2020 annual consolidated financial statements due this material weakness.

We have begun taking significant measures, and plan to continue to take measures, to remediate this material weakness. These measures include hiring and engaging additional accounting personnel with familiarity with reporting under U.S. GAAP, and implementing and adopting additional controls and procedures. These remediation measures may be time consuming, costly, and might place significant demands on our financial and operational resources. Although we have made enhancements to our control procedures in this area, the material weaknesses will not be remediated until the necessary controls have been implemented and are operating effectively. See Item 1A. “Risk Factors.

Item 9B. Other Information.

None.

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.

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.

Item 6. Exhibits.

Exhibit Index.

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

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

* 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: March 30, 2021

By: /s/ Carl L. G. Hansen
Carl L.G. Hansen, Ph.D.
Chief Executive Officer

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

Name	Title	Date
/s/ Carl L. G. Hansen Carl L. G. Hansen, Ph.D.	Chief Executive Officer and Director (*Principal Executive Officer*)	March 30, 2021
/s/ Andrew Booth Andrew Booth	Chief Financial Officer (*Principal Financial Officer and Principal Accounting Officer*)	March 30, 2021
/s/ Véronique Lecault Véronique Lecault, Ph.D.	Director	March 30, 2021
/s/ John Edward Hamer John Edward Hamer, Ph.D.	Director	March 30, 2021
/s/ Michael Hayden Michael Hayden, Ph.D.	Director	March 30, 2021
/s/ John S. Montalbano John S. Montalbano	Director	March 30, 2021
/s/ Peter Thiel Peter Thiel	Director	March 30, 2021

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

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, 2020 and 2019, 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, 2020, 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, 2020 and 2019, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2020, in conformity with U.S. generally accepted accounting principles.

Change in Accounting Principle

As discussed in Note 4 to the consolidated financial statements, the Company has changed its accounting policy for leases as of January 1, 2019 due to the adoption of Accounting Standards Codification Topic 842, *Leases*.

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 Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the 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.

/s/ KPMG LLP

Chartered Professional Accountants

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

Vancouver, Canada
March 25, 2021

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

	December 31, 2019	December 31, 2020
Assets		
Current assets:		
Cash and cash equivalents	$ 7,553	$ 594,116
Accounts receivable	2,124	903
Accrued accounts receivable	1,152	212,336
Other current assets	1,811	5,970
Total current assets	12,640	813,325
Long term assets:		
Property and equipment, net	8,480	17,923
Intangible assets	-	115,153
Goodwill	-	31,500
Equity investee	-	19,247
Other long-term assets	585	8,388
Loans to related parties	1,783	-
Total long-term assets	10,848	192,211
Total assets	$ 23,488	$ 1,005,536
Liabilities and shareholders' equity		
Current liabilities:		
Accounts payable and accrued liabilities	$ 2,579	$ 20,005
Current portion of contingent consideration payable	-	13,411
Income taxes payable	-	36,152
Accrued royalties payable	-	27,143
Deferred revenue	3,236	6,589
Current portion of long-term debt	2,080	190
Total current liabilities	7,895	103,490
Long-term liabilities:		
Operating lease liability	2,642	3,715
Long-term debt	1,363	2,198
Deferred revenue and grant funding	1,336	25,894
Contingent consideration payable	-	9,148
Deferred tax liability	-	26,161
Other long-term liabilities	-	4,422
Total long-term liabilities	5,341	71,538
Total liabilities	13,236	175,028
Commitments and contingencies		
Shareholders' equity:		
Common shares: no par value, unlimited authorized shares at December 31, 2019 and 2020: 151,681,382 and 269,497,768 shares issued and outstanding at December 31, 2019 and 2020 respectively	5,122	710,387
Convertible preferred shares unlimited authorized shares at December 31, 2019 and 2020: 2,105,264 and nil issued and outstanding at December 31, 2019 and 2020 respectively	7,546	-
Additional paid-in capital	2,300	5,919
Accumulated earnings (deficit)	(4,716)	114,202
Total shareholders' equity	10,252	830,508
Total liabilities and shareholders' equity	$ 23,488	$ 1,005,536
Subsequent events		

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,		
	2018	2019	2020
Revenue:			
Research fees	$ 8,831	$ 11,612	$ 19,848
Milestone payments	-	-	15,000
Royalty revenue	-	-	198,307
Total revenue	8,831	11,612	233,155
Operating expenses:			
Royalty fees	-	-	27,143
Research and development[1]	5,803	10,113	29,393
Sales and marketing[1]	712	1,263	3,842
General and administrative[1]	2,151	2,749	11,910
Depreciation and amortization	918	1,604	4,836
Total operating expenses	9,584	15,729	77,124
Income (loss) from operations	(753)	(4,117)	156,031
Other (income) expense			
Interest income	(42)	(155)	(293)
Interest and other expense	212	209	6,511
Foreign exchange (gain) loss	362	(186)	300
Grants and incentives	(1,594)	(1,774)	(8,320)
Total other income	(1,062)	(1,906)	(1,802)
Net earnings (loss) before income tax	309	(2,211)	157,833
Provision for income tax	-	-	38,915
Net earnings (loss) and comprehensive income (loss) for the period	$ 309	$ (2,211)	$ 118,918
Net earnings (loss) per share attributable to common shareholders			
Basic	$ 0.00	$ (0.01)	$ 0.53
Diluted	$ 0.00	$ (0.01)	$ 0.45
Weighted-average common shares outstanding			
Basic	149,436,370	151,327,560	159,195,023
Diluted	171,336,110	151,327,560	263,129,765

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

[1]Exclusive 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)	Total Shareholders' Equity
	Shares	Amount	Shares	Amount	Shares	Amount			
Balances as at December 31, 2017	-	$ -	-	$ -	141,885,067	$ 2,393	$ 901	$ (2,814)	$ 480
Shares issued for cash	-	-	-	-	8,016,315	2,612	-	-	2,612
Shares issued under stock option plan	-	-	-	-	1,040,000	69	(33)	-	36
Preferred shares issued	2,105,264	7,557	-	-	-	-	-	-	7,557
Stock-based compensation expense	-	-	-	-	-	-	615	-	615
Net earnings	-	-	-	-	-	-	-	309	309
Balances as at 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)
Balances as at 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
Share-based compensation expense	-	-	-	-	-	-	4,127	-	4,127
Issuance of common shares upon initial public offering, net of issuance costs of $32,609 (net of tax $8,462)	-	-	-	-	27,772,500	531,302	-	-	531,302
Conversion of Series A1 and A2 preferred shares	(2,105,264)	(7,546)	(6,017,784)	(74,662)	81,230,480	82,208	-	-	-
Conversion of convertible note	-	-	-	-	6,093,524	90,305	-	-	90,305
Net earnings	-	-	-	-	-	-	-	118,918	118,918
Balances as at December 31, 2020	**-**	**$ -**	**-**	$ -	**269,497,768**	**$ 710,387**	**$ 5,919**	**$ 114,202**	**$ 830,508**

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, 2018	December 31, 2019	December 31, 2020
Cash flows from operating activities:			
Net income (loss)	$ 309	$ (2,211)	$ 118,918
Cash flows from operating activities:			
Depreciation of property and equipment	918	1,604	2,317
Amortization of intangible assets	-	-	2,519
Amortization of operating lease right-of-use-assets	-	243	435
Stock-based compensation	615	890	8,397
Extinguishment of long-term debt	-	-	3,700
Accretion and other	(188)	194	830
Deferred tax expense	-	-	2,098
Unrealized foreign exchange gains and losses	-	-	177
Changes in operating assets and liabilities:			
Accounts and accrued research fees receivable	(477)	(1,803)	(5,467)
Accrued royalties receivable	-	-	(197,553)
Investment tax credit receivable	(1,208)	1,593	-
Income taxes payable	-	-	36,412
Accounts payable and accrued liabilities	180	150	6,601
Operating lease liabilities	310	2,784	(350)
Deferred revenue	3,247	(6)	21,810
Accrued royalties payable	-	-	27,143
Other operating assets and liabilities	(141)	(744)	(5,297)
Net cash provided by operating activities	3,565	2,694	22,690
Cash flows from investing activities:			
Purchases of property and equipment	(5,307)	(3,997)	(9,673)
Purchase of intangible assets	-	-	(5,000)
Repayment (issuance) of related party loans	-	(1,783)	1,783
Acquisition of Trianni	-	-	(87,643)
Investment in equity investees	-	-	(19,247)
Net cash used in investing activities	(5,307)	(5,780)	(119,780)
Cash flows from financing activities:			
Repayment of long-term debt	(899)	(399)	(19,942)
Proceeds from long-term debt	2,911	193	15,490
Proceeds from convertible debentures	-	-	89,990
Short-term borrowings	(32)	387	(387)
Issuance of common shares pursuant to exercise of stock options	37	25	1,000
Net proceeds from issuance of common shares	2,612	-	522,840
Proceeds from issuance of preferred shares - series A1 financing	7,557	(11)	-
Proceeds from issuance of preferred shares - series A2 financing	-	-	74,662
Net cash provided by financing activities	$ 12,186	$ 195	$ 683,653
Increase (decrease) in cash and cash equivalents	10,444	(2,891)	586,563
Cash and cash equivalents, beginning of year	-	10,444	7,553
Cash and cash equivalents, end of year	$ 10,444	$ 7,553	$ 594,116
Supplemental disclosure of non-cash investing and financing activities:			
Property and equipment purchases in accounts payable	548	35	656
Right-of-use assets obtained in exchange for operating lease obligation	-	2,830	1,679
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.

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 drug 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 probaiblity of success of theraputic 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") and include the accounts of the Company and its wholly owned subsidiaries. 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.

Stock split

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.

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.

3. Significant accounting policies

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, recoverability of investment tax credits receivable, value of contingent consideration payable and the fair value 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. 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 Company applied ASC 606 to all arrangements to date.

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.

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. 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 on a relative standalone selling price basis. 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.

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 2018, 2019 and 2020.

The Company's long-term assets excluding financial instruments were in Canada in 2018 and 2019, and at December 31, 2020, $133.7 million was in the U.S. and $58.5 million was in Canada.

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 receives payments from the government of Canada as investment tax credits for scientific research and experimental development expenditures. The benefits of investment tax credits are recognized 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 reasonably assured. 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.

The benefit of below-market rate government loans is treated as a government grant. The government grant benefit is measured as the difference between the fair value of the government loan estimated by discounting future principal and interest amounts at interest rates expected to be available to the Company and the proceeds for the below-market government loan. The weighted-average interest rates estimated to be available to the Company for below-market loans received was 5.5% and 8.0% in the years ended December 31, 2019 and 2020, respectively.

Deferred financing fees

Deferred financing fees include amounts charged by attorneys, accountants and service providers that are directly attributable to future financing transactions. These costs are deferred and subsequently charged against the gross proceeds of the related financing transaction upon closing of such transaction. As of December 31, 2019 and 2020, the Company had no deferred financing fees.

Functional currency

The functional currency and reporting currency of the Company and its subsidiaries is the U.S. 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) and comprehensive income (loss).

Cash and cash equivalents

Cash and cash equivalents are defined as cash on hand and deposits held with banks with maturity dates of less than three months.

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, 2019 and 2020.

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.

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.

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. 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 evaluated for impairment on an annual basis as of October 1 or more frequently if an indicator of impairment is present.

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.

The Company recognizes DTAs to the extent that these assets are more likely than not to be realized. In making such a determination, all available positive and negative evidence are considered, including future reversals of existing taxable temporary differences, projected future taxable income, tax-planning strategies, and results of recent operations. If it is determined that the DTAs in the future in excess of their net recorded amount can be realized, an adjustment to the DTA valuation allowance will be made, which would reduce the provision for income taxes.

The Company records uncertain tax positions in accordance with Accounting Standards Codification ("ASC") 740 on the basis of a two-step process in which (1) determine 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, the largest amount of tax benefit that is more than 50 percent likely to be realized upon ultimate settlement with the related tax authority is realized.

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.

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).

During 2020, the Company entered into a joint venture related to the construction of our future office headquarters. To date, the equity investment balance represents the cash contribution made since inception.

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 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.

Emerging Growth Company Status

The Company is an "emerging growth company," as defined in the Jumpstart Our Business Startups Act, or JOBS Act, and may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies. Section 107 of the JOBS Act provides that an emerging growth company can take advantage of the extended transition period afforded by the JOBS Act for the implementation of new or revised accounting standards. The Company has elected to use the extended transition period for complying with new or revised accounting standards and as a result of this election, its consolidated financial statements may not be comparable to companies that comply with public company effective dates. The Company may take advantage of these exemptions up until December 31, 2025 or such earlier time that it is no longer an emerging growth company.

4. Changes in significant accounting policies

Recent accounting pronouncements not yet adopted

On January 1, 2020, the Company adopted the new ASU 2016-13, issued by the Financial Accounting Standards Board ("FASB"), and all related amendments under ASC Topic 326, *Financial Instruments—Credit Losses*.

Adoption of this new accounting standard did not have a significant impact as on the Company's 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,		
	2018	2019	2020
Basic earnings (loss) per share			
Net earnings (loss)	$ 309	$ (2,211)	$ 118,918
Less: earnings allocated to Preferred Shareholders	(17)	-	(33,817)
Net earnings (loss) attributable to common shareholders - basic	**$ 292**	**$ (2,211)**	**$ 85,101**
Weighted-average common shares outstanding - basic	**149,436,370**	**151,327,560**	**159,195,023**
Net earnings (loss) per share attributable to common shareholders - basic	**$ 0.00**	**$ (0.01)**	**$ 0.53**
Diluted earnings (loss) per share			
Net earnings (loss) attributable to common shareholders - diluted	**$ 309**	**$ (2,211)**	**$ 118,918**
Weighted-average common shares outstanding - basic	149,436,370	151,327,560	159,195,023
Convertible Preferred Shares	8,675,540	-	63,260,090
Stock options	13,224,200	-	40,674,652
Weighted-average common shares outstanding - diluted	**171,336,110**	**151,327,560**	**263,129,765**
Net earnings (loss) per share attributable to common shareholders - diluted	**$ 0.00**	**$ (0.01)**	**$ 0.45**

The Company's potentially dilutive securities, which include convertible preferred shares and stock options have been excluded from the computation of diluted net loss per share for the year ended December 31, 2019 as the effect would be to reduce the net loss per share. Therefore, the weighted-average number of common shares outstanding for the year ended December 31, 2019 used to calculate both basic and diluted net loss per share attributable to common shareholders is the same.

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
Options to purchase common shares	37,359,000	-
Convertible preferred shares	21,052,640	-
Total potential common shares excluded	58,411,640	-

6. Other Current Assets

Other current assets consisted of the following:

	December 31,	
	2019	2020
Tax and investment tax credit receivable	$ 1,101	$ 489
Prepaid expenses	547	4,073
Materials and supplies	163	1,408
Total other current assets	$ 1,811	$ 5,970

7. Property and equipment, net

Property and equipment, net consisted of the following:

	December 31,	
	2019	2020
Computers	$ 3,830	$ 6,324
Laboratory equipment	2,302	9,423
Furniture and fixtures	85	119
Leasehold improvements	2,729	3,708
Operating lease right-of-use assets	2,691	3,935
Property and equipment	11,637	23,509
Less accumulated depreciation	(3,157)	(5,586)
Property and equipment, net	$ 8,480	$ 17,923

Depreciation expense on property and equipment for the years ended December 31, 2018, 2019 and 2020 was $918, $1,604 and $2,317, respectively.

8. 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
	$ 117,673	$ 2,520	$ 115,153

There was no balance of intangible assets, or related amortization expense, for the years ended December 31, 2018 and 2019. Amortization expense related to intangible assets was $2,520 for the year ended December 31, 2020 and is reflected within Depreciation and amortization expense on the consolidated statement of income (loss) and comprehensive income (loss).

At December 31, 2020, amortization expense on intangible assets is estimated to be as follows for each of the next five years:

	Amortization Expense
2021	$ 9,860
2022	9,860
2023	9,860
2024	5,045
2025	3,476
	$ 38,101

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 $14,060 consists of an initial cash payment of $5,000, with two additional $5,000 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).

9. Accounts payable and other liabilities

Accounts payable and other liabilities consisted of the following:

	December 31,	
	2019	2020
Accounts payable and accrued liabilities	$ 1,644	$ 7,130
Liability for in-licensing agreement	-	5,000
Bank indebtedness	387	-
Operating lease liability	419	675
Liability classified options	51	4,270
Government remittances payable	46	1,988
Current portion of deferred grant funding	32	942
Total accounts payable and other liabilities	$ 2,578	$ 20,005

10. Long-term debt

Long-term debt consisted of the following:

	December 31,	
	2019	2020
Non-revolving BMO loan	$ 2,009	$ -
WD Canada - WINN Loan A	290	275
WD Canada - WINN Loan B	1,144	1,206
WD Canada - BSP loan	-	907
Less: current portion of long-term debt	(2,080)	(190)
Total long-term debt	$ 1,363	$ 2,198

Non-revolving BMO loan

The non-revolving loan from Bank of Montreal (BMO), along with interest accrued, was paid off in full in March 2020.

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 $30,000, which matures on March 23, 2025 (a 5 year term). As of June 30, 2020, the Company had $15,000 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 $3,700 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.

WD Canada – WINN Loan A

The Company secured contribution-based, shared cost, non-interest-bearing funding from the Ministry of Western Economic Diversification under the Western Innovation Initiative (WINN), towards capital equipment and expenses for a project based in Vancouver, BC. The funding commenced on April 1, 2015 and was completed on March 31, 2018. The maximum amount of funding under the agreement was $458. The contribution is repayable to the Ministry by 59 monthly installments of $8 starting from June 1, 2018, and one final instalment of $27.

WD Canada – WINN Loan B

The Company secured contribution-based, shared cost, non-interest-bearing funding from the Ministry of Western Economic Diversification under the WINN towards capital equipment and expenses for a project based in Vancouver, BC. The funding commenced on July 1, 2017 and was completed on August 1, 2019. The maximum amount of funding under the agreement is $1,347 subject to annual maximums of: 2017 - $549; 2018 - $565; 2019 - $223. The contribution is repayable to the Ministry by 59 monthly instalments of $22 starting January 1, 2021 and one final instalment of $21.

WD Canada—Business Scale Up and Productivity (BSP) Loan

The Company secured contribution-based, shared cost, non-interest-bearing funding from the Ministry of Western Economic Diversification under the BSP towards capital equipment and expenses for a project based in Vancouver, BC. This represents the third project for which we have received funding. The maximum amount of funding under the agreement is $3,846 subject to the following maximum annual amounts based on government funding years ending March 31: 2020—$750; 2021—$1,588; 2022—$1,508. The contribution is repayable to the Ministry by 59 monthly instalments of $64 starting April 1, 2023 and one final instalment of $64.

At December 31, 2020 the Company has made draws amounting to $1,491 with respect to WD Canada loans.

Principal repayments required on the Western Economic Diversification loans over the next five years and thereafter are as follows:

	Required principal repayments
2021	$ 379
2022	379
2023	616
2024	604
2025	573
Thereafter	687
Total	$ 3,238

11. Shareholders' Equity

Common Shares

As of December 31, 2019 and 2020, 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, 2019			December 31, 2020	
	Shares authorized	Shares authorized	Shares issued and outstanding	Shares authorized	Shares issued and outstanding
Common shares	*Unlimited*	*Unlimited*	151,681,382	*Unlimited*	269,497,768

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, 2020, 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 $10,000 ($7,702) in exchange for 2,105,264 shares. Total proceeds received net of financing costs were $7,557.

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 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. Through December 31, 2020, 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 $75,000 in exchange for 6,017,784 shares. Total proceeds received net of financing costs were $74,662.

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 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. Through December 31, 2020, 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 amount of common shares.

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

		December 31, 2019		December 31, 2020	
	Shares authorized	Shares authorized	Shares issued and outstanding	Shares authorized	Shares issued and outstanding
Series A1 preferred shares	*Unlimited*	*Unlimited*	21,052,640	*Unlimited*	-

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. As of December 31, 2020, options to purchase 53,204,810 common shares were outstanding under the Pre-IPO Plan.

Options granted under the Company's Pre-IPO Plan are denominated in Canadian dollars and are translated into U.S dollars using the period end rate or the average foreign exchange rate for the period, as applicable, and have been noted for information purposes.

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.

The following table summarizes the Company's stock options granted in Canadian dollars under the Pre-IPO Plan since December 31, 2018:

	Number of Shares	Weighted-Average Exercise Price (CAD)	Weighted-Average Exercise Price (USD)	Weighted-Average Contractual Term (years)
Outstanding as of December 31, 2018	23,744,000	$ 0.20	$ 0.15	
Granted	14,905,000	0.43	0.33	
Exercised	(740,000)	0.05	0.04	
Forfeited	(550,000)	0.43	0.33	
Outstanding as of December 31, 2019	37,359,000	0.29	0.22	7.66
Granted	19,539,680	2.16	1.61	
Exercised	(2,719,870)	0.49	0.37	
Forfeited	(974,000)	1.34	1.00	
Outstanding as of December 31, 2020	53,204,810	0.95	0.71	7.67
Options exercisable as of December 31, 2020	23,511,125	$ 0.25	$ 0.18	6.14

The aggregate intrinsic value of options is calculated as the difference between the exercise price of the stock options and the fair value of the Company's common shares for those options that had exercise prices lower than the fair value of the Company's common shares. The intrinsic value for stock options exercised during the years ended December 31, 2019 and 2020 was $Nil and $6,784, respectively.

The following table summarizes the Company's stock options granted under the 2020 Plan:

	Number of Shares	Weighted-Average Exercise Price (USD)	Weighted-Average Remaining Contractual Term (years)
Outstanding, December 31, 2019	-	$ -	
Granted	1,260,840	20.00	-
Exercised	-	-	-
Forfeited	-	-	-
Outstanding as of December 31, 2020	1,260,840	20.00	9.95
Options exercisable as of December 31, 2020	-	$ -	-

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

	Year ended December 31,		
	2018	2019	2020
Research and development expenses	$ 593	$ 606	$ 5,365
General and administrative expenses	6	199	1,341
Sales and marketing expenses	16	85	1,691
	$ 615	$ 890	$ 8,397

Total stock-based compensation expense related to the new plan is nil during the year ended December 31, 2019 and $24 during the year ended December 31, 2020.

As of December 31, 2019, and 2020, there was $5,915 and $48,440 of total unrecognized compensation cost related to nonvested stock-based compensation arrangements granted under the employee share option plan. That cost is expected to be recognized over a weighted average period of 1.9 years.

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,		
	2018	2019	2020
Average risk-free interest rate[1]	3.50%	1.60%	0.64%
Expected volatility[2]	100%	100%	79%
Average expected term (years)[3]	6.25	6.25	6.11
Expected dividend yield[4]	0.00%	0.00%	0.00%
Weighted average fair value of options granted[5]	$ 0.34	$ 0.34	$ 5.60

The weighted-average valuation assumptions for liability classified stock options outstanding at December 31, 2020 are as follows:

	Year ended December 31,	
	2019	2020
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, 2019 there were no liability classified options outstanding. At December 31, 2020, there were 1,012,000 liability classified options outstanding, of which $4,270 was included in other liabilities.

12. Revenue

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

Contract liabilities

Contract liabilities represent payments received for performance obligations not yet satisfied and relate to deferred revenue, 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 December 31, 2018, 2019 and 2020 were $4,518, $4,511 and $26,321, respectively. During the years ended December 31, 2018, 2019 and 2020, the Company recognized $1,271, $2,098 and $2,982, respectively, as 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. The agreement resulted in upfront payments of $26,700, of which $21,940 was included in deferred revenue at December 31, 2020. Under the agreement, the Company is entitled to receive an aggregate of up to $29,000 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 $125,000 and mid-teens to mid-twenties on aggregate sales above $125,000. The Company expects to recognize approximately $5,801 in revenue in the next 12 months related to this agreement.

Of the remaining deferred revenue balance of $4,289, which amount is related to various other agreements, approximately $696 is expected to be recognized in revenue in the next 12 months.

13. Government Funding

In 2020 the Company received a funding commitment from the Government of Canada under Innovation, Science and Economic Development's (ISED) Strategic Innovation Fund (SIF) for a total of CAD $175,631 ($125,600) 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.

To December 31, 2020 the Company incurred $12,420 in expenditures in respect of the SIF grant funding. This amount relates primarily to spending under phase 1 of the agreement and such amounts are not repayable. An immaterial amount was claimed in respect of phase 2 of the funding commitment which includes a non-probable repayable condition that is not estimable at this time.

Of the total spend during the year ended December 31, 2020, $5,336 relates to research and development expenditures and is reflected in other income on the consolidated statement of income (loss) and comprehensive income (loss). The remaining $7,084 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 sheet.

14. Income taxes

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

	December 31,		
	2018	2019	2020
Canadian	$ 341	$ (2,015)	$ 163,077
Foreign	(32)	(196)	(5,244)
Total	$ 309	$ (2,211)	$ 157,833

The expense (benefit) for income taxes consists of:

	December 31,		
	2018	2019	2020
Canadian			
Current	$ -	$ -	$ 36,931
Deferred	-	-	2,461
	-	-	39,392
Foreign			
Current	-	-	(114)
Deferred	-	-	(363)
	-	-	(477)
Income tax expense	$ -	$ -	$ 38,915

	December 31,		
	2018	2019	2020
Current tax expense (benefit)	$ -	$ -	$ 36,817
Deferred tax expense (benefit)	-	-	2,098
Total tax expense	$ -	$ -	$ 38,915

b. The consolidated effective income tax rate differs from the expected Canadian statutory tax rate of 27% (2019 and 2018: 27%). Reconciliation between the expected tax rate on income from operations and the statutory tax rate was as follows:

	December 31,		
	2018	2019	2020
Net earnings (loss) before income taxes	$ 309	$ (2,211)	$ 157,833
Combined statutory tax rate	27%	27%	27%
Expected income tax expense (recovery) at statutory rates	83	(597)	42,615
Stock-based compensation	166	254	1,934
Change in valuation allowance	237	854	(680)
Change for (over) under accrual	(142)	49	36
Change due to SR&ED	(243)	(510)	(1,698)
Foreign exchange	(131)	(9)	(4,048)
Other	30	(41)	756
Income tax expense	$ -	$ -	$ 38,915

c. Deferred income tax assets and liabilities 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,	
	2019	2020
Deferred tax assets:		
Long-term debt	$ 450	$ 2,590
Financing fee	29	6,786
Operating lease liability	826	1,182
Net operating losses carried forward	433	408
Research and development deductions and credits	1,013	-
Other	67	949
	2,818	11,915
Deferred tax liabilities:		
Property and equipment	$ (591)	$ (707)
Intangibles	-	(26,300)
Operating lease right of use assets	(746)	(1,084)
Government funding receivable	-	(3,279)
Other	(1)	(41)
	(1,338)	(31,411)
	1,480	(19,496)
Less: valuation allowance	(1,480)	(767)
Net deferred tax asset (liability)	-	(20,263)
Deferred tax asset	1,338	11,148
Deferred tax liability	(1,338)	(31,411)
Net deferred tax assets (liability)	$ -	$ (20,263)

Amounts recognized in the Company's consolidated balance sheet as of December 31, 2019 and 2020 comprise of $Nil and $5.9 million, respectively, included in Other long-term assets and $Nil and $26.2 million, respectively, as Deferred tax liability.

Management assesses the available positive and negative evidence to estimate whether sufficient future taxable income will be generated to permit use of the existing DTAs. A significant piece of objective negative evidence evaluated was the cumulative loss incurred over the three-year period ended December 31, 2020 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 $555, $1,480 and $767 as of December 31, 2018, 2019 and 2020, 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 $1,285, $1,547 and $1,456 as of December 31, 2018, 2019 and 2020 respectively. 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	$ 325
2035	423
2036	333
2037	145
Indefinite	230
Total amount	$ 1,456

e. As of December 31, 2020, 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, 2018, 2019 and 2020 were as follows:

	2018	2019	2020
January 1 balance	$ 357	$ 448	$ 387
Gross increase - tax position in prior period	-	-	-
Gross increase - tax position in current period	448	387	109
Gross decrease - tax position in current period	(357)	(448)	(387)
December 31 balance	$ 448	$ 387	$ 109

Included in the balance of unrecognized tax benefits at December 31, 2018, 2019 and 2020 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 2020 remain subject to Canadian income tax examinations. Tax years ranging from 2017 to 2020 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.

15. Leases

The Company leases office and laboratory facilities in Vancouver, Canada and Sydney, Australia, with terms expiring within two to seven years.

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

	December 31, 2019	December 31, 2020
Operating lease liabilities:		
Current portion	$ 419	$ 675
Long-term portion	2,642	3,715
Total operating lease liabilities	$ 3,061	$ 4,390

At December 31, 2020, the future minimum lease payments of the Company's operating lease liabilities were as follows:

	Amount
2021	$ 1,045
2022	841
2023	807
2024	815
2025	856
Thereafter	1,330

The initial recognition of the lease obligation and right-of-use asset excludes leases acquired as part of a business combination that have a remaining lease term of 12 months or less on the date of acquisition. As of December 31, 2020, the weighted-average remaining lease term is 6.00 years and the discount rate used to determine the operating lease liabilities was approximately 6.5%.

The Company incurred total operating lease expenses, including fixed lease payments and non-lease components, of $625, $638 and $1,086 during the years ended December 31, 2018, 2019 and 2020, respectively.

16. Financial Instruments

The Company categorizes its financial assets and liabilities measured at fair value into a three-level hierarchy established by U.S. GAAP that prioritizes those inputs to valuation techniques used to measure fair value based on the degree to which they are observable. The three levels of the fair value hierarchy are as follows: Level 1 inputs are quoted prices in active markets for identical assets and liabilities; Level 2 inputs, other than quoted prices included within Level 1, are observable for the asset or liability either directly or indirectly; and Level 3 inputs are not observable in the market.

The Company's financial instruments consist of cash and cash equivalents, accounts receivable, loans to related parties, accounts payable and accrued liabilities and royalties payable, bank indebtedness, operating lease obligations, long-term debt, and contingent consideration payable. The carrying values of cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities, and bank indebtedness approximate their fair values due to the immediate and short-term maturity of these financial instruments. The fair value of loans to related party approximate the carrying value as the interest rates approximate the rates applicable for non-related party loans.

The estimated fair value of long-term debt of $3,400 and $2,338 at December 31, 2019 and December 31, 2020, respectively, are classified as Level 2. The estimated fair value has been determined by discounting future principal and interest amounts at estimated interest rates expected to be available to the Company at period end. Details of the fair value of the contingent consideration payable utilizing the Level 3 inputs is detailed in Note 19.

17. Commitments and contingencies

From time to time, the Company may become involved in routine litigation arising in the ordinary course of business. At each reporting date, the Company evaluates whether or not a potential loss amount or a potential range of loss is probable and reasonably estimable under the provisions of the authoritative guidance that addresses accounting for contingencies. The Company does not have contingency reserves established for any litigation liabilities and any 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 has expensed approximately $32,300 related to such obligations, of which $27,200 is included in current liabilities. There were no such payments prior to 2020.

Excluding the lease arrangements as accounted for in Note 15 – Leases, the Company has the following additional commitments in respect of several leased facilities where the lease commencement dates are subsequent to December 31, 2020:

	Amount
2021	$ 368
2022	3,388
2023	7,802
2024	7,848
2025	7,983
Thereafter	86,332

18. Financial Risk Management

Concentration of Credit Risk

Financial instruments that potentially subject the Company to a concentration of credit risk consist primarily of cash and cash equivalents and accounts receivable. Cash and cash equivalents 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 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, 2019 and 2020, accounts and accrued royalty receivable amounts were due from five and seven customers, respectively.

For the year ended December 31, 2020 we recognized our first milestone and royalty revenue streams, totaling $213,307, exclusively from our partnership with Lilly, of which $198,307 was a receivable at December 31, 2020 and collected subsequent to year end.

Interest Rate Risk

The Company's interest rate risk is primarily attributable to its cash and cash equivalents, long term contingent consideration payable, long term operating lease liability and long-term debt.

The Company believes that it does not have material exposure to changes in the fair value of cash and cash equivalents because of changes in interest rates due to the short-term nature of cash and cash equivalents. 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 exposed to the risk that the fair value or future cash flows of the contingent consideration payable, operating lease liability and long-term debt will vary as a result of changes in market interest rates. In order to manage funding needs or capital structure goals, the Company enters into debt or lease agreements 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 $5,845 and CAD $905 at December 31, 2019 and 2020, 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 loss and shareholders' equity in the Company's consolidated financial statements.

Liquidity Risk

Liquidity risk is the risk that the Company will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Company's short-term cash requirements are primarily to settle its financial liabilities, which consist primarily of accounts payable and accrued liabilities falling due on average within 30 days and current portion of contingent consideration payable, lease obligations and long term debt falling due within the next 12 months, with medium term requirements to invest in property and equipment and research and development. The Company's principal sources of liquidity to settle its financial liabilities are cash, cash equivalents and, collection of accounts and accrued receivables relating to research collaboration and license agreements, royalties and additional government grant funding as required. The Company believes that these principal sources of liquidity are sufficient to fund its operations for at least the next 12 months.

Counterparty Risk

In 2018, a significant portion of revenue was recognized from one customer representing 61%. In 2019, a significant portion of revenue was recognized from three customers representing 47%, 15% and 12%, respectively.

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.

19. Related party transactions

The Company utilizes its network of investors, directors, and advisors in executing business. As such, the Company had transactions with related parties including the following:

a) The Chief Commercial Officer of StemCell Technologies Inc. (Stemcell) was a director for the Company until September 11, 2019. Stemcell provices reagents, tools and services for life science research. The Company incurred expenditures of $26 and $29 from transactions with Stemcell during the years ended December 31, 2019 and 2020, respectively. The amounts charged were subject to normal trade terms. As of December 31, 2020, StemCell was no longer a related party of the Company.

b) Chief Executive Officer ("CEO") of the Company was the recipient of a personal loan of CAD $2,000 ($1,540) 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.

c) The General Counsel of the Company was the recipient of a loan of $200 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.

20. Acquisitions

OrthoMab

In June 2020, the Company acquired rights to the OrthoMab bispecific platform from Dualogics, LLC for $4,000. 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 $4,000 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 $90,000. 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 preliminary purchase price consideration transferred consisted of the following:

Estimated Purchase Price Consideration

		Estimated Fair Value	
Closing Payment	$	95,925	(i)
Earn-out payment		21,813	(ii)
	$	117,738	

(i) Pursuant to the merger agreement, the initial purchase price is $90 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.

As of December 31, 2020, 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 impact 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) was immaterial.

The following table summarizes the preliminary purchase price allocation for the Trianni transaction as of November 3, 2020:

Fair value of assets and liabilities acquired	Purchase Price Allocation	
Cash and cash equivalents	$ 8,282	
Other current assets	710	
Total current assets	8,992	
Other assets	223	
Intangibles	103,613	(i)
Goodwill	31,527	(ii)
Total assets	135,363	
Current liabilities	92	
Deferred income tax liability	26,525	(ii)
Total liabilities	26,617	
Estimated fair value of net identifiable assets acquired and liabilities assumed	$ 117,738	

(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	$ 21,813	3
Technology	41,400	20
IPR&D	40,400	(c)
	$ 103,613	

(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%. These fair values are based on the most recent estimate of the fair value available and will be updated as we obtain more information.

(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

21. Subsequent events

In January 2021, the Company entered into an agreement with a partner whereby we will invest $11,700 in equal shares of a Vancouver building development in Vancouver Canada to be leased by AbCellera for additional office and laboratory facilities.

Exhibit 3.1

TABLE OF CONTENTS

BUSINESS CORPORATIONS ACT

ARTICLES

of

ABCELLERA BIOLOGICS INC.

ARTICLE 14
ELECTION AND REMOVAL OF DIRECTORS

ARTICLE 15
POWERS AND DUTIES OF DIRECTORS

ARTICLE 16
DISCLOSURE OF INTEREST OF DIRECTORS

ARTICLE 17
PROCEEDINGS OF DIRECTORS

ARTICLE 18
EXECUTIVE AND OTHER COMMITTEES

ARTICLE 19
OFFICERS

ARTICLE 20
INDEMNIFICATION

ARTICLE 21
DIVIDENDS

ARTICLE 22
DOCUMENTS, RECORDS AND REPORTS

ARTICLE 23
NOTICES

BUSINESS CORPORATIONS ACT

ARTICLES

of

ABCELLERA BIOLOGICS INC.

ARTICLE 1
INTERPRETATION

1.1 Definitions. In these Articles (the "**Articles**"), unless the context otherwise requires:

"**Applicable Securities Laws**" means the applicable securities legislation of the United States and each relevant province and territory of Canada, as amended from time to time, the written rules, regulations and forms made or promulgated under any such statute and the published national instruments, multilateral instruments, policies, bulletins and notices of the securities commissions and similar regulatory authorities of the United States and each province and territory of Canada;

"**board of directors**", "**directors**" and "**board**" mean the directors of the Company for the time being;

"***Business Corporations Act***" means the *Business Corporations Act* (British Columbia) from time to time in force and all amendments thereto and includes all regulations and amendments thereto made pursuant to that Act;

"***Interpretation Act***" means the *Interpretation Act* (British Columbia) from time to time in force and all amendments thereto and includes all regulations and amendments thereto;

"**legal personal representative**" means the personal or other legal representative of a shareholder;

"**registered address**" of a shareholder means the shareholder's address as recorded in the central securities register;

"**seal**" means the seal of the Company, if any; and

"***Securities Act***" means the *Securities Act* (British Columbia) from time to time in force and all amendments thereto and includes all regulations and amendments thereto made pursuant to that Act.

1.2 Business Corporations Act and Interpretation Act Definitions Applicable. The definitions in the *Business Corporations Act* and the definitions and rules of construction in the *Interpretation Act*, with the necessary changes, so far as applicable, and unless the context requires otherwise, apply to these Articles as if they were an enactment. If there is a conflict between a definition in the *Business Corporations Act* and a definition or rule in the *Interpretation Act* relating to a term used in these Articles, the definition in the *Business Corporations Act* will prevail in relation to the use of the term in these Articles. If there is a conflict between these Articles and the *Business Corporations Act*, the *Business Corporations Act* will prevail.

ARTICLE 2
SHARES AND SHARE CERTIFICATES

2.1 Authorized Share Structure. The authorized share structure of the Company consists of shares of the class or classes and series, if any, described in the Notice of Articles of the Company.

2.2 Form of Share Certificate. Each share certificate issued by the Company must comply with, and be signed as required by, the *Business Corporations Act*.

2.3 Shareholder Entitled to Certificate or Acknowledgement. Except in respect of shares that are uncertificated shares within the meaning of the *Business Corporations Act*, each shareholder is entitled, without charge, to (a) one share certificate representing the shares of each class or series of shares registered in the shareholder's name or (b) a non-transferable written acknowledgement of the shareholder's right to obtain such a share certificate, provided that in respect of a share held jointly by several persons, the Company is not bound to issue more than one share

certificate and delivery of a share certificate for a share to one of several joint shareholders or to one of the shareholders' duly authorized agents will be sufficient delivery to all.

2.4 Delivery by Mail. Any share certificate or non-transferable written acknowledgement of a shareholder's right to obtain a share certificate may be sent to the shareholder by mail at the shareholder's registered address and neither the Company nor any director, officer or agent of the Company (including the Company's transfer agent or legal counsel) is liable for any loss to the shareholder because the share certificate or acknowledgement is lost in the mail or stolen.

2.5 Replacement of Worn Out or Defaced Certificate or Acknowledgement. If the directors are satisfied that a share certificate or a non-transferable written acknowledgement of the shareholder's right to obtain a share certificate is worn out or defaced, they must, on production to them of the share certificate or acknowledgement, as the case may be, and on such other terms, if any, as they think fit:

(a) order the share certificate or acknowledgement, as the case may be, to be cancelled; and

(b) issue a replacement share certificate or acknowledgement, as the case may be.

2.6 Replacement of Lost, Stolen or Destroyed Certificate or Acknowledgement. If a share certificate or a non-transferable written acknowledgement of a shareholder's right to obtain a share certificate is lost, stolen or destroyed, a replacement share certificate or acknowledgement, as the case may be, must be issued to the person entitled to that share certificate or acknowledgement, as the case may be, if the directors receive:

(a) proof satisfactory to them that the share certificate or acknowledgement is lost, stolen or destroyed; and

(b) any indemnity the directors consider adequate.

2.7 Splitting Share Certificates. If a shareholder surrenders a share certificate to the Company with a written request that the Company issue in the shareholder's name two or more share certificates, each representing a specified number of shares and in the aggregate representing the same number of shares as the share certificate so surrendered, the Company must cancel the surrendered share certificate and issue replacement share certificates in accordance with that request.

2.8 Certificate Fee. There must be paid to the Company, in relation to the issue of any share certificate under Articles 2.5, 2.6 or 2.7, the amount, if any and which must not exceed the amount prescribed under the *Business Corporations Act*, determined by the directors.

2.9 Recognition of Trusts. Except as required by law or statute or these Articles, no person will be recognized by the Company as holding any share upon any trust, and the Company is not bound by or compelled in any way to recognize (even when having notice thereof) any equitable, contingent, future or partial interest in any share or fraction of a share or (except as by law or statute or these Articles provided or as ordered by a court of competent jurisdiction) any other rights in respect of any share except an absolute right to the entirety thereof in the shareholder.

ARTICLE 3
ISSUE OF SHARES

3.1 Directors Authorized. Subject to the *Business Corporations Act* and the rights of the holders of issued shares of the Company, the Company may issue, allot, sell or otherwise dispose of the unissued shares, and issued shares held by the Company, at the times, to the persons, including directors, in the manner, on the terms and conditions and for the issue prices (including any premium at which shares with par value may be issued) that the directors may determine. The issue price for a share with par value must be equal to or greater than the par value of the share.

3.2 Commissions and Discounts. The Company may at any time, pay a reasonable commission or allow a reasonable discount to any person in consideration of that person purchasing or agreeing to purchase shares of the Company from the Company or any other person or procuring or agreeing to procure purchasers for shares of the Company.

3.3 Brokerage. The Company may pay such brokerage fee or other consideration as may be lawful for or in connection with the sale or placement of its securities.

3.4 Conditions of Issue. Except as provided for by the *Business Corporations Act*, no share may be issued until it is fully paid. A share is fully paid when:

(a) consideration is provided to the Company for the issue of the share by one or more of the following:

(i) past services performed for the Company;

(ii) property;

(iii) money; and

(b) the value of the consideration received by the Company equals or exceeds the issue price set for the share under Article 3.1.

3.5 Share Purchase Warrants and Rights. Subject to the *Business Corporations Act*, the Company may issue share purchase warrants, options and rights upon such terms and conditions as the directors determine, which share purchase warrants, options and rights may be issued alone or in conjunction with debentures, debenture stock, bonds, shares or any other securities issued or created by the Company from time to time.

ARTICLE 4
SHARE REGISTERS

4.1 Central Securities Register. As required by and subject to the *Business Corporations Act*, the Company must maintain in British Columbia a central securities register, which may be kept in electronic form. The directors may, subject to the *Business Corporations Act*, appoint an agent to maintain the central securities register. The directors may also appoint one or more agents, including the agent which keeps the central securities register, as transfer agent for its shares or any class or series of its shares, as the case may be, and the same or another agent as registrar for its shares or such class or series of its shares, as the case may be. The directors may terminate such appointment of any agent at any time and may appoint another agent in its place.

4.2 Closing Register. The Company must not at any time close its central securities register.

ARTICLE 5
SHARE TRANSFERS

5.1 Registering Transfers. A transfer of a share of the Company must not be registered unless:

(a) a duly signed instrument of transfer in respect of the share has been received by the Company;

(b) if a share certificate has been issued by the Company in respect of the share to be transferred, that share certificate has been surrendered to the Company; and

(c) if a non-transferable written acknowledgement of the shareholder's right to obtain a share certificate has been issued by the Company in respect of the share to be transferred, that acknowledgement has been surrendered to the Company.

5.2 Form of Instrument of Transfer. The instrument of transfer in respect of any share of the Company must be either in the form, if any, on the back of the Company's share certificates or in any other form that may be approved by the directors from time to time.

5.3 Transferor Remains Shareholder. Except to the extent that the *Business Corporations Act* otherwise provides, the transferor of shares is deemed to remain the holder of the shares until the name of the transferee is entered in a securities register of the Company in respect of the transfer.

5.4 Signing of Instrument of Transfer. If a shareholder, or the shareholder's duly authorized attorney, signs an instrument of transfer in respect of shares registered in the name of the shareholder, the signed instrument of transfer constitutes a complete and sufficient authority to the Company and its directors, officers and agents to register the number of shares specified in the instrument of transfer or specified in any other manner, or, if no number is specified, all the shares represented by the share certificates or set out in the written acknowledgements deposited with the instrument of transfer:

(a) in the name of the person named as transferee in that instrument of transfer; or

(b) if no person is named as transferee in that instrument of transfer, in the name of the person on whose behalf the instrument is deposited for the purpose of having the transfer registered.

5.5 Enquiry as to Title Not Required. Neither the Company nor any director, officer or agent of the Company is bound to inquire into the title of the person named in the instrument of transfer as transferee or, if no person is named as transferee in the instrument of transfer, of the person on whose behalf the instrument is deposited for the purpose of having the transfer registered or is liable for any claim related to registering the transfer by the shareholder or by any intermediate owner or holder of the shares, of any interest in the shares, of any share certificate representing such shares or of any written acknowledgement of a right to obtain a share certificate for such shares.

5.6 Transfer Fee. There must be paid to the Company, in relation to the registration of any transfer, the amount, if any, determined by the directors.

ARTICLE 6
TRANSMISSION OF SHARES

6.1 Legal Personal Representative Recognized on Death. In case of the death of a shareholder, the legal personal representative, or if the shareholder was a joint holder, the surviving joint holder, will be the only person recognized by the Company as having any title to the shareholder's interest in the shares. Before recognizing a person as a legal personal representative, the directors may require proof of appointment by a court of competent jurisdiction, a grant of letters probate, letters of administration or such other evidence or documents as the directors consider appropriate.

6.2 Rights of Legal Personal Representative. The legal personal representative has the same rights, privileges and obligations that attach to the shares held by the shareholder, including the right to transfer the shares in accordance with these Articles, provided the documents required by the *Business Corporations Act* and the directors have been deposited with the Company.

ARTICLE 7
PURCHASE OF SHARES

7.1 Company Authorized to Purchase or Otherwise Acquire Shares. Subject to Article 7.2, the special rights and restrictions attached to the shares of any class or series, the *Business Corporations Act* and the Applicable Securities Laws, the Company may, if authorized by the directors, purchase or otherwise acquire any of its shares at the price and upon the terms determined by the directors.

7.2 Purchase When Insolvent. The Company must not make a payment or provide any other consideration to purchase or otherwise acquire any of its shares if there are reasonable grounds for believing that:

(a) the Company is insolvent; or

(b) making the payment or providing the consideration would render the Company insolvent.

7.3 Sale and Voting of Purchased, Redeemed, or Otherwise Acquired Shares. If the Company retains a share purchased, redeemed, or otherwise acquired by it, the Company may sell, gift or otherwise dispose of the share, but, while such share is held by the Company, it:

(a) is not entitled to vote the share at a meeting of its shareholders;

(b) must not pay a dividend in respect of the share; and

(c) must not make any other distribution in respect of the share.

ARTICLE 8
BORROWING POWERS

8.1 Borrowing Powers. The Company, if authorized by the directors, may:

(a) borrow money in the manner and amount, on the security, from the sources and on the terms and conditions that the directors consider appropriate;

(b) issue bonds, debentures and other debt obligations either outright or as security for any liability or obligation of the Company or any other person and at such discounts or premiums and on such other terms as the directors consider appropriate;

(c) guarantee the repayment of money by any other person or the performance of any obligation of any other person; and

(d) mortgage, charge, whether by way of specific or floating charge, grant a security interest in, or give other security on, the whole or any part of the present and future assets and undertaking of the Company.

ARTICLE 9
ALTERATIONS

9.1 Alteration of Authorized Share Structure. Subject to Articles 9.2 and 9.3, the *Business Corporations Act* and the special rights and restrictions attached to the shares of any class or series, the Company may by special resolution:

(a) create one or more classes or series of shares or, if none of the shares of a class or series of shares are allotted or issued, eliminate that class or series of shares;

(b) increase, reduce or eliminate the maximum number of shares that the Company is authorized to issue out of any class or series of shares or establish a maximum number of shares that the Company is authorized to issue out of any class or series of shares for which no maximum is established;

(c) subdivide or consolidate all or any of its unissued, or fully paid issued, shares;

(d) if the Company is authorized to issue shares of a class of shares with par value:

(i) decrease the par value of those shares; or

(ii) if none of the shares of that class of shares are allotted or issued, increase the par value of those shares;

(e) change all or any of its unissued, or fully paid issued, shares with par value into shares without par value or any of its unissued shares without par value into shares with par value;

(f) alter the identifying name of any of its shares; or

(g) otherwise alter its shares or authorized share structure when required or permitted to do so by the *Business Corporations Act*;

and, if applicable, alter its Notice of Articles and Articles accordingly.

9.2 Special Rights and Restrictions. Subject to Article 9.3, the special rights or restrictions attached to any class or series of shares and the *Business Corporations Act*, the Company may by special resolution:

(a) create special rights or restrictions for, and attach those special rights or restrictions to, the shares of any class or series of shares, whether or not any or all of those shares have been issued; or

(b) vary or delete any special rights or restrictions attached to the shares of any class or series of shares, whether or not any or all of those shares have been issued;

and alter its Articles or Notice of Articles accordingly.

9.3 No Interference with Class or Series Rights without Consent. A right or special right attached to issued shares must not be prejudiced or interfered with under the *Business Corporations Act*, the Notice of Articles or these

Articles unless the holders of shares of the class or series of shares to which the right or special right is attached consent by a special separate resolution of the holders of such class or series of shares.

9.4 Change of Name. The Company may by directors'resolution authorize an alteration of its Notice of Articles in order to change its name.

9.5 Other Alterations. If the *Business Corporations Act* does not specify the type of resolution and these Articles do not specify another type of resolution, the Company may by special resolution alter these Articles.

ARTICLE 10
MEETINGS OF SHAREHOLDERS

10.1 Annual General Meetings. Unless an annual general meeting is deferred or waived in accordance with the *Business Corporations Act*, the Company must hold an annual general meeting at least once in each calendar year and not more than 15 months after the last annual reference date at such time and place as may be determined by the directors.

10.2 Resolution Instead of Annual General Meeting. If all the shareholders who are entitled to vote at an annual general meeting consent by a unanimous resolution under the *Business Corporations Act* to all of the business that is required to be transacted at that annual general meeting, the annual general meeting is deemed to have been held on the date of the unanimous resolution. The shareholders must, in any unanimous resolution passed under this Article 10.2, select as the Company's annual reference date a date that would be appropriate for the holding of the applicable annual general meeting.

10.3 Calling of Meetings of Shareholders. The directors may, whenever they think fit, call a meeting of shareholders, to be held at such time and place as may be determined by the directors.

10.4 Notice for Meetings of Shareholders. The Company must send notice of the date, time and location of any meeting of shareholders, in the manner provided in these Articles, or in such other manner, if any, as may be prescribed by ordinary resolution (whether previous notice of the resolution has been given or not), to each shareholder entitled to attend the meeting, to each director and to the auditor of the Company, unless these Articles otherwise provide, at least the following number of days before the meeting:

(a) if and for so long as the Company is a public company, 21 days;

(b) otherwise, 10 days.

10.5 Record Date for Notice. The directors may set a date as the record date for the purpose of determining shareholders entitled to notice of any meeting of shareholders. The record date must not precede the date on which the meeting is to be held by more than two months or, in the case of a general meeting requisitioned by shareholders under the *Business Corporations Act*, by more than four months. The record date must not precede the date on which the meeting is held by fewer than:

(a) if and for so long as the Company is a public company, 21 days;

(b) otherwise, 10 days.

If no record date is set, the record date is 5 p.m. on the day immediately preceding the first date on which the notice is sent or, if no notice is sent, the beginning of the meeting.

10.6 Record Date for Voting. The directors may set a date as the record date for the purpose of determining shareholders entitled to vote at any meeting of shareholders. The record date must not precede the date on which the meeting is to be held by more than two months or, in the case of a general meeting requisitioned by shareholders under the *Business Corporations Act*, by more than four months. If no record date is set, the record date is 5 p.m. on the day immediately preceding the first date on which the notice is sent or, if no notice is sent, the beginning of the meeting.

10.7 Failure to Give Notice and Waiver of Notice. The accidental omission to send notice of any meeting to, or the non-receipt of any notice by, any of the persons entitled to notice does not invalidate any proceedings at that meeting. Any person entitled to notice of a meeting of shareholders may, in writing or otherwise, waive or reduce

the period of notice of such meeting. Attendance of a person at a meeting of shareholders is a waiver of entitlement to notice of the meeting unless that person attends the meeting for the express purpose of objecting to the transaction of any business on the grounds that the meeting is not lawfully called.

10.8 Notice of Special Business at Meetings of Shareholders. If a meeting of shareholders is to consider special business within the meaning of Article 11.1, the notice of meeting must:

(a) state the general nature of the special business; and

(b) if the special business includes considering, approving, ratifying, adopting or authorizing any document or the signing of or giving of effect to any document, have attached to it a copy of the document or state that a copy of the document will be available for inspection by shareholders:

(i) at the Company's records office, or at such other reasonably accessible location in British Columbia as is specified in the notice; and

(ii) during statutory business hours on any one or more specified days before the day set for the holding of the meeting.

For the avoidance of doubt, any special business that is not set out in the notice of meeting shall not be approved at that meeting.

10.9 Class Meetings and Series Meetings of Shareholders. Unless otherwise specified in these Articles, the provisions of these Articles relating to a meeting of shareholders will apply, with the necessary changes and so far as they are applicable, to a class meeting or series meeting of shareholders holding a particular class or series of shares.

10.10 Meetings by Telephone or Other Communications Medium. The directors may determine that a meeting of shareholders shall be held entirely by means of telephonic, electronic or other communication facilities that permit all participants to communicate with each other during the meeting. A meeting of shareholders may also be held at which some, but not necessarily all, persons entitled to attend may participate by means of such communications facilities, if the directors determine to make them available. A person participating in a meeting by such means is deemed to be present at the meeting.

10.11 Advance Notice of Nominations of Directors.

(a) Nomination Procedures - Subject only to the *Business Corporations Act*, Applicable Securities Law and these Articles, only persons who are nominated in accordance with the following procedures shall be eligible for election as directors of the Company. Nominations of persons for election to the board may be made at any annual meeting of shareholders, or at any special meeting of shareholders if the election of directors is a matter specified in the notice of meeting,

(i) by or at the direction of the board, including pursuant to a notice of meeting;

(ii) by or at the direction or request of one or more shareholders pursuant to a proposal made in accordance with the provisions of the *Business Corporations Act*, or a requisition of the shareholders made in accordance with the provisions of the *Business Corporations Act*; or

(iii) by any person (a "**Nominating Shareholder**") who (A) at the close of business on the date of the giving of the notice provided for in this Article 10.11 and on the record date for notice of such meeting, is entered in the securities register as a holder of one or more shares carrying the right to vote at such meeting or who beneficially owns shares that are entitled to be voted at such meeting and provides evidence of such beneficial ownership to the Company, and (B) has given timely notice in proper written form as set forth in this Article 10.11.

(b) Manner of timely notice - To be timely, a Nominating Shareholder's notice must be received by the corporate secretary of the Company at the principal executive office or registered office of the Company:

(i) in the case of an annual meeting (including an annual and special meeting) of shareholders, not later than the close of business on the 30th day prior to the date of the meeting; provided, however, that in the event that the meeting is to be held on a date that is less than 50 days after the date (the "**Notice Date**") on which the first public announcement of the date of the meeting was made, notice by the Nominating Shareholder may be made not later than the close of business on the tenth (10th) day following the Notice Date; and

(ii) in the case of a special meeting (which is not also an annual meeting) of shareholders called for the purpose of electing directors (whether or not called for other purposes), not later than the close of business on the fifteenth (15th) day following the day on which the first public announcement of the date of the meeting was made.

(c) Proper form of notice - To be in proper written form, a Nominating Shareholder's notice must comply with this Article 10.11 and must set forth:

(i) as to each person whom the Nominating Shareholder proposes to nominate for election as a director:

(A) their name, age, business and residential address, and principal occupation or employment for the past five years;

(B) their direct or indirect beneficial ownership in, or control or direction over, any class or series of securities of the Company, including the number or principal amount; and

(C) any other information that would be required to be disclosed in a dissident proxy circular or other filings required to be made in connection with the solicitation of proxies for election of directors pursuant to the *Business Corporations Act* or Applicable Securities Laws; and

(ii) as to each Nominating Shareholder giving the notice:

(A) their name, business and residential address;

(B) any direct or indirect beneficial ownership in, or control or direction over, any class or series of securities of the Company, including the number or principal amount;

(C) any proxy, contract, arrangement, agreement or understanding pursuant to which such person, or any of its Affiliates or Associates, or any person acting jointly or in concert with such person, has any interests, rights or obligations relating to the voting of any securities of the Company or the nomination of directors to the board; and

(D) any other information relating to such person that would be required to be included in a dissident proxy circular or other filings required to be made in connection with solicitations of proxies for election of directors pursuant to the *Business Corporations Act* or as required by Applicable Securities Laws.

References to "Nominating Shareholder" in this Article 10.11 shall be deemed to refer to each shareholder that nominates a person for election as a director in the case of a nomination proposal where more than one shareholder is involved in making such nomination proposal.

(d) Currency of information - All information to be provided in a timely notice pursuant to this Article 10.11 shall be provided as of the record date for determining shareholders entitled to vote at the meeting (if such date shall then have been publicly announced) and as of the date of such notice. The Nominating Shareholder shall update such information to the extent necessary so that it is true and correct as of the date that is ten (10) business days prior to the date of the meeting, or any adjournment or postponement thereof.

(e) Power of the chair - The chair of the meeting shall have the power and duty to determine whether a nomination was made in accordance with the procedures set forth in the foregoing provisions and, if any proposed nomination is not in compliance with such foregoing provisions, to declare that such defective nomination shall be disregarded.

(f) Delivery of notice - Notwithstanding any other provision of these Articles, notice given to the corporate secretary of the Company pursuant to this Article 10.11 may only be given by personal delivery, facsimile transmission or by email (at such email address as may be stipulated from time to time on the Company's website for general inquiries), and shall be deemed to have been given and made only at the time it is served by personal delivery to the corporate secretary at the address of the principal executive offices of the Company, email (at the address as aforesaid and provided that confirmation of receipt of such email has been received) or sent by facsimile transmission (provided that receipt of the confirmation of such transmission has been received); provided that if such delivery or electronic communication is made on a day which is not a business day or later than 5:00 p.m. (Vancouver time) on a day which is a business day, then such delivery or electronic communication shall be deemed to have been made on the subsequent day that is a business day.

(g) Exclusive Means – For the avoidance of doubt, this Article 10.11 shall be the exclusive means for any person to bring nominations for election to the board at or in connection with any annual or special meeting of the shareholders of the Company.

(h) Waiver - Notwithstanding the foregoing, the board may, in its sole discretion, waive any requirement in this Article 10.11.

(i) Definitions - For purposes of this Article 10.11,

"**Affiliate**", when used to indicate a relationship with a specific person, shall mean a person that directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, such specified person;

"**Associate**", when used to indicate a relationship with a specified person, shall mean (i) any body corporate or trust of which such person beneficially owns, directly or indirectly, voting securities carrying more than 10% of the voting rights attached to all voting securities of such body corporate or trust for the time being outstanding, (ii) any partner of that person, (iii) any trust or estate in which such person has a substantial beneficial interest or as to which such person serves as trustee or in a similar capacity, (iv) a spouse of such specified person, (v) any person of either sex with whom such specified person is living in conjugal relationship outside marriage or (vi) any relative of such specified person or of a person mentioned in clauses (iv) or (v) of this definition if that relative has the same residence as the specified person;

"**beneficially owns**" or "**beneficially owned**" means, in connection with the ownership of shares in the capital of the Company by a person, (i) any such shares as to which such person or any of such person's Affiliates or Associates owns at law or in equity, or has the right to acquire or become the owner at law or in equity, where such right is exercisable immediately or after the passage of time and whether or not on condition or the happening of any contingency or the making of any payment, upon the exercise of any conversion right, exchange right or purchase right attaching to any securities, or pursuant to any agreement, arrangement, pledge or understanding whether or not in writing; (ii) any such shares as to which such person or any of such person's Affiliates or Associates has the right to vote, or the right to direct the voting, where such right is exercisable immediately or after the passage of time and whether or not on condition or the happening of any contingency or the making of any payment, pursuant to any agreement, arrangement, pledge or understanding whether or not in writing; (iii) any such shares which are beneficially owned, directly or indirectly, by a Counterparty (or any of such Counterparty's Affiliates or Associates) under any Derivatives Contract (without regard to any short or similar position under the same or any other Derivatives Contract) to which such person or any of such person's Affiliates or Associates is a Receiving Party; provided, however that the number of shares that a person beneficially owns pursuant to this clause (iii) in connection with a particular Derivatives Contract shall not exceed the number of Notional Securities with respect to such Derivatives Contract; provided, further, that the number of securities owned beneficially by each Counterparty (including their respective Affiliates and Associates) under a Derivatives Contract shall for purposes of this clause be deemed to include all securities that are owned beneficially, directly or indirectly, by any other Counterparty (or any of such other Counterparty's Affiliates or Associates) under any Derivatives Contract to which such first Counterparty (or any of such first Counterparty's Affiliates or Associates) is a Receiving Party and this proviso shall be applied to successive Counterparties as appropriate; and (iv) any such shares which are owned beneficially within the meaning of this definition by any other person with whom such person is acting jointly or in concert with respect to the Company or any of its securities;

"**close of business**" means 5:00 p.m. (Vancouver time) on a business day in British Columbia, Canada;

"**Derivatives Contract**" shall mean a contract between two parties (the "**Receiving Party**" and the "**Counterparty**") that is designed to expose the Receiving Party to economic benefits and risks that correspond substantially to the ownership by the Receiving Party of a number of shares in the capital of the Company or securities convertible into such shares specified or referenced in such contract (the number corresponding to such economic benefits and risks, the "**Notional Securities**"), regardless of whether obligations under such contract are required or permitted to be settled through the delivery of cash, shares in the capital of the Company or securities convertible into such shares or other property, without regard to any short position under the same or any other Derivatives Contract. For the avoidance of doubt, interests in broad-based index options, broad-based index futures and broad-based publicly traded market baskets of stocks approved for trading by the appropriate governmental authority shall not be deemed to be Derivatives Contracts; and

"**public announcement**" shall mean disclosure in a press release reported by a national news service in Canada or the United States, or in a document publicly filed by the Company under its profile on the System for Electronic Document Analysis and Retrieval at www.sedar.com or on the Electronic Data Gathering, Analysis and Retrieval system at https://www.sec.gov/edgar/searchedgar/companysearch.html.

ARTICLE 11
PROCEEDINGS AT MEETINGS OF SHAREHOLDERS

11.1 Special Business. At a meeting of shareholders, the following business is special business:

(a) at a meeting of shareholders that is not an annual general meeting, all business is special business except business relating to the conduct of or voting at the meeting;

(b) at an annual general meeting, all business is special business except for the following:

(i) business relating to the conduct of or voting at the meeting;

(ii) consideration of any financial statements of the Company presented to the meeting;

(iii) consideration of any reports of the directors or auditor;

(iv) the setting or changing of the number of directors;

(v) the election or appointment of directors;

(vi) the appointment of an auditor;

(vii) the setting of the remuneration of an auditor;

(viii) business arising out of a report of the directors not requiring the passing of a special resolution or an exceptional resolution;

(ix) any other business which, under these Articles or the *Business Corporations Act*, may be transacted at a meeting of shareholders without prior notice of the business being given to the shareholders.

11.2 Special Majority. The majority of votes required for the Company to pass a special resolution at a meeting of shareholders is two-thirds of the votes cast on the resolution.

11.3 Quorum. Subject to the special rights and restrictions attached to the shares of any class or series of shares and Article 11.4, the quorum for the transaction of business at a meeting of shareholders is two persons who are, or who represent by proxy, shareholders who, in the aggregate, hold at least a majority of the issued shares entitled to be voted at the meeting.

11.4 One Shareholder May Constitute Quorum. If there is only one shareholder entitled to vote at a meeting of shareholders:

(a) the quorum is one person who is, or who represents by proxy, that shareholder, and

(b) that shareholder, present in person or by proxy, may constitute the meeting.

11.5 Other Persons May Attend. In addition to those persons who are entitled to vote at a meeting of shareholders, the only other persons entitled to be present at the meeting are the directors, the officers, any lawyer for the Company, the auditor of the Company, any other persons invited to be present at the meeting by the directors or by the chair of the meeting and any persons entitled or required under the *Business Corporations Act* or these Articles to be present at the meeting; but if any of those persons does attend the meeting, that person is not to be counted in the quorum and is not entitled to vote at the meeting unless that person is a shareholder or proxy holder entitled to vote at the meeting.

11.6 Requirement of Quorum. No business, other than the election of a chair of the meeting and the adjournment of the meeting, may be transacted at any meeting of shareholders unless a quorum of shareholders entitled to vote is present at the commencement of the meeting, but such quorum need not be present throughout the meeting.

11.7 Lack of Quorum. If, within one-half hour from the time set for the holding of a meeting of shareholders, a quorum is not present:

(a) in the case of a general meeting requisitioned by shareholders, the meeting is dissolved, and

(b) in the case of any other meeting of shareholders, the meeting stands adjourned to the same day in the next week at the same time and place.

11.8 Lack of Quorum at Succeeding Meeting. If, at the meeting to which the meeting referred to in Article 11.7(b) was adjourned, a quorum is not present within one-half hour from the time set for the holding of the meeting, the person or persons present and being, or representing by proxy, one or more shareholders entitled to attend and vote at the meeting constitute a quorum.

11.9 Chair. The following individual is entitled to preside as chair at a meeting of shareholders:

(a) the chair of the board, if any; or

(b) if the chair of the board is absent or unwilling to act as chair of the meeting, the president, if any.

11.10 Selection of Alternate Chair. If, at any meeting of shareholders, there is no chair of the board or president present within 15 minutes after the time set for holding the meeting, or if the chair of the board and the president are unwilling to act as chair of the meeting, or if the chair of the board and the president have advised the secretary, if any, or any director present at the meeting, that they will not be present at the meeting, the directors present must choose one of their number to be chair of the meeting or if all of the directors present decline to take the chair or fail to so choose or if no director is present, the shareholders entitled to vote at the meeting who are present in person or by proxy may choose any person present at the meeting to chair the meeting.

11.11 Adjournments. The chair of a meeting of shareholders may, and if so directed by the meeting must, adjourn the meeting from time to time and from place to place, but no business may be transacted at any adjourned meeting other than the business left unfinished at the meeting from which the adjournment took place.

11.12 Notice of Adjourned Meeting. It is not necessary to give any notice of an adjourned meeting of shareholders or of the business to be transacted at an adjourned meeting of shareholders except that, when a meeting is adjourned for 30 days or more, notice of the adjourned meeting must be given as in the case of the original meeting.

11.13 Decision by Show of Hands or Poll. Subject to the *Business Corporations Act*, every motion put to a vote at a meeting of shareholders will be decided on a show of hands, or the functional equivalent of a show of hands by means of electronic, telephonic or other communications facility unless a poll, before or on the declaration of the result of the vote by show of hands or the functional equivalent of a show of hands, is directed by the chair or demanded by at least one shareholder entitled to vote who is present in person or by proxy.

11.14 Declaration of Result. The chair of a meeting of shareholders must declare to the meeting the decision on every question in accordance with the result of the show of hands (or its functional equivalent) or the poll, as the case may be, and that decision must be entered in the minutes of the meeting. A declaration of the chair that a resolution is carried by the necessary majority or is defeated is, unless a poll is directed by the chair or demanded under Article 11.13, conclusive evidence without proof of the number or proportion of the votes recorded in favour of or against the resolution.

11.15 Motion Need Not be Seconded. No motion proposed at a meeting of shareholders need be seconded unless the chair of the meeting rules otherwise, and the chair of any meeting of shareholders is entitled to propose or second a motion.

11.16 Casting Vote. In the case of an equality of votes, the chair of a meeting of shareholders does not, either on a show of hands (or its functional equivalent) or on a poll, have a second or casting vote in addition to the vote or votes to which the chair may be entitled as a shareholder.

11.17 Manner of Taking Poll. Subject to Article 11.18, if a poll is duly demanded at a meeting of shareholders:

(a) the poll must be taken:

(i) at the meeting, or within seven days after the date of the meeting, as the chair of the meeting directs; and

(ii) in the manner, at the time and at the place that the chair of the meeting directs;

(b) the result of the poll is deemed to be the decision of the meeting at which the poll is demanded; and

(c) the demand for the poll may be withdrawn by the person who demanded it.

11.18 Demand for Poll on Adjournment. A poll demanded at a meeting of shareholders on a question of adjournment must be taken immediately at the meeting.

11.19 Chair Must Resolve Dispute. In the case of any dispute as to the admission or rejection of a vote given on a poll, the chair of the meeting must determine the dispute, and the chair's determination made in good faith is final and conclusive.

11.20 Casting of Votes. On a poll, a shareholder entitled to more than one vote need not cast all the votes in the same way.

11.21 No Demand for Poll on Election of Chair. No poll may be demanded in respect of the vote by which a chair of a meeting of shareholders is elected.

11.22 Demand for Poll Not to Prevent Continuance of Meeting. The demand for a poll at a meeting of shareholders does not, unless the chair of the meeting so rules, prevent the continuation of a meeting for the transaction of any business other than the question on which a poll has been demanded.

11.23 Retention of Ballots and Proxies. The Company or its agent must, for at least three months after a meeting of shareholders, keep each ballot cast on a poll and each proxy voted at the meeting, and, during that period, make them available for inspection during normal business hours by any shareholder or proxy holder entitled to vote at the meeting. At the end of such three month period, the Company may destroy such ballots and proxies.

ARTICLE 12
VOTES OF SHAREHOLDERS

12.1 Number of Votes by Shareholder or by Shares. Subject to any special rights or restrictions attached to any shares and to the restrictions imposed on joint shareholders under Article 12.3:

(a) on a vote by show of hands (or its functional equivalent), every person present who is a shareholder or proxy holder and entitled to vote on the matter has one vote; and

(b) on a poll, every shareholder entitled to vote on the matter has one vote in respect of each share entitled to be voted on the matter and held by that shareholder and may exercise that vote either in person or by proxy.

12.2 Votes of Persons in Representative Capacity. A person who is not a shareholder may vote at a meeting of shareholders, whether on a show of hands (or its functional equivalent) or on a poll, and may appoint a proxy holder to act at the meeting, if, before doing so, the person satisfies the chair of the meeting, or the directors, that the person is a legal personal representative or a trustee in bankruptcy for a shareholder who is entitled to vote at the meeting.

12.3 Votes by Joint Holders. If there are joint shareholders registered in respect of any share:

(a) any one of the joint shareholders may vote at any meeting of shareholders, personally or by proxy, in respect of the share as if that joint shareholder were solely entitled to it; or

(b) if more than one of the joint shareholders is present at any meeting of shareholders, personally or by proxy, and more than one of them votes in respect of that share, then only the vote of the joint shareholder present whose name stands first on the central securities register in respect of the share will be counted.

12.4 Legal Personal Representatives as Joint Shareholders. Two or more legal personal representatives of a shareholder in whose sole name any share is registered are, for the purposes of Article 12.3, deemed to be joint shareholders.

12.5 Representative of a Corporate Shareholder. If a corporation, that is not a subsidiary of the Company, is a shareholder, that corporation may appoint a person to act as its representative at any meeting of shareholders of the Company, and:

(a) for that purpose, the instrument appointing a representative must be received:

(i) at the registered office of the Company or at any other place specified, in the notice calling the meeting, for the receipt of proxies, at least the number of business days specified in the notice for the receipt of proxies, or if no number of days is specified, two business days before the day set for the holding of the meeting or adjourned or postponed meeting; or

(ii) at the meeting or any adjourned or postponed meeting, to the chair of the meeting or adjourned or postponed meeting or by a person designated by the chair of the meeting or adjourned or postponed meeting;

(b) if a representative is appointed under this Article 12.5:

(i) the representative is entitled to exercise in respect of and at that meeting the same rights on behalf of the corporation that the representative represents as that corporation could exercise if it were a shareholder who is an individual, including, without limitation, the right to appoint a proxy holder; and

(ii) the representative, if present at the meeting, is to be counted for the purpose of forming a quorum and is deemed to be a shareholder present in person at the meeting.

Evidence of the appointment of any such representative may be sent to the Company or its transfer agent by written instrument, fax or any other method of transmitting legibly recorded messages.

12.6 Proxy Provisions Do Not Apply to All Companies. Articles 12.7 to 12.15 do not apply to the Company if and for so long as it is a public company or a pre-existing reporting company which has the Statutory Reporting Company Provisions as part of its Articles or to which the Statutory Reporting Company Provisions apply.

12.7 Appointment of Proxy Holders. Every shareholder of the Company, including a corporation that is a shareholder but not a subsidiary of the Company, entitled to vote at a meeting of shareholders of the Company may, by proxy, appoint one or more (but not more than five) proxy holders to attend and act at the meeting in the manner, to the extent and with the powers conferred by the proxy.

12.8 Alternate Proxy Holders. A shareholder may appoint one or more alternate proxy holders to act in the place of an absent proxy holder.

12.9 When Proxy Holder Need Not Be Shareholder. A person must not be appointed as a proxy holder unless the person is a shareholder, although a person who is not a shareholder may be appointed as a proxy holder if:

(a) the person appointing the proxy holder is a corporation or a representative of a corporation appointed under Article 12.5;

(b) the Company has at the time of the meeting for which the proxy holder is to be appointed only one shareholder entitled to vote at the meeting; or

(c) the shareholders present in person or by proxy at and entitled to vote at the meeting for which the proxy holder is to be appointed, by a resolution on which the proxy holder is not entitled to vote but in respect of which the proxy holder is to be counted in the quorum, permit the proxy holder to attend and vote at the meeting.

12.10 Deposit of Proxy. A proxy for a meeting of shareholders must:

(a) be received at the registered office of the Company or at any other place specified, in the notice calling the meeting, for the receipt of proxies, at least the number of business days specified in the notice, or if no number of days is specified, two business days before the day set for the holding of the meeting or any adjourned meeting;

(b) unless the notice provides otherwise, be provided, at the meeting or any adjourned meeting, to the chair of the meeting or to a person designated by the chair of the meeting; or

(c) be received in any other manner determined by the board or the chair of the meeting.

A proxy may be sent to the Company by written instrument, fax or any other method of transmitting legibly recorded messages or by using such available internet or telephone voting services as may be approved by the directors.

12.11 Validity of Proxy Vote. A vote given in accordance with the terms of a proxy is valid notwithstanding the death or incapacity of the shareholder giving the proxy and despite the revocation of the proxy or the revocation of the authority under which the proxy is given, unless notice in writing of that death, incapacity or revocation is received:

(a) at the registered office of the Company, at any time up to and including the last business day before the day set for the holding of the meeting or any adjourned meeting at which the proxy is to be used; or

(b) at the meeting or any adjourned meeting by the chair of the meeting or adjourned meeting, before any vote in respect of which the proxy has been given has been taken.

12.12 Form of Proxy. A proxy, whether for a specified meeting or otherwise, must be either in the following form or in any other form approved by the directors or the chair of the meeting:

AbCellera Biologics Inc.
(the "Company")

The undersigned, being a shareholder of the Company, hereby appoints *[name]* or, failing that person, *[name]*, as proxy holder for the undersigned to attend, act and vote for and on behalf of the undersigned at the meeting of shareholders of the Company to be held on *[month, day, year]* and at any adjournment of that meeting.

Number of shares in respect of which this proxy is given (if no number is specified, then this proxy if given in respect of all shares registered in the name of the shareholder): _____.

Signed this _____ day of _____, _____.

_____
(Signature of shareholder)

_____
(Name of shareholder—printed)

12.13 Revocation of Proxy. Subject to Article 12.14, every proxy may be revoked by an instrument in writing that is received:

(a) at the registered office of the Company at any time up to and including the last business day before the day set for the holding of the meeting at which the proxy is to be used; or

(b) at the meeting or any adjourned meeting, by the chair of the meeting or any adjourned meeting, before any vote in respect of which the proxy has been given has been taken.

12.14 Revocation of Proxy Must Be Signed. An instrument referred to in Article 12.13 must be signed as follows:

(a) if the shareholder for whom the proxy holder is appointed is an individual, the instrument must be signed by the shareholder or the shareholder's legal personal representative or trustee in bankruptcy;

(b) if the shareholder for whom the proxy holder is appointed is a corporation, the instrument must be signed by the corporation or by a representative appointed for the corporation under Article 12.5.

12.15 Chair May Determine Validity of Proxy. The chair of any meeting of shareholders may determine whether or not a proxy deposited for use at the meeting, which may not strictly comply with the requirements of this Article 12 as to form, execution, accompanying documentation, time of filing or otherwise, shall be valid for use at the meeting, and any such determination made in good faith shall be final, conclusive and binding upon the meeting.

12.16 Production of Evidence of Authority to Vote. The directors or the chair of any meeting of shareholders may, but need not, inquire into the authority of any person to vote at the meeting and may, but need not, demand from that person production of evidence as to the existence of the authority to vote.

ARTICLE 13
DIRECTORS

13.1 Number of Directors. The number of directors, excluding additional directors appointed under Article 14.10, is set at:

(a) if the Company is a public company, a number that is no less than three (3) and no greater than ten (10), and which shall be the most recently set of:

(i) the number of directors set by the board of directors of the Company; and

(ii) the number of directors set under Article 14.6;

(b) if the Company is not a public company, the most recently set of:

(i) the number of directors set by the board of directors of the Company; and

(ii) the number of directors set under Article 14.6.

13.2 Change in Number of Directors. If the number of directors is set under Article 13.1(a)(i) or 13.1(b)(i):

(a) the shareholders may elect the directors needed to fill any vacancies in the board of directors up to that number;

(b) if the shareholders do not elect the directors needed to fill any vacancies in the board of directors up to that number contemporaneously with the setting of that number, then the directors may appoint directors to fill those vacancies.

13.3 Directors' Acts Valid Despite Vacancy. An act or proceeding of the directors is not invalid merely because fewer than the number of directors set or otherwise required under these Articles is in office.

13.4 Qualifications of Directors. Notwithstanding any other provision of these Articles, a director is not required to hold a share in the capital of the Company as qualification for the director's office but must be qualified as required by the *Business Corporations Act* to become, act or continue to act as a director.

13.5 Remuneration of Directors. The directors are entitled to the remuneration for acting as directors, if any, as the directors may from time to time determine. If the directors so decide, the remuneration of the directors, if any, will be determined by the shareholders. That remuneration may be in addition to any salary or other remuneration paid to any officer or employee of the Company as such, who is also a director.

13.6 Reimbursement of Expenses of Directors. The Company must reimburse each director for the reasonable expenses that he or she may incur in and about the business of the Company.

13.7 Special Remuneration for Directors. If any director performs any professional or other services for the Company that in the opinion of the directors are outside the ordinary duties of, or not in that individual's capacity as, a director, or if any director is otherwise specially occupied in or about the Company's business, he or she may be paid remuneration fixed by the directors, or, at the option of that director, fixed by ordinary resolution, and such remuneration may be either in addition to, or in substitution for, any other remuneration that he or she may be entitled to receive.

13.8 Gratuity, Pension or Allowance on Retirement of Director. Unless otherwise determined by ordinary resolution, the directors on behalf of the Company may pay a gratuity or pension or allowance on retirement to any director who has held any salaried office or place of profit with the Company or to that director's spouse or dependants and may make contributions to any fund and pay premiums for the purchase or provision of any such gratuity, pension or allowance.

ARTICLE 14
ELECTION AND REMOVAL OF DIRECTORS

14.1 Staggered Terms. For purposes of facilitating staggered terms on the board, the following provisions shall apply:

(a) one-third of the directors (or if the number of directors is not divisible by three, then that number of directors that is one-third of the directors rounded up to the next whole number) shall initially hold office for a three-year term expiring on the third annual general meeting of the Company following the date noted at the end of these Articles, as approved by ordinary resolution of the shareholders of the Company prior to the date noted at the end of these Articles;

(b) one-third of the directors (or if the number of directors is not divisible by three, then that number of directors that is one-third of the directors rounded up to the next whole number) shall initially hold office for a two-year term expiring on the second annual general meeting of the Company following the date noted at the end of these Articles, as approved by ordinary resolution of the shareholders of the Company prior to the date noted at the end of these Articles; and

(c) the remaining number of directors shall initially hold office for a one-year term expiring on the first annual general meeting of the Company following the date noted at the end of these Articles, as approved by ordinary resolution of the shareholders of the Company prior to the date noted at the end of these Articles,

and upon the expiry of the directors' initial terms of office as set forth above, the directors shall be elected in the manner provided in Article 14.2 to hold office for three-year terms expiring on the third annual general meeting following their election.

14.2 Election at Annual General Meeting. At every annual general meeting and in every unanimous resolution contemplated by Article 10.2:

(a) all of the directors whose terms expire shall cease to hold office immediately before the election or appointment of directors under Article 14.2(b) below, but are eligible for re-election or re-appointment; and

(b) the shareholders entitled to vote at the annual general meeting for the election of directors may elect, or in the unanimous resolution appoint, the number of directors required to fill the following vacancies, such that the staggered terms are maintained as contemplated in Article 14.1:

(i) the vacancies created by the expiry of any directors' terms under these Articles, to hold office for three-year terms expiring on the third annual general meeting following their election; and

(ii) any vacancies created before the expiry of any directors' terms under these Articles, which vacancies have not already been filled as otherwise permitted in these Articles, to hold office until the remainder of the unexpired portion of the term of the departed directors for whom the new directors are replacing.

14.3 Election or Appointment between Annual General Meetings. A director may be:

(a) elected or appointed under Articles 14.7, 14.9, 14.12, and 14.13 to hold office until the remainder of the unexpired portion of the term of the departed director for whom the new director is replacing;

(b) appointed under Article 14.10 for a three-year term expiring on the third annual general meeting of the Company following the director's appointment under Article 14.10.

For greater certainty, following the expiry of the term of any director appointed under Articles 14.7, 14.9, 14.10, 14.12, and 14.13, that director is eligible for re-election or re-appointment under these Articles.

14.4 Consent to be a Director. No election, appointment or designation of an individual as a director is valid unless:

(a) that individual consents to be a director in the manner provided for in the *Business Corporations Act*; or

(b) that individual is elected or appointed at a meeting at which the individual is present and the individual does not refuse, at the meeting, to be a director.

14.5 Failure to Elect or Appoint Directors. If:

(a) the Company fails to hold an annual general meeting, and all the shareholders who are entitled to vote at an annual general meeting fail to pass the unanimous resolution contemplated by Article 10.2 on or before the date by which the annual general meeting is required to be held under the *Business Corporations Act*; or

(b) the shareholders fail, at the annual general meeting or in the unanimous resolution contemplated by Article 10.2, to elect or appoint any directors;

then each director then in office continues to hold office until the earlier of:

(c) the date on which that director's successor is elected or appointed; and

(d) the date on which that director otherwise ceases to hold office under the *Business Corporations Act* or these Articles.

14.6 Places of Retiring Directors Not Filled. If, at any meeting of shareholders at which there should be an election of directors, the places of any of the retiring directors are not filled by that election, then those retiring directors who are not re-elected and who are asked by the newly elected directors to continue in office will, if willing to do so, continue in office to complete the number of directors for the time being set pursuant to these Articles until further new directors are elected at a meeting of shareholders convened for that purpose. If any such election or continuance of directors does not result in the election or continuance of the number of directors for the time being set pursuant to these Articles, then the number of directors of the Company is deemed to be set at the number of directors actually elected or continued in office.

14.7 Directors May Fill Casual Vacancies. Any casual vacancy occurring in the board of directors may be filled by the directors, subject to these Articles.

14.8 Remaining Directors Power to Act. The directors may act notwithstanding any vacancy in the board of directors, but if the Company has fewer directors in office than the number set pursuant to these Articles as the quorum of directors, then the directors may only act for the purpose of appointing directors up to that number or of summoning a meeting of shareholders for the purpose of filling any vacancies on the board of directors or, subject to the *Business Corporations Act*, for any other purpose.

14.9 Shareholders May Fill Vacancies. If the Company has no directors or fewer directors in office than the number set pursuant to these Articles as the quorum of directors, then the shareholders may elect or appoint directors to fill any vacancies on the board of directors, subject to these Articles.

14.10 Additional Directors. Notwithstanding Articles 13.1 and 13.2, between annual general meetings or unanimous resolutions contemplated by Article 10.2, the directors may appoint one or more additional directors subject to these Articles, but the number of additional directors appointed under this Article 14.10 must not at any time exceed one-third of the number of the current directors who were elected or appointed as directors other than under this Article 14.10. Except as provided otherwise under these Articles or the *Business Corporations* Act, any director so appointed shall cease to hold office at the end of a three-year term expiring on the third annual general meeting of the Company following the director's appointment but is eligible for re-election or re-appointment.

14.11 Ceasing to be a Director. A director ceases to be a director when:

(a) the term of office of the director expires;

(b) the director dies;

(c) the director resigns as a director by notice in writing provided to the Company or a lawyer for the Company; or

(d) the director is removed from office pursuant to Articles 14.12 or 14.13.

14.12 Removal of Director by Shareholders. The Company may remove any director before the expiration of that director's term of office by special resolution. In that event, the shareholders may elect, or appoint by ordinary resolution, a director to fill the resulting vacancy, subject to these Articles. If the shareholders do not elect or appoint a director to fill the resulting vacancy contemporaneously with the removal, then the directors may appoint a director to fill that vacancy, subject to these Articles.

14.13 Removal of Director by Directors. The directors may remove any director before the expiration of his or that director's term of office if the director is convicted of an indictable offence, or if the director ceases to be qualified to act as a director of a company and does not promptly resign, and the directors may appoint a director to fill the resulting vacancy, subject to these Articles.

ARTICLE 15
POWERS AND DUTIES OF DIRECTORS

15.1 Powers of Management. The directors must, subject to the *Business Corporations Act* and these Articles, manage or supervise the management of the business and affairs of the Company and have the authority to exercise all such powers of the Company as are not, by the *Business Corporations Act* or by these Articles, required to be exercised by the shareholders of the Company.

15.2 Appointment of Attorney of Company. The directors may from time to time, by power of attorney or other instrument, under seal if so required by law, appoint any person to be the attorney of the Company for such purposes, and with such powers, authorities and discretions (not exceeding those vested in or exercisable by the directors under these Articles and excepting the power to fill vacancies in the board of directors, to remove a director, to change the membership of, or fill vacancies in, any committee of the directors, to appoint or remove officers appointed by the directors and to declare dividends) and for such period, and with such remuneration and subject to such conditions as the directors may think fit. Any such power of attorney may contain such provisions for the protection or convenience of persons dealing with such attorney as the directors think fit. Any such attorney may be authorized by the directors to sub-delegate all or any of the powers, authorities and discretions for the time being vested in such attorney.

ARTICLE 16
DISCLOSURE OF INTEREST OF DIRECTORS

16.1 Obligation to Account for Profits. A director or senior officer who holds a disclosable interest (as that term is used in the *Business Corporations Act*) in a contract or transaction into which the Company has entered or proposes to enter is liable to account to the Company for any profit that accrues to the director or senior officer under or as a result of the contract or transaction only if and to the extent provided in the *Business Corporations Act*.

16.2 Restrictions on Voting by Reason of Interest. A director who holds a disclosable interest in a contract or transaction into which the Company has entered or proposes to enter is not entitled to vote on any directors'

resolution to approve that contract or transaction, unless all the directors have a disclosable interest in that contract or transaction, in which case any or all of those directors may vote on such resolution.

16.3 Interested Director Counted in Quorum. A director who holds a disclosable interest in a contract or transaction into which the Company has entered or proposes to enter and who is present at the meeting of directors at which the contract or transaction is considered for approval may be counted in the quorum at the meeting whether or not the director votes on any or all of the resolutions considered at the meeting.

16.4 Disclosure of Conflict of Interest or Property. A director or senior officer who holds any office or possesses any property, right or interest that could result, directly or indirectly, in the creation of a duty or interest that materially conflicts with that individual's duty or interest as a director or senior officer, must disclose the nature and extent of the conflict as required by the *Business Corporations Act.*

16.5 Director Holding Other Office in the Company. A director may hold any office or place of profit with the Company, other than the office of auditor of the Company, in addition to their office of director for the period and on the terms (as to remuneration or otherwise) that the directors may determine.

16.6 No Disqualification. No director or intended director is disqualified by that director's or intended director's office from contracting with the Company either with regard to the holding of any office or place of profit the director holds with the Company or as vendor, purchaser or otherwise, and no contract or transaction entered into by or on behalf of the Company in which a director is in any way interested is liable to be voided for that reason.

16.7 Professional Services by Director or Officer. Subject to the *Business Corporations Act*, a director or officer, or any person in which a director or officer has an interest, may act in a professional capacity for the Company, except as auditor of the Company, and the director or officer or such person is entitled to remuneration for professional services as if that director or officer were not a director or officer.

16.8 Director or Officer in Other Corporations. A director or officer may be or become a director, officer or employee of, or otherwise interested in, any person in which the Company may be interested as a shareholder or otherwise, and, subject to the *Business Corporations Act*, the director or officer is not accountable to the Company for any remuneration or other benefits received by that individual as director, officer or employee of, or from that individual's interest in, such other person.

ARTICLE 17
PROCEEDINGS OF DIRECTORS

17.1 Meetings of Directors. The directors may meet together for the conduct of business, adjourn and otherwise regulate their meetings as they think fit, and meetings of the directors held at regular intervals may be held at the place, at the time and on the notice, if any, as the directors may from time to time determine.

17.2 Voting at Meetings. Questions arising at any meeting of directors are to be decided by a majority of votes and, in the case of an equality of votes, the chair of the meeting does not have a second or casting vote.

17.3 Chair of Meetings. The following individual is entitled to preside as chair at a meeting of directors:

(a) the chair of the board, if any;

(b) in the absence of the chair of the board, the president, if any, if the president is a director; or

(c) any other director chosen by the directors if:

  (i) neither the chair of the board nor the president, if a director, is present at the meeting within 15 minutes after the time set for holding the meeting;

  (ii) neither the chair of the board nor the president, if a director, is willing to chair the meeting; or

  (iii) the chair of the board and the president, if a director, have advised the secretary, if any, or any other director, that they will not be present at the meeting.

17.4 Meetings by Telephone or Other Communications Medium. A director may participate in a meeting of the directors or of any committee of the directors in person or by telephone if all directors participating in the meeting,

whether in person or by telephone or other communications medium, are able to communicate with each other. A director may participate in a meeting of the directors or of any committee of the directors by a communications medium other than telephone if all directors participating in the meeting, whether in person or by telephone or other communications medium, are able to communicate with each other and if all directors who wish to participate in the meeting agree to such participation. A director who participates in a meeting in a manner contemplated by this Article 17.4 is deemed for all purposes of the *Business Corporations Act* and these Articles to be present at the meeting and to have agreed to participate in that manner.

17.5 Calling of Meetings. A director may, and the corporate secretary or an assistant corporate secretary of the Company, if any, on the request of a director must, call a meeting of the directors at any time.

17.6 Notice of Meetings. Other than for meetings held at regular intervals as determined by the directors pursuant to Article 17.1, reasonable notice of each meeting of the directors, specifying the place, day and time of that meeting must be given to each of the directors by any method set out in Article 23.1 or orally or by telephone.

17.7 When Notice Not Required. It is not necessary to give notice of a meeting of the directors to a director if:

(a) the meeting is to be held immediately following a meeting of shareholders at which that director was elected or appointed, or is the meeting of the directors at which that director is appointed; or

(b) the director has waived notice of the meeting.

17.8 Meeting Valid Despite Failure to Give Notice. The accidental omission to give notice of any meeting of directors to, or the non-receipt of any notice by, any director does not invalidate any proceedings at that meeting.

17.9 Waiver of Notice of Meetings. Any director may send to the Company a document signed by that director waiving notice of any past, present or future meeting or meetings of the directors and may at any time withdraw that waiver with respect to meetings held after that withdrawal. After sending a waiver with respect to all future meetings and until that waiver is withdrawn, no notice of any meeting of the directors need be given to such director and all meetings of the directors so held are deemed not to be improperly called or constituted by reason of notice not having been given to such director.

Attendance of a director at a meeting of the directors is a waiver of notice of the meeting, unless that director attends the meeting for the express purpose of objecting to the transaction of any business on the grounds that the meeting is not lawfully called.

17.10 Quorum. The quorum necessary for the transaction of the business of the directors is a majority of the number of directors in office or such greater number as the directors may determine from time to time.

17.11 Validity of Acts Where Appointment Defective. Subject to the *Business Corporations Act*, an act of a director or officer is not invalid merely because of an irregularity in the election or appointment or a defect in the qualification of that director or officer.

17.12 Consent Resolutions in Writing. A resolution of the directors or of any committee of the directors consented to in writing by all of the directors entitled to vote on it, whether by signed document (which may include an electronic signature, as permitted by the *Electronic Transactions Act* (British Columbia)), fax, email or any other method of transmitting legibly recorded messages, is as valid and effective as if it had been passed at a meeting of the directors or of the committee of the directors duly called and held. Such resolution may be in two or more counterparts which together are deemed to constitute one resolution in writing. A resolution passed in that manner is effective on the date stated in the resolution or on the latest date stated on any counterpart. A resolution of the directors or of any committee of the directors passed in accordance with this Article 17.12 is deemed to be a proceeding at a meeting of directors or of the committee of the directors and to be as valid and effective as if it had been passed at a meeting of the directors or of the committee of the directors that satisfies all the requirements of the *Business Corporations Act* and all the requirements of these Articles relating to meetings of the directors or of a committee of the directors.

ARTICLE 18
EXECUTIVE AND OTHER COMMITTEES

18.1 Appointment and Powers of Executive Committee. The directors may, by resolution, appoint an executive committee consisting of the director or directors that they consider appropriate, and this committee has, during the intervals between meetings of the board of directors, all of the directors' powers, except:

(a) the power to fill vacancies in the board of directors;

(b) the power to remove a director;

(c) the power to change the membership of, or fill vacancies in, any committee of the directors; and

(d) such other powers, if any, as may be set out in the resolution or any subsequent directors' resolution.

18.2 Appointment and Powers of Other Committees. The directors may, by resolution:

(a) appoint one or more committees (other than the executive committee) consisting of the director or directors that they consider appropriate;

(b) delegate to a committee appointed under paragraph (a) any of the directors' powers, except:

(i) the power to fill vacancies in the board of directors;

(ii) the power to remove a director;

(iii) the power to change the membership of, or fill vacancies in, any committee of the directors; and

(iv) the power to appoint or remove officers appointed by the directors; and

(c) make any delegation referred to in paragraph (b) subject to the conditions set out in the resolution or any subsequent directors' resolution.

18.3 Obligations of Committees. Any committee appointed under Articles 18.1 or 18.2, in the exercise of the powers delegated to it, must:

(a) conform to any rules that may from time to time be imposed on it by the directors; and

(b) report every act or thing done in exercise of those powers at such times as the directors may require.

18.4 Powers of Board. The directors may, at any time, with respect to a committee appointed under Articles 18.1 or 18.2:

(a) revoke or alter the authority given to the committee, or override a decision made by the committee, except as to acts done before such revocation, alteration or overriding;

(b) terminate the appointment of, or change the membership of, the committee; and

(c) fill vacancies in the committee.

18.5 Committee Meetings. Subject to Article 18.3(a) and unless the directors otherwise provide in the resolution appointing the committee or in any subsequent resolution, with respect to a committee appointed under Articles 18.1 or 18.2:

(a) the committee may meet and adjourn as it thinks proper;

(b) the committee may elect a chair of its meetings but, if no chair of a meeting is elected, or if at a meeting the chair of the meeting is not present within 15 minutes after the time set for holding the meeting, the directors present who are members of the committee may choose one of their number to chair the meeting;

(c) a majority of the members of the committee constitutes a quorum of the committee; and

(d) questions arising at any meeting of the committee are determined by a majority of votes of the members present, and in case of an equality of votes, the chair of the meeting does not have a second or casting vote.

ARTICLE 19
OFFICERS

19.1 Directors May Appoint Officers. The directors may, from time to time, appoint such officers, if any, as the directors determine and the directors may, at any time, terminate any such appointment.

19.2 Functions, Duties and Powers of Officers. The directors may, for each officer:

(a) determine the functions and duties of the officer;

(b) entrust to and confer on the officer any of the powers exercisable by the directors on such terms and conditions and with such restrictions as the directors think fit; and

(c) revoke, withdraw, alter or vary all or any of the functions, duties and powers of the officer.

19.3 Qualifications. No officer may be appointed unless that officer is qualified in accordance with the *Business Corporations Act*. One person may hold more than one position as an officer of the Company. Any person appointed as the chair of the board or as the managing director must be a director. Any other officer need not be a director.

19.4 Remuneration and Terms of Appointment. All appointments of officers are to be made on the terms and conditions and at the remuneration (whether by way of salary, fee, commission, participation in profits or otherwise) that the directors think fit and are subject to termination at the pleasure of the directors, and an officer may in addition to such remuneration be entitled to receive, after he or she ceases to hold such office or leaves the employment of the Company, a pension or gratuity.

ARTICLE 20
INDEMNIFICATION

20.1 Definitions. In this Article 20:

(a) "**eligible party**", in relation to a Company, means an individual who:

(i) is or was a director or officer of the Company,

(ii) is or was a director or officer of another corporation (A) at a time when the corporation is or was an affiliate of the Company, or (B) at the request of the Company, or

(iii) at the request of the Company, is or was, or holds or held a position equivalent to that of, a director of officer of a partnership, trust, joint venture or other unincorporated entity,

and includes, to the extent permitted by the Act, the heirs and personal or other legal representatives of that individual;

(b) "**eligible penalty**" means a judgment, penalty or fine awarded or imposed in, or an amount paid in settlement of, an eligible proceeding;

(c) "**eligible proceeding**" means a proceeding in which an eligible party or any of the heirs and personal or other legal representatives of the eligible party, by reason of the eligible party being or having been a director or officer of, or holding or having held a position equivalent to that of a director or officer of, the Company or an associated corporation:

(i) is or may be joined as a party; or

(ii) is or may be liable for or in respect of a judgment, penalty or fine in, or expenses related to, the proceeding;

(d) "**expenses**" has the meaning set out in the *Business Corporations Act*.

20.2 Mandatory Indemnification of Directors and Former Directors. Subject to the *Business Corporations Act*, the Company must indemnify an eligible party against all eligible penalties to which such person is or may be liable, and the Company must, after the final disposition of an eligible proceeding, pay the expenses actually and reasonably incurred by such person in respect of that proceeding. Each director is deemed to have contracted with the Company on the terms of the indemnity contained in this Article 20.2.

20.3 Indemnification of Other Persons. Subject to any restrictions in the *Business Corporations Act*, the Company may indemnify any person.

20.4 Non-Compliance with *Business Corporations Act*. The failure of a director or officer of the Company to comply with the *Business Corporations Act* or these Articles does not invalidate any indemnity to which he or she is entitled under this Article 20.

20.5 Company May Purchase Insurance. The Company may purchase and maintain insurance for the benefit of any person (or that person's heirs or legal personal representatives) who:

(a) is or was a director, officer, employee or agent of the Company;

(b) is or was a director, officer, employee or agent of a corporation at a time when the corporation is or was an affiliate of the Company;

(c) at the request of the Company, is or was a director, officer, employee or agent of a corporation or of a partnership, trust, joint venture or other unincorporated entity;

(d) at the request of the Company, holds or held a position equivalent to that of a director or officer of a partnership, trust, joint venture or other unincorporated entity;

against any liability incurred by that person as such director, officer, employee or agent or person who holds or held such equivalent position.

ARTICLE 21
DIVIDENDS

21.1 Payment of Dividends Subject to Special Rights. The provisions of this Article 21 are subject to the rights, if any, of shareholders holding shares with special rights as to dividends.

21.2 Declaration of Dividends. Subject to the *Business Corporations Act* and the rights of the holders of issued shares of the Company, the directors may from time to time declare and authorize payment of such dividends as they consider appropriate.

21.3 No Notice Required. The directors need not give notice to any shareholder of any declaration under Article 21.2.

21.4 Record Date. The directors may set a date as the record date for the purpose of determining shareholders entitled to receive payment of a dividend. The record date must not precede the date on which the dividend is to be paid by more than two months. If no record date is set, the record date is 5 p.m. on the date on which the directors pass the resolution declaring the dividend.

21.5 Manner of Paying Dividend. A resolution declaring a dividend may direct payment of the dividend wholly or partly in money or by the distribution of specific assets or of fully paid shares or of bonds, debentures or other securities of the Company or any other corporation, or in any one or more of those ways.

21.6 Settlement of Difficulties. If any difficulty arises in regard to a distribution under Article 21.5, the directors may settle the difficulty as they deem advisable, and, in particular, may:

(a) set the value for distribution of specific assets;

(b) determine that cash payments in substitution for all or any part of the specific assets to which any shareholders are entitled may be made to any shareholders on the basis of the value so fixed in order to adjust the rights of all parties; and

(c) vest any such specific assets in trustees for the persons entitled to the dividend.

21.7 When Dividend Payable. Any dividend may be made payable on such date as is fixed by the directors.

21.8 Dividends to be Paid in Accordance with Number of Shares. All dividends on shares of any class or series of shares must be declared and paid according to the number of such shares held.

21.9 Receipt by Joint Shareholders. If several persons are joint shareholders of any share, any one of them may give an effective receipt for any dividend, bonus or other money payable in respect of the share.

21.10 Dividend Bears No Interest. No dividend bears interest against the Company.

21.11 Fractional Dividends. If a dividend to which a shareholder is entitled includes a fraction of the smallest monetary unit of the currency of the dividend, that fraction may be disregarded in making payment of the dividend and that payment represents full payment of the dividend.

21.12 Payment of Dividends. Any dividend or other distribution payable in money in respect of shares may be paid by cheque, made payable to the order of the person to whom it is sent, and mailed to the address of the shareholder, or in the case of joint shareholders, to the address of the joint shareholder who is first named on the central securities register, or to the person and to the address the shareholder or joint shareholders may direct in writing. The mailing of such cheque will, to the extent of the sum represented by the cheque (plus the amount of the tax required by law to be deducted), discharge all liability for the dividend unless such cheque is not paid on presentation or the amount of tax so deducted is not paid to the appropriate taxing authority.

21.13 Capitalization of Surplus. Notwithstanding anything contained in these Articles, the directors may from time to time capitalize any surplus of the Company and may from time to time issue, as fully paid, shares or any bonds, debentures or other securities of the Company as a dividend representing the surplus or any part of the surplus.

21.14 Unclaimed Dividends. Any dividend unclaimed after a period of three years from the date on which the same has been declared to be payable shall be forfeited and shall revert to the Company. The Company shall not be liable to any person in respect of any dividend which is forfeited to the Company or delivered to any public official pursuant to any applicable abandoned property, escheat or similar law.

ARTICLE 22
DOCUMENTS, RECORDS AND REPORTS

22.1 Recording of Financial Affairs. The directors must cause adequate accounting records to be kept to record properly the financial affairs and condition of the Company and to comply with the *Business Corporations Act*.

22.2 Inspection of Accounting Records. Unless the directors determine otherwise, or unless otherwise determined by ordinary resolution, no shareholder of the Company is entitled to inspect or obtain a copy of any accounting records of the Company.

ARTICLE 23
NOTICES

23.1 Method of Giving Notice. Unless the *Business Corporations Act* or these Articles provide otherwise, a notice, statement, report or other record required or permitted by the *Business Corporations Act* or these Articles to be sent by or to a person may be sent by any one of the following methods:

(a) mail addressed to the person at the applicable address for that person as follows:

(i) for a record mailed to a shareholder, the shareholder’s registered address;

(ii) for a record mailed to a director or officer, the prescribed address for mailing shown for the director or officer in the records kept by the Company or the mailing address provided by the recipient for the sending of that record or records of that class;

(iii) in any other case, the mailing address of the intended recipient;

(b) delivery at the applicable address for that person as follows, addressed to the person:

(i) for a record delivered to a shareholder, the shareholder's registered address;

(ii) for a record delivered to a director or officer, the prescribed address for delivery shown for the director or officer in the records kept by the Company or the delivery address provided by the recipient for the sending of that record or records of that class;

(iii) in any other case, the delivery address of the intended recipient;

(c) sending the record by fax to the fax number provided by the intended recipient for the sending of that record or records of that class;

(d) sending the record by email to the email address provided by the intended recipient for the sending of that record or records of that class;

(e) physical delivery to the intended recipient;

(f) creating and providing a record posted on or made available through a generally-accessible electronic source and providing written notice by any of the foregoing methods of the availability of such record; or

(g) as otherwise permitted by any securities legislation (together with all regulations and rules made and promulgated thereunder and all administrative policy statements, blanket orders, and rulings, notices, and other administrative directions issued by securities commissions or similar authorities appointed thereunder) in any province or territory of Canada or in the federal jurisdiction of the United States or in any state of the United States that is applicable to the Company.

23.2 Deemed Receipt. A notice, statement, report or other record that is:

(a) mailed to a person by ordinary mail to the applicable address for that person referred to in Article 23.1 is deemed to be received by the person to whom it was mailed on the day, Saturdays, Sundays and holidays excepted, following the date of mailing;

(b) faxed to a person to the fax number provided by that person referred to in Article 23.1 is deemed to be received by the person to whom it was faxed on the day it was faxed;

(c) e-mailed to a person to the e-mail address provided by that person referred to in Article 23.1 is deemed to be received by the person to whom it was e-mailed on the day it was e-mailed; and

(d) delivered in accordance with Article 23.1(f), is deemed to be received by the person on the day such written notice is sent.

23.3 Certificate of Sending. A certificate signed by the corporate secretary, if any, or other officer of the Company or of any other corporation acting in that capacity on behalf of the Company stating that a notice, statement, report or other record was sent in accordance with Article 23.1 is conclusive evidence of that fact.

23.4 Notice to Joint Shareholders. A notice, statement, report or other record may be provided by the Company to the joint shareholders of a share by providing such record to the joint shareholder first named in the central securities register in respect of the share.

23.5 Notice to Legal Personal Representatives and Trustees. A notice, statement, report or other record may be provided by the Company to the persons entitled to a share in consequence of the death, bankruptcy or incapacity of a shareholder by:

(a) mailing the record, addressed to them:

(i) by name, by the title of the legal personal representative of the deceased or incapacitated shareholder, by the title of trustee of the bankrupt shareholder or by any similar description; and

(ii) at the address, if any, supplied to the Company for that purpose by the persons claiming to be so entitled; or

(b) if an address referred to in paragraph (a)(ii) has not been supplied to the Company, by giving the notice in a manner in which it might have been given if the death, bankruptcy or incapacity had not occurred.

23.6 Undelivered Notices. If, on two consecutive occasions, a notice, statement, report or other record is sent to a shareholder pursuant to Article 23.1 and on each of those occasions any such record is returned because the shareholder cannot be located, then, subject to the *Business Corporations Act*, the Company shall not be required to send any further records to the shareholder until the shareholder informs the Company in writing of that shareholder's new address.

ARTICLE 24
SEAL AND EXECUTION OF DOCUMENTS

24.1 Who May Attest Seal. Except as provided in Articles 24.2 and 24.3, the Company's seal, if any, must not be impressed on any record except when that impression is attested by the signatures of:

(a) any two directors;

(b) any officer, together with any director;

(c) if the Company only has one director, that director; or

(d) any one or more directors or officers or persons as may be determined by the directors.

24.2 Sealing Copies. For the purpose of certifying under seal a certificate of incumbency of the directors or officers of the Company or a true copy of any resolution or other document, despite Article 24.1, the impression of the seal may be attested by the signature of any director or officer or the signature of any other person as may be determined by the directors.

24.3 Mechanical Reproduction of Seal. The directors may authorize the seal to be impressed by third parties on share certificates or bonds, debentures or other securities of the Company as they may determine appropriate from time to time. To enable the seal to be impressed on any share certificates or bonds, debentures or other securities of the Company, whether in definitive or interim form, on which facsimiles of any of the signatures of the directors or officers of the Company are, in accordance with the *Business Corporations Act* or these Articles, printed or otherwise mechanically reproduced, there may be delivered to the person employed to engrave, lithograph or print such definitive or interim share certificates or bonds, debentures or other securities one or more unmounted dies reproducing the seal and such persons as are authorized to attest the Company's seal may in writing authorize such person to cause the seal to be impressed on such definitive or interim share certificates or bonds, debentures or other securities by the use of such dies. Share certificates or bonds, debentures or other securities to which the seal has been so impressed are for all purposes deemed to be under and to bear the seal impressed on them.

24.4 Execution of Documents Generally. The Directors may from time to time by resolution appoint any one or more persons, officers or Directors for the purpose of executing any instrument, document or agreement in the name of and on behalf of the Company for which the seal need not be affixed, and if no such person, officer or Director is appointed, then any one officer or Director of the Company may execute such instrument, document or agreement.

ARTICLE 25
PROHIBITIONS

25.1 Definitions. In this Article 25:

(a) "**designated security**" means:

(i) a voting security of the Company;

(ii) a security of the Company that is not a debt security and that carries a residual right to participate in the earnings of the Company or, on the liquidation or winding up of the Company, in its assets; or

(iii) a security of the Company convertible, directly or indirectly, into a security described in paragraph (i) or (ii);

(b) "**security**" has the meaning assigned in the *Securities Act*;

(c) "**voting security**" means a security of the Company that:

(i) is not a debt security, and

(ii) carries a voting right either under all circumstances or under some circumstances that have occurred and are continuing.

25.2 Application. Article 25.3 does not apply to the Company if and for so long as it is a public company or a pre-existing reporting company which has the Statutory Reporting Company Provisions as part of its Articles or to which the Statutory Reporting Company Provisions apply.

25.3 Consent Required for Transfer of Shares or Designated Securities. No share or designated security may be sold, transferred or otherwise disposed of without the consent of the directors and the directors are not required to give any reason for refusing to consent to any such sale, transfer or other disposition.

ARTICLE 26
FORUM SELECTION

26.1 Forum for Adjudication of Certain Disputes. Unless the Company consents in writing to the selection of an alternative forum, the Supreme Court of British Columbia, Canada and the appellate Courts therefrom, shall, to the fullest extent permitted by law, be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the Company; (ii) any action or proceeding asserting a claim of breach of a fiduciary duty owed by any director, officer, or other employee of the Company to the Company; (iii) any action or proceeding asserting a claim arising pursuant to any provision of the *Business Corporations Act* or these Articles (as either may be amended from time to time); or (iv) any action or proceeding asserting a claim otherwise related to the affairs of the Company. Unless the Company consents in writing to the selection of an alternative forum, and without limiting the generality of the foregoing sentence, 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 of 1933*, as amended and the *Securities Exchange Act of 1934*, as amended. If any action or proceeding, the subject matter of which is within the scope of the preceding sentence, is filed other than with the designated court (a "**Foreign Action**") in the name of any securityholder, such securityholder shall be deemed to have consented to (x) the personal jurisdiction of the court in connection with any action or proceeding brought in in any such court to enforce the preceding sentence, and (y) having service of process made upon such securityholder in any such action or proceeding by service upon such securityholder's counsel in the Foreign Action as agent for such securityholder. Any person or entity purchasing or otherwise acquiring any interest in common shares in the capital of the Company shall be deemed to have notice of and consented to the provisions of this Section 26.1.

ARTICLE 27
SPECIAL RIGHTS AND RESTRICTIONS ATTACHED TO COMMON SHARES

27.1 The Common Shares Without Par Value (the "**Common Shares**") have attached to them the special rights and restrictions set out in this Article 27.

Dividends

27.2 Except as otherwise provided in these Articles, each holder of a Common Share is entitled, as such, to receive, on the date fixed for payment thereof, and the Company will pay thereon, such dividends as the directors may in their sole and absolute discretion declare from time to time out of the money or other property of the Company properly applicable to the payment of dividends.

27.3 No holder of a Common Share will be entitled, as such, to any dividend other than or in excess of the dividends, if any, declared pursuant to Article 27.2.

27.4 The directors may, in their sole and absolute discretion, declare and pay or set apart for payment dividends on the Common Shares independently of any dividend on, and without also declaring or paying or setting apart for payment any dividend (whether or not of a similar amount) on, any one or more other classes of shares in the Company and may, in their sole and absolute discretion, declare and pay or set apart for payment dividends on shares of any one or more classes of shares in the Company other than the Common Shares independently of any dividend on, and without also declaring or paying or setting apart for payment any dividend (whether or not of a similar amount) on, the Common Shares.

Winding Up

27.5 In the event of the liquidation, dissolution or winding-up of the Company or other distribution of property or assets of the Company among its shareholders for the purpose of winding up its affairs, no amount will be paid and no property or asset of the Company will be distributed to the holders of the Common Shares, as such, until the holders of any other class or series of shares entitled to receive assets of the Company upon such a distribution in priority to the holders of the Common Shares, as such, have first received from the property and assets of the Company the amount to which they are entitled pursuant to these Articles, but thereafter, the holders of the Common Shares will be entitled to all remaining property and assets of the Company on a share for share basis.

Votes

27.6 Each holder of a Common Share, as such, is entitled to receive notice of and to attend and vote in person or by proxy at all meetings of the shareholders of the Company and is entitled to one vote for each such share held.

ARTICLE 28
SPECIAL RIGHTS AND RESTRICTIONS ATTACHED TO THE PREFERRED SHARES

Preferred Shares

28.1 The special rights or restrictions attached to the Preferred Shares Without Par Value (the "**Preferred Shares**") shall be as follows:

Issuable in Series

28.2 The Preferred Shares may at any time and from time to time be issued in one or more series.

28.3 Subject to Article 9.3 and the *Business Corporations Act*, the board may from time to time, by directors' resolution, if none of the Preferred Shares of any particular series are issued, alter these Articles and authorize the alteration of the Notice of Articles of the Company, as the case may be, to do one or more of the following:

(a) determine the maximum number of shares of any of those series of Preferred Shares that the Company is authorized to issue, determine that there is no such maximum number, or alter any determination made under this paragraph (i) or otherwise in relation to a maximum number of those shares;

(b) create an identifying name by which the shares of any of those series of Preferred Shares may be identified, or alter any identifying name created for those shares; and

(c) attach special rights or restrictions to the shares of any of those series of Preferred Shares or alter any special rights or restrictions attached to those shares, including, but without limiting or restricting the generality of the foregoing, special rights or restrictions with respect to:

  (i) the rate, amount, method of calculation and payment of any dividends, whether cumulative, partly cumulative or non-cumulative, and whether such rate, amount, method of calculation or payment is subject to change or adjustment in the future;

  (ii) any rights upon a dissolution, liquidation or winding-up of the Company or upon any other return of capital or distribution of the assets of the Company among its shareholders for the purpose of winding up its affairs;

(iii) any rights of redemption, retraction or purchase for cancellation and the prices and terms and conditions of any such rights;

(iv) any rights of conversion, exchange or reclassification and the terms and conditions of any such rights;

(v) any voting rights and restrictions;

(vi) the terms and conditions of any share purchase plan or sinking fund; and

(vii) any other special rights or restrictions, not inconsistent with these share provisions, attaching to such series of Preferred Shares.

28.4 No special rights or restrictions attached to any series of Preferred Shares will confer upon the shares of that series a priority over the shares of any other series of Preferred Shares in respect of dividends or a return of capital in the event of the dissolution of the Company or on the occurrence of any other event that entitles the shareholders holding the shares of all series of the Preferred Shares to a return of capital. The Preferred Shares of each series will, with respect to the payment of dividends and the distribution of assets or return of capital in the event of dissolution or on the occurrence of any other event that entitles the shareholders holding the shares of all series of the Preferred Shares to a return of capital, rank on a parity with the shares of every other series.

Class Rights or Restrictions

28.5 Holders of Preferred Shares will be entitled to preference with respect to payment of dividends over the Common Shares and any other shares ranking junior to the Preferred Shares with respect to payment of dividends.

28.6 In the event of the liquidation, dissolution or winding-up of the Company, whether voluntary or involuntary, or any other distribution of the assets of the Company among its shareholders for the purpose of winding up its affairs, the holders of the Preferred Shares will be entitled to preference over the Common Shares and any other shares ranking junior to the Preferred Shares with respect to the repayment of capital paid up on and the payment of unpaid dividends accrued on the Preferred Shares.

28.7 The Preferred Shares may also be given such other preferences over the Common Shares and any other shares ranking junior to the Preferred Shares as may be fixed by directors' resolution as to the respective series authorized to be issued.

DATED _____, 2020.

SIGNATURE OF A DIRECTOR OF THE COMPANY

_____

Exhibit 4.3

DESCRIPTION OF SECURITIES

As of December 31, 2020, AbCellera Biologics, Inc. (the "Company," "we," "us," and "our") had one class of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended: our Common Shares.

Description of Common Shares

The following description of our Common Shares is a summary and does not purport to be complete. It is subject to and qualified in its entirety by reference to our Amended Articles ("Articles") which was incorporated by reference as an exhibit to the Annual Report on Form 10-K of which this Exhibit 4.3 is a part, and by applicable law. We encourage you to read our Articles and applicable provisions of the Business Corporations Act of British Columbia (the "BCBCA") for additional information.

Authorized Share Capital

Our authorized share capital consists of an unlimited number of common shares, no par value ("Common Shares"), and an unlimited number of preferred shares, no par value (the "Preferred Shares"), issuable in series, all of which Preferred Shares are undesignated.

Common Shares

The holders of our Common Shares are entitled to one vote for each share held on all matters submitted to a vote of the shareholders. Holders of our Common Shares are entitled to receive ratably any dividends declared by our board of directors out of funds legally available for that purpose, subject to any preferential dividend rights of any outstanding Preferred Shares. Under the terms of our contribution agreements with Western Economic Diversification Canada, we are restricted from paying any dividends until we have repaid the contributions thereunder in full. Our Common Shares have no preemptive rights, conversion rights or other subscription rights or redemption or sinking fund provisions.

In the event of our liquidation, dissolution or winding up, holders of our Common Shares will be entitled to share ratably in all assets remaining after payment of all debts and other liabilities and any liquidation preference of any outstanding Preferred Shares.

Our Common Shares are listed on the Nasdaq Global Select Market under the trading symbol "ABCL."

The transfer agent and registrar for our Common Shares is Philadelphia Stock Transfer, Inc., located at 2320 Haverford Road, Suite 230, Ardmore, Pennsylvania 19003; telephone (484) 416-3124.

Preferred Shares

Our board of directors has the authority, without further action by our shareholders, to issue an unlimited number of Preferred Shares in one or more series and to fix the rights, preferences, privileges and restrictions thereof. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting, or the designation of, such series, any or all of which may be greater than the rights of Common Shares. The issuance of our Preferred Shares could adversely affect the voting power of holders of Common Shares and the likelihood that such holders will receive dividend payments and payments upon our liquidation, dissolution or winding up. In addition, the issuance of Preferred Shares could have the effect of delaying, deferring or preventing a change in control of our company or other corporate action. No Preferred Shares are currently outstanding, and we have no present plan to issue any Preferred Shares.

Registration Rights

The holders of 85,227,408 Common Shares, are entitled to rights with respect to the registration of these securities under the Securities Act. These rights are provided under the terms of an amended and restated investors' rights agreement between us and holders of our preferred shares and are subject to the provisions of the lock-up agreements entered into by such holders of our preferred shares. The amended and restated investors' rights agreement includes demand registration rights, short-form registration rights and piggyback registration rights. All fees, costs and expenses of underwritten registrations under this agreement will be borne by us and all selling expenses, including the estimated underwriting discounts and selling commissions, will be borne by the holders of the shares being registered.

Demand Registration Rights

Beginning June 8, 2021, the holders of 85,227,408 Common Shares are entitled to demand registration rights. Under the terms of the amended and restated investors' rights agreement, we will be required, upon the written request of holders of at least a majority of the securities eligible for registration then outstanding, to use all reasonable efforts to effect the registration of these registrable securities for public resale so long as the aggregate offering price, net of related fees and expenses, would be at least $15 million. We are required to effect only two registrations pursuant to this provision of the amended and restated investors' rights agreement.

Form S-3 Registration Rights

Pursuant to the amended and restated investors' rights agreement, if we are eligible to file a registration statement on Form S-3 or a Canadian short-form prospectus, upon the written request of shareholders holding at least 30% of the Common Shares issued upon the conversion of our prior preferred shares during the closing of our initial public offering ("IPO") then outstanding we will be required to file a Form S-3 registration restatement or a Canadian short-form prospectus, with respect to outstanding securities of such shareholders having an anticipated aggregate offering, net of related fees and expenses, of at least $5.0 million. We are required to effect only two registrations in any 12-month period pursuant to this provision of the amended and restated investors' rights agreement. The right to have such shares registered on

Form S-3 or a Canadian short-form prospectus is further subject to other specified conditions and limitations.

Piggyback Registration Rights

Pursuant to the amended and restated investors' rights agreement, if we register any of our securities either for our own account or for the account of other security holders, the holders of our Common Shares issuable upon the conversion of our preferred shares are entitled to include their shares in the registration. Subject to certain exceptions and limitations contained in the amended and restated investors' rights agreement, we and the underwriters may limit the number of shares included in an underwritten offering to the number of shares which we and the underwriters determine in our sole discretion will not jeopardize the success of the offering.

Indemnification

Our amended and restated investors' rights agreement contains customary cross-indemnification provisions, under which we are obligated to indemnify holders of registrable securities in the event of material misstatements or omissions in the registration statement attributable to us, and they are obligated to indemnify us for material misstatements or omissions attributable to them.

Expiration of Registration Rights

The demand registration rights, short form registration rights, and piggyback registration rights granted under the amended and restated investors' rights agreement will terminate on the earlier of a fourth anniversary of the closing of our IPO, the closing of a deemed liquidation event, at such time when the holders' shares may be sold without restriction pursuant to Rule 144 within a three-month period, or in such case that the sale of all such holder's shares would not be a distribution under Section 2.5 or Section 2.6 of National Instrument 45-102, and would not be a control distribution (as defined in National Instrument 45-102).

Anti-Takeover Effects under the Business Corporations Act of British Columbia (BCBCA) and Provisions of Our Articles

Our Articles include a number of provisions that may have the effect of delaying, deferring or discouraging another party from acquiring control of us and encouraging persons considering unsolicited tender offers or other unilateral takeover proposals to negotiate with our board of directors (the " Board") rather than pursue non-negotiated takeover attempts. These provisions include the items described below:

- *Classified or "Staggered" Board of Directors.* With a staggered Board, only one-third of the members of the Board shall be elected at an annual meeting of shareholders, and a person can gain control of the Board only by successfully engaging in a proxy contest at two or more annual meetings.

- *Number of Directors and Vacancies on the Board.* The BCBCA provides that vacancies on the Board may be filled in two ways: (1) If the director was removed, the position can be filled by the shareholders at the shareholder meeting where the director is

removed; (2) if there is a casual vacancy, such vacancy can be filled by the remaining directors. The Articles contain provisions establishing the right of the Board to fill a vacancy.

- *Only those matters set forth in the notice of shareholder meetings may be approved at such meetings.* The conduct of shareholder meetings are determined by the notice of meeting and avoids unexpected matters to be raised at meetings of shareholders.

- *Advance Notice of Shareholders Proposals and Director Nominations.* Shareholder proposals must be received well in advance of meetings at which such proposals are to be considered. Under the BCBCA, a person submitting a proposal must have been the registered or beneficial owner of one or more voting shares for an uninterrupted period of at least two years before the date of the signing of the proposal. In addition, the proposal must be signed by shareholders who, together with the submitter, are registered or beneficial owners of (i) at least 1% of the company's voting shares, or (ii) shares with a fair market value exceeding an amount prescribed by regulation. The Articles contain advance notice provisions respecting the nomination of directors.

- *Supermajority thresholds for amendment of certain provisions in the Articles.* The BCBCA permits setting higher than simple majority thresholds for amendments to the articles. The Articles sets forth that certain provisions may not be amended without at least two thirds (2/3) of the votes cast in respect of such amendment being voted in the affirmative.

- *Blank Check Preferred Stock.* The Articles contain provisions allowing for "blank check" preferred shares and permit the Board to issue shares of preferred shares without the approval of shareholders.

- *Prohibition on Shareholder Action by Written Consent.* Under the BCBCA, shareholders are expressly authorized to act by written consent, but such written consent must be unanimous.

- *Exclusive Forum for Litigation Regarding Corporate and Securities Matters*. The Articles contains a provision specifying that fundamental corporate matters be adjudicated in a court in British Columbia, and U.S. securities litigation be adjudicated in a U.S. federal court.

Limitations on Liability and Indemnification Agreements

We are governed by the BCBCA. Under the BCBCA, and our articles, we may (or must, in the case of our Articles) indemnify all eligible parties against all eligible penalties to which such person is or may be liable, and we must, after the final disposition of an eligible proceeding, pay the expenses actually and reasonably incurred by such person in respect of that proceeding. Each director is deemed to have contracted with the Company on the terms of indemnity contained in our Articles.

For the purposes of such an indemnification:

“eligible party,” in relation to the Company, means an individual who

- is or was a director or officer of the Company;
- is or was a director or officer of another corporation
  - at a time when the corporation is or was an affiliate of the Company, or
  - at the request of the Company; or
- at the request of the Company, is or was, or holds or held a position equivalent to that of, a director or officer of a partnership, trust, joint venture or other unincorporated entity and includes the heirs and personal or other legal representatives of that individual;

“eligible penalty” means a judgment, penalty or fine awarded or imposed in, or an amount paid in settlement of, an eligible proceeding;

“ eligible proceeding” means a proceeding in which an eligible party or any of the heirs and personal or other legal representatives of the eligible party, by reason of the eligible party being or having been a director or officer of, or holding or having held a position equivalent to that of a director or officer of, the Company or an associated corporation:

- is or may be joined as a party, or
- is or may be liable for or in respect of a judgment, penalty or fine in, or expenses related to, the proceeding;

“expenses” includes costs, charges and expenses, including legal and other fees, but does not include judgments, penalties, fines or amounts paid in settlement of a proceeding; and

“proceeding” includes any legal proceeding or investigative action, whether current, threatened, pending or completed.

In addition, under the BCBCA, the Company may pay, as they are incurred in advance of the final disposition of an eligible proceeding, the expenses actually and reasonably incurred by an eligible party in respect of that proceeding, provided that the Company first receives from the eligible party a written undertaking that, if it is ultimately determined that the payment of expenses is prohibited by the restrictions noted below, the eligible party will repay the amounts advanced.

Notwithstanding the provisions of the Company’s Articles noted above, the Company must not indemnify an eligible party or pay the expenses of an eligible party, if any of the following circumstances apply:

- if the indemnity or payment is made under an earlier agreement to indemnify or pay expenses and, at the time that the agreement to indemnify or pay expenses

was made, the Company was prohibited from giving the indemnity or paying the expenses by its Articles;

- if the indemnity or payment is made otherwise than under an earlier agreement to indemnify or pay expenses and, at the time that the indemnity or payment is made, the Company is prohibited from giving the indemnity or paying the expenses by its Articles;

- if, in relation to the subject matter of the eligible proceeding, the eligible party did not act honestly and in good faith with a view to the best interests of the Company or the associated corporation, as the case may be; or

- in the case of an eligible proceeding other than a civil proceeding, if the eligible party did not have reasonable grounds for believing that the eligible party's conduct in respect of which the proceeding was brought was lawful.

In addition, if an eligible proceeding is brought against an eligible party by or on behalf of the Company or by or on behalf of an associated corporation, the Company must not do either of the following:

- indemnify the eligible party in respect of the proceeding; or

- pay the expenses of the eligible party in respect of the proceeding.

Notwithstanding any of the foregoing, and whether or not payment of expenses or indemnification has been sought, authorized or declined under the BCBCA or the Articles of the Company, on the application of the Company or an eligible party, the Supreme Court of British Columbia may do one or more of the following:

- order the Company to indemnify an eligible party against any liability incurred by the eligible party in respect of an eligible proceeding;

- order the Company to pay some or all of the expenses incurred by an eligible party in respect of an eligible proceeding;

- order the enforcement of, or any payment under, an agreement of indemnification entered into by the Company;

- order the Company to pay some or all of the expenses actually and reasonably incurred by any person in obtaining an order under this section; or

- make any other order the court considers appropriate.

The BCBCA and our Articles authorize us to purchase and maintain insurance for the benefit of an eligible party against any liability that may be incurred by reason of the eligible party being or having been a director or officer of, or holding or having held a position equivalent to that of a director or officer of, the Company, a current or former affiliate of the

Company or a corporation, partnership, trust, joint venture or other unincorporated entity at the request of the Company.

In addition, we have entered, or will enter, into separate indemnity agreements with each of our directors and officers pursuant to which we agree to indemnify and hold harmless our directors and officers against any and all liability, loss, damage, cost or expense in accordance with the terms and conditions of the BCBCA and our Articles.

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

The Board of Directors
AbCellera Biologics Inc.

We consent to the incorporation by reference in the registration statement (No. 333-251341) on Form S-8 of AbCellera Biologics Inc. of our report dated March 25, 2021, with respect to the consolidated balances sheets of AbCellera Biologics Inc. as of December 31, 2020 and 2019, 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, 2020, and the related notes, which report appears in the December 31, 2020 annual report on Form 10-K of AbCellera Biologics Inc.
Our report refers to a change in the method of accounting for leases as of January 1, 2019 due to the adoption of Accounting Standards Codification Topic 842, *Leases*.

/s/ KPMG LLP

Chartered Professional Accountants

Vancouver, Canada
March 30, 2021

Exhibit 31.1

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: March 30, 2021

By: /s/ Carl L. G. Hansen

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

Exhibit 31.2

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: March 30, 2021

By: /s/ Andrew Booth

Andrew Booth
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of AbCellera Biologics Inc. (the "Company") on Form 10-K for the period ending December 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

Date: March 30, 2021

By: /s/ Carl L. G. Hansen

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

Exhibit 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of AbCellera Biologics Inc. (the "Company") on Form 10-K for the period ending December 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

Date: March 30, 2021

By: /s/ Andrew Booth

Andrew Booth
Chief Financial Officer
(Principal Financial Officer)