As confidentially submitted to the Securities and Exchange Commission on May 6, 2021. This draft registration statement has not been filed publicly with the Securities and Exchange Commission and all information contained herein remains confidential.

Registration No. 333-

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

FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

ABSCI CORPORATION

(Exact name of Registrant as specified in its charter)

Delaware	**8731**	**85-3383487**
(State or other jurisdiction of incorporation or organization)	**(Primary Standard Industrial Classification Code Number)**	**(I.R.S. Employer Identification No.)**

101 E. 6th Street, Suite 350
Vancouver, WA 98660
(360) 949-1041
(Address, including zip code and telephone number, including area code, of Registrant's principal executive offices)

Sean McClain
Chief Executive Officer
Absci Corporation
101 E. 6th Street, Suite 350
Vancouver, WA 98660
(360) 949-1041
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Kingsley Taft, Esq. **Maggie Wong, Esq.** **Anitha Anne, Esq.** **Goodwin Procter LLP** **Three Embarcadero Center** **San Francisco, CA 94111** **(415) 733-6000**	**Sean McClain** **Chief Executive Officer** **Absci Corporation** **101 E. 6th Street, Suite 350** **Vancouver, WA 98660** **(360) 949-1041**	**Brian J. Cuneo, Esq.** **B. Shayne Kennedy, Esq.** **Latham & Watkins LLP** **140 Scott Drive** **Menlo Park, CA 94205** **(650) 328-4600**

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box. ☐

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

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

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 7(a)(2)(B) of the Securities Act. ☐

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price(1)	Amount of Registration Fee(2)
Common Stock, par value $0.0001 per share	$	$

(1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act. Includes the offering price of any additional shares that the underwriters have the option to purchase.
(2) Calculated pursuant to Rule 457(o) under the Securities Act based on an estimate of the proposed maximum aggregate offering price.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information in this preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any jurisdiction where such offer or sale is not permitted.

Subject to completion, dated , 2021.

Preliminary prospectus

shares

absci®

Common stock

This is an initial public offering of shares of common stock by Absci Corporation. We are offering shares of our common stock to be sold in the offering. The initial public offering price is expected to be between $ and $ per share.

Prior to this offering, there has been no public market for our common stock. We intend to apply to list our common stock on the Nasdaq Global Market (Nasdaq), under the symbol "ABSI."

We are an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012 and a "smaller reporting company" as defined in the Securities Exchange Act of 1934, as amended and, as such, have elected to take advantage of certain reduced public company reporting requirements.

	Per share	Total
Initial public offering price	$	$
Underwriting discounts and commissions[(1)]	$	$
Proceeds to Absci Corporation, before expenses	$	$

(1) See "Underwriting" for a description of the compensation payable to the underwriters.

We have granted the underwriters an option for a period of 30 days to purchase up to additional shares of common stock at the initial public offering price, less underwriting discounts and commissions.

Investing in our common stock involves a high degree of risk. See "Risk Factors" beginning on page 16.

Neither the Securities and Exchange Commission nor any other regulatory body has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the shares to purchasers on or about , 2021.

J.P. Morgan **Credit Suisse** **BofA Merrill Lynch** **Cowen** **Stifel**

The date of this prospectus is , 2021.

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Through and including , (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

We and the underwriters have not authorized anyone to provide any information other than that contained in this prospectus or in any free writing prospectus prepared by or on behalf of us or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We and the underwriters are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus is accurate only as of the date on the front cover of this prospectus. Our business, financial condition, results of operations and prospects may have changed since that date.

For investors outside of the United States: We have not, and the underwriters have not, done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than the United States. Persons outside of the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of common stock and the distribution of this prospectus outside of the United States.

Prospectus Summary

This summary highlights selected information contained elsewhere in this prospectus and does not contain all of the information that you should consider in making your investment decision. Before investing in our common stock, you should carefully read this entire prospectus, including our financial statements and the related notes included elsewhere in this prospectus. You should also consider, among other things, the matters described under "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations," in each case appearing elsewhere in this prospectus. Unless otherwise stated, all references to "us," "our," "Absci" "we," the "Company" and similar designations refer to Absci Corporation and its wholly owned subsidiaries.

Our Mission

Our mission is to change the world, one protein at a time. We founded Absci with the goal of creating better medicines and helping them reach patients sooner. We recognized the extraordinary medical and economic potential of protein-based drugs (biologics), but also the significant challenges the biopharmaceutical industry faces to both discover novel biologics and generate cell lines to manufacture them at commercial scale. We looked at the end game – getting better medicines to patients, faster — and asked: *how?* We built our technology to be that *how*.

We are replacing the fragmented steps and inefficiencies of the conventional biologic drug discovery and cell line development processes with our fully integrated, end-to-end platform designed to create new and better biologics and accelerate their advancement into clinical trials and ultimately into the marketplace where they can serve patients. Combining innovative approaches, including synthetic biology, high-throughput single-cell screening, and deep learning artificial intelligence (AI), we seek to identify optimal drug candidates by exploring expansive protein sequence solution spaces — including considering sequences that nature's evolutionary trajectory has yet to propose. Our platform allows us to expand biological possibilities and generate proteins intractable to produce with other technologies to ensure the best drug candidates have the opportunity to become therapeutic realities for patients. Our goal is to enable the creation of life-saving medicines by *Translating Ideas into Drugs*.

And we are just getting started. Proteins are everywhere making biology happen. Their commercial applications extend far beyond the realm of therapeutics and into other industries including materials science, industrial chemicals, cosmetics, synthetic foods, and agriculture. Today, we are focused on bringing value to the biopharmaceutical industry and generating better medicines. Looking ahead, our vision is that tomorrow's Absci will be the universal engine creating protein-based solutions to advance the bio-based economy, one protein at a time.

Overview

With our AI-powered Integrated Drug Creation Platform we enable the creation of novel biologics by unifying biologic drug discovery and cell line development into one simultaneous process. We leverage proprietary synthetic biology technologies and deep learning AI to predict, design, construct, screen, select and scale production of novel biologic drug candidates, and learn from the data we generate. We believe our approach delivers disruptive efficiency, but more importantly enables our partners to create novel and human/AI-designed new-to-nature biologics (next-generation biologics). While next-generation biologics have exciting medical potential and are a rapidly growing field of drug development, because their protein architectures (scaffolds or modalities) are biologically foreign, they present challenges for conventional biologic drug discovery and cell line development methods. These methods typically involve a linear series of steps to screen and select desired molecular parts and reformat them into their final protein scaffold, and subsequent laborious and often unsuccessful generation of a suitable manufacturing cell line. We

are transforming the biologic drug discovery and cell line development processes by rapidly screening up to billions of drug candidates *in* the desired final protein scaffold that goes into patients and *in* the scalable production cell line that scales up for clinical and commercial manufacturing. Our platform integrates a fragmented set of processes and bypasses the molecular reformatting and cell line development challenges that can lead to inefficiencies and failures. To accomplish this, we use proprietary high-throughput single cell assays that can evaluate billions of drug sequence variants, each within its production cell line, for target binding affinity, protein quality, and production level (titer). We also harness the large datasets we generate to train and refine our deep learning models which guide our protein and cell line designs, and enable *in silico* optimization of multiple attributes. We believe our platform is the only commercially available solution that allows for high-throughput screening for simultaneous biologic drug discovery and manufacturing cell line development for next-generation biologics. We believe our unique approach to biologic drug creation has the potential to significantly accelerate preclinical development timelines and expand therapeutic possibilities for the biopharmaceutical industry.

We believe we represent a new breed of biotechnology company. Our goal is to become the partner of choice for biologic drug discovery and cell line development. Our business model is to establish partnerships with biopharmaceutical companies to use our platform for creating biologic drug candidates and production cell lines on their behalf. Our partnerships are expected to provide us with the opportunity to participate in the future success of the biologics generated utilizing our platform, through potential milestone payments as well as royalties on sales of approved products. We aim to build a diversified portfolio of biologic drug candidates across multiple disease indications in which we have downstream economic participation rights. We currently have drug candidates in nine “Active Programs” (across seven current partners) in which we have or are positioned to negotiate license agreements with potential downstream milestone payments and royalties. Eight of the Active Programs are focused on developing production cell lines for partners’ biologic drug candidates (five preclinical, one Phase 1, one Phase 3, and one animal health), reflecting our 2018 commercialization of our Cell Line Development (CLD) applications. We have one Discovery program underway, focused on lead optimization, which we signed shortly after our December 2020 expansion of our platform to include our initial Discovery applications. Our current partners include three of the top 20 pharmaceutical companies based on 2020 global revenues.

Strategy

We believe we represent a new breed of biotechnology company, integrating powerful artificial intelligence with new synthetic biology technologies to create next-generation biologics. We aim to become a partner of choice to both large pharmaceutical companies and biotechnology companies to enable and empower discovery and cell line development capabilities for biologics. We intend to use our Integrated Drug Creation Platform to empower innovation by creating new modalities, discovering next-generation biologics, driving efficiencies, broadening pipelines, and accelerating preclinical timelines.

Our strategy to accomplish this is as follows:

- Enable the discovery and development of next-generation biologics and new modalities through our proprietary platform.
- Accelerate biologic drug discovery and cell line development by unifying these processes as “Integrated Drug Creation.”
- Drive rapid adoption by becoming a partner of choice for large pharmaceutical companies and biotechnology companies.
- Advance the promise of *in silico* drug creation by leveraging proprietary data and AI.
- Continuously invest in our platform to push the boundaries of science and unlock the untapped power of biology.

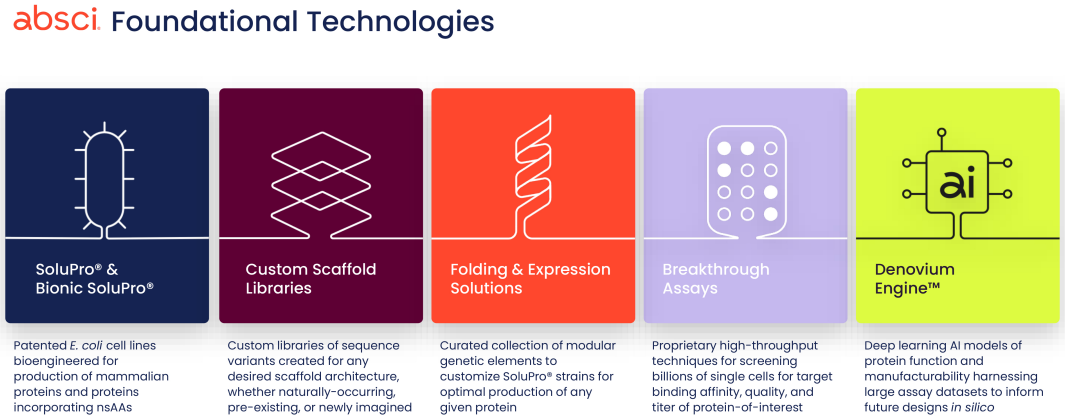
- Maintain an entrepreneurial, founder-led, scientifically rigorous, data-driven, and inclusive corporate culture.

Our Integrated Drug Creation Platform

We built our Integrated Drug Creation Platform to create next-generation biologics including those that lie beyond the scope of nature. To achieve this, we leverage synthetic biology technologies, engineered biodiversity, proprietary functional assays and data-driven deep learning computational models to discover next-generation biologic drug candidates and design optimized production cell lines in parallel. The foundational technologies that power our platform are:

- **SoluPro and Bionic SoluPro:** SoluPro is our patented bioproduction system based on bioengineered *E. coli.* Using synthetic biology techniques, we designed SoluPro to be our chassis cell line and be fundamentally good at making complex mammalian proteins. We believe our SoluPro unlocks evolutionary opportunities by expanding the biological repertoire of proteins that can be produced to include complex new-to-nature proteins such as next-generation biologics. We further engineered a version of SoluPro to facilitate site-specific incorporation of non-standard amino acids (nsAAs) into proteins for scaled production. We refer to these nsAA-containing proteins as Bionic Proteins and the SoluPro strain we use to produce them as Bionic SoluPro.
- **Custom Scaffold Libraries:** We can design and generate custom collections of drug candidate sequence variants for each Discovery program, starting with whatever scaffold our partner specifies, whether natural, pre-existing, or newly-invented, and building out up to billions of different versions to test. These libraries are specifically generated for each program and scaffold, and our AI predictions coupled with our ability to generate libraries in any given scaffold allow us to consider relevant variants that nature could not have proposed. We can also specify nsAA incorporation sites as we design these libraries.
- **Folding and Expression Solutions:** We curate a diverse collection of folding and expression solutions, which are genetic tools that we use to customize SoluPro and optimize production of the desired protein. Each protein we work on has different characteristics when it comes to manufacturability factors, and with the folding and expression solutions parts library and our synthetic biology methods, we create up to billions of different cell lines and measure each cell's performance to find the solutions that work best for the protein-of-interest. The folding and expression solutions collectively comprise an expansive set of genetic modules and techniques we have assembled, including ribosome binding site sequences, molecular chaperones, and codon-optimization conventions.
- **Breakthrough Assays:** Our proprietary Activity-specific Cell Enrichment (ACE) and High-Throughput Proximity Binding (HiPrBind) Assays allow us to evaluate and sort the millions to billions of drug sequence and cell line variants we generate. Tailored for each of our programs, our high-throughput assays can rank and sort billions of cells based on desired parameters such as target affinity, protein quality, and titer. We are also able to capture datasets correlating protein sequence variants and folding and expression solutions with cell line characteristics. These large, highly complex datasets have the potential to provide us with highly relevant insights about protein function and manufacturability in our system and beyond.
- **Denovium Engine:** Our Denovium Engine is an AI technology that includes deep learning computational models of protein function. The Denovium Engine models, trained on our high-quality data that are particularly relevant to our system, generate non-obvious predictions about the impact of amino acid sequence and cell line characteristics on a given protein's function and manufacturability. A deep learning neural network approach is well-suited to our complex datasets because the models learn what is relevant to the specific objective, without human annotation or bias. We expect the capabilities of the Denovium

Engine grow with each new set of data we generate and input. In the future, we intend to use AI to inform the choice of drug scaffold, define the scope of sequence variants to generate, and design the cell line attributes. We believe this technology may eventually enable us to optimize complex solution space fully *in silico* without the need to physically screen billions of options.



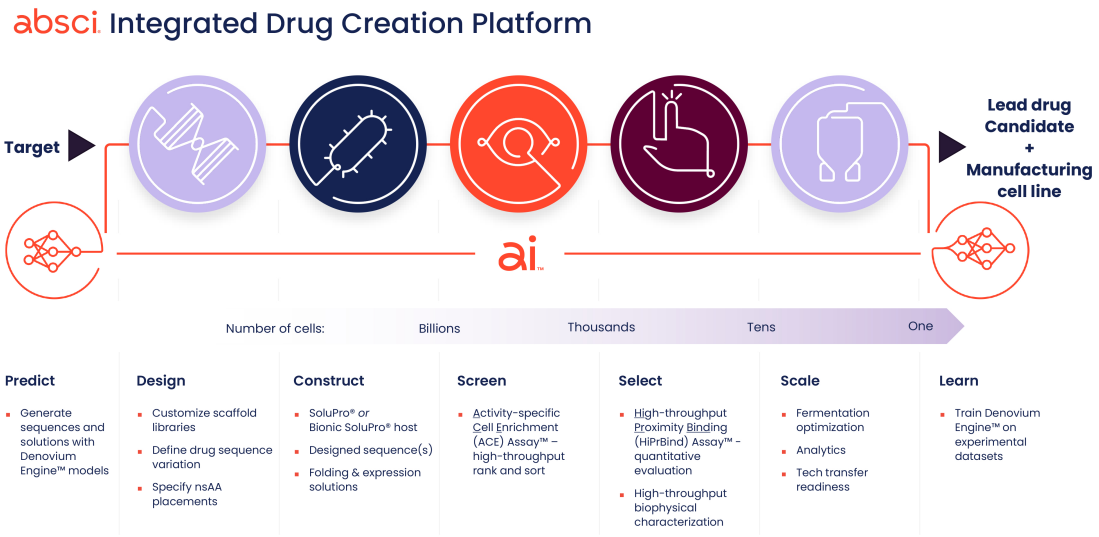
Our platform integrates biologic drug discovery and cell line development processes, accomplishing these activities in parallel rather than sequentially. We have designed our Integrated Drug Creation Platform to provide the following potential benefits for our partners:

- Accelerated timelines from idea to drug candidate.
- Creation of new biologic modalities.
- Efficient production of complex biologics.
- Design of better drug candidates.
- Increase manufacturing productivity and reduce costs.

We perform our process using our Integrated Drug Creation Platform to predict biologically interesting variants, design custom libraries of protein-of-interest sequence variants, construct diverse populations of cells with these libraries and our folding and expression solutions, screen and sort these cells based on our desired criteria, select lead drug candidate/cell line combinations having the desired functionality and manufacturability qualities, optimize these leads for scaled manufacturing readiness, and learn by feeding data from our multitude of single cell experiments into our AI models to continually refine our predictions. Our process using our Integrated Drug Creation Platform includes the following steps:

- **Predict:** We expect to use our Denovium Engine AI models to generate non-obvious predictions about what are likely to be optimal drug candidate sequences and cell line designs for any protein-of-interest. The AI combines the collective learnings available in public databases with our own experimental data specifically documenting protein functionality and manufacturability factors relevant to our system. Importantly, our Denovium Engine considers sequences and solutions that it has not seen before, and it may predict entirely new-to-nature protein scaffold elements and sequence motifs or design new biologic modalities.

- **Design:** Based on the program goals, we design custom libraries of protein-of-interest variants in the desired scaffold architecture, and specify any desired nsAA placements. Using our Denovium Engine models, we may recommend modifications to the scaffold architecture, as well as define the scope of protein variation to evaluate options beyond sequences that exist in nature. In addition, we also incorporate designs based on folding and expression solutions predicted as relevant by our Denovium Engine models. This entire step is accomplished *in silico*.
- **Construct:** Using synthetic biology approaches, we construct up to billions of genetically distinct SoluPro or Bionic SoluPro cells to evaluate. Each cell contains the instructions to make one version of the protein-of-interest, as well as a different assortment of folding and expression solutions.
- **Screen:** Our proprietary high-throughput ACE Assay allows us to evaluate and sort up to billions of cells. We collect subsets of the population of cells that express the best versions of the protein-of-interest (hits), based on target binding, protein quality, and titer. We are also generating billions of data points describing sequence modifications and combinations of folding solutions contributing to protein affinity, solubility and manufacturability that we use to train our Denovium Engine deep learning model.
- **Select:** With our HiPrBind Assay, using automated multiplexed plate-based methods, we grow micro-batches of each of the thousands of hits from the ACE Assay and perform quantitative characterization of protein function, quality, and titer. We also perform high-throughput biophysical characterization to collect additional data on relevant biophysical attributes that impact developability. We are able to select the best several candidates (leads) in their putative production cell lines for further analytics, as well as collect further data insights to enhance our Denovium Engine models.
- **Scale:** We optimize fermentation conditions for the selected lead strain(s) to demonstrate desired productivity, quality, and scalability. We perform comprehensive analytics on the lead drug candidate(s) for evaluation and technology transfer to our partners.
- **Learn:** Throughout our process, we generate large and complex datasets specifying determinants of protein function and manufacturability. We use these data to train our Denovium Engine to enable its models to make increasingly refined predictions for scaffold sequence variants and cell line designs. Our goal is to train the deep learning models with enough data to be able to input a sequence of a new drug target and have the model output a unique, optimal drug scaffold sequence and cell line architecture that we construct and confirm: a process that we refer to as *de novo* biologic drug creation *in silico*.



Applications of our Integrated Drug Creation Platform

Our platform is flexible, and we are able to onboard a given program at multiple points in the biologic drug discovery and cell line development process. Starting with a given target and a desired scaffold format for an eventual drug candidate, we may perform comprehensive *de novo* biologic drug discovery through to cell line development. We may enhance discovery opportunities with our partners by building new scaffolds and designing new molecules to incorporate nsAAs to facilitate post-purification chemical modifications. We may also design and optimize a high titer production cell line for a partner's already-established lead drug candidate. We classify our applications into two key categories: Discovery and Cell Line Development (CLD). Since we deliver a production cell line for each of our projects, we define Discovery as any projects for which we are evaluating variants of the protein-of-interest, and we define CLD as a program for which the production cell line alone is the goal of the partnership.

- **Discovery:** We commercially launched our initial Discovery applications in December 2020, and to date we have one Discovery program underway for lead optimization. Discovery involves screening for "hits" of the desired target, but unlike other commonly used screening methods used for biologic drug discovery, we are screening for hit variants *in* the complete scaffold, not a domain fragment to be subsequently reformatted. We also screen *in* production cell line variants. Our Discovery applications are scaffold-agnostic. Whether we are screening variants of an antibody, a T-cell engager, a multivalent Fc-fusion, or any other human- or AI-designed modality, our platform is adaptable to simultaneously optimize for functionality and manufacturability of lead candidates. We believe there is no other commercially available solution that enables comprehensive scaffold-agnostic drug discovery in the desired scaffold format. The Discovery applications that we currently or in the future expect to address with our Integrated Drug Creation Platform are the following:
    - *De novo discovery* - We may perform *de novo* discovery by starting with a desired scaffold format for the desired drug, and creating a library of relevant sequence variants that will establish the target specificity (e.g., CDR regions of antibody). And we create an optimized production cell line.
    - *nsAA incorporation* - We may engineer a signal into the gene encoding the drug candidate that directs incorporation of an nsAA into the growing protein chain in a site-

specific manner. The nsAA provides a handle for chemical modifications including glycosylation, PEGylation, ADC-payload conjugation, and novel branched proteins and chemical conjugates. And we create an optimized production cell line.

- *Lead optimization* - We may start with drug discovery leads and introduce modifications into the sequences to evaluate variants for improved target affinity, manufacturability, and other pharmacologic characteristics. Thus we can optimize leads that our partners may advance through preclinical development. And we create an optimized production cell line.

- *Scaffold design and drug platform development* - We are uniquely capable of assembling and producing new-to-nature next-generation biologic scaffolds. We may therefore empower our partners with the ability to execute on theoretical modalities, creative fusions, and multivalent molecular hybrids. Within the context of those assembled scaffolds we can evaluate variants to discover new drug candidates designed for optimal target affinity and other desired characteristics. And we create optimized production cell lines.

- **Cell Line Development (CLD):** We launched our CLD applications in 2018 as our first commercial offering, and all but one of our ongoing programs are for CLD. Because we deliver a production cell line for each of our projects, we classify a program as CLD only when the production cell line alone is the goal of the partnership, or in other words, when the sequence of the lead drug candidate is locked in. Fundamentally, the process utilizing our Integrated Drug Creation Platform is the same as for our Discovery programs, except that the plasmid libraries we design include a fixed lead drug sequence, with variation limited to the assortment of the folding and expression solutions. Screening and selection steps are aimed at identifying the cell lines with highest titer expression of the drug candidate. Partners typically have come to us with late-preclinical or clinical-stage next-generation biologics for which they have not been able to develop a manufacturing process or for which an existing manufacturing process is poorly performing. As we succeed in these CLD programs, we believe we enable the advancement of next-generation biologic candidates that otherwise would not proceed in development due to manufacturability challenges.

Market Opportunity

Our market opportunity is driven by the number of biologic candidates we generate and the successful development and commercialization of these candidates by our partners. According to our evaluation of the April 2021 Evaluate Pharma data, there are currently 1,250 companies involved in developing and marketing over 4,950 protein-based biologics, which we define as including candidates Evaluate Pharma categorizes as monoclonal antibodies (mAbs), monoclonal antibody conjugates (ADCs), and recombinant products (comprising novel fusion proteins as well as numerous conventional recombinant proteins, peptides, and hormones), but excluding those categorized as cell therapies, DNA and RNA based therapies, gene therapies, plasma-derived therapies, and vaccines. In 2020, cumulative global sales of these protein-based biologics reached approximately $254 billion, representing 33% of the sales of all drugs. In 2020, 72 protein-based biologics reached blockbuster status with annual worldwide sales higher than $1.0 billion. Of the total protein-based biologics sales, mAbs represent approximately 63%, with average per product peak sales of $2.7 billion (median $1.3 billion). The protein-based biologics market is expected to reach $418 billion by 2026, representing a compound annual growth rate of approximately 9%. In the near term, we are focused on the next-generation biologics market, which represents approximately 32% of protein-based biologics in Phase 1 clinical development. We estimate next-generation biologics represent a similar proportion of the 2,539 preclinical protein-based biologics. While our Integrated Drug Creation Platform is suited to generation of any type of protein-based

biologic, we believe our capabilities are especially differentiated in the area of next-generation biologics. We expect our future programs to be principally in this category as we seek to provide an avenue to expand the number and variety of next-generation biologics in development by our existing and future partners, including with the addition of nsAA-containing Bionic Proteins to their pipelines.

Our Growth Strategy

Our goal is to establish our proprietary, end-to-end platform as the industry standard for biologic drug discovery and cell line development. We are laying the groundwork for integration into our partners' discovery organizations, with the goal to be the *de facto* starting point for new drug creation. Our growth strategy is to:

- Establish new partnerships to create biologic drug candidates.
- Increase the number of molecules on which we work with our existing partners.
- Expand the scope of our partnerships across the biologic drug discovery and cell line development value chain.
- Create new biologic modalities and novel conjugates with Bionic Proteins that incorporate nsAAs.
- Grow our platform through R&D and strategic acquisitions.
- Create proprietary biologic assets.
- Leverage our platform to address market opportunities outside of biopharmaceuticals.

Risks Associated with our Business

Our ability to implement our business strategy is subject to numerous risks that you should be aware of before making an investment decision. These risks are described more fully in the section titled "Risk Factors" appearing elsewhere in this prospectus. These risks include, among others:

- Our current business has a limited operating history, which may make it difficult to evaluate our business and predict our future performance.
- We have incurred significant losses since inception, we expect to incur losses in the future and we may not be able to generate sufficient revenue to achieve and maintain profitability.
- Even if this offering is successful, we will need to raise additional capital to fund our operations and improve our platform. If we are unable to raise additional capital on terms acceptable to us or at all, we may need not be able to compete successfully, which would harm our business, operations and financial condition.
- Our historical revenue is primarily related to technology development services, and our revenue for any historical period may not be indicative of results that may be expected for any future period.
- Our commercial success depends on the technological capabilities of our Integrated Drug Creation Platform and its utilization by our existing partners and adoption by new partners.
- Our future success is dependent on the eventual approval and commercialization of biologic drugs developed under our partnerships for which we have no control over the clinical development plan, regulatory strategy or commercialization efforts.

- We are substantially dependent on the successful application of our Integrated Drug Creation Platform to Discovery and Cell Line Development partnerships, and we have only recently begun to enter into Discovery partnerships.
- If we cannot maintain our current relationships with partners, fail to expand our relationships with our current partners, or if we fail to enter into new relationships, our future operating results would be adversely affected as a general matter.
- Biopharmaceutical drug development is inherently uncertain, and it is possible that our technology may not succeed in discovering appropriate molecules or producing cell lines. Even if we do succeed, it is possible that none of the drug candidates discovered using our platform, if any, that are further developed by our partners will achieve development or regulatory milestones, including marketing approval, or become viable commercial technologies, on a timely basis or at all, which would harm our ability to generate revenue.
- We expect to make significant investments in our continued research and development of new technologies and platform expansion, which may not be successful.
- The loss of any member of our senior management team or our inability to attract and retain highly skilled scientists and business development professionals could adversely affect our business.
- 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 our anticipated revenue.
- The biopharmaceutical 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.
- If we are unable to obtain and maintain sufficient intellectual property protection for our technologies, including our platform and Denovium deep learning technology, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize technologies or a platform similar or identical to ours, and our ability to successfully leverage our platform technologies may be impaired.
- We have identified a material weakness in our internal control over financial reporting, and we may identify additional material weaknesses in the future or otherwise fail to maintain proper and effective internal controls, which may impair our ability to produce accurate financial statements on a timely basis.

Corporate History and Information

We were formed as AbSci, LLC in August 2011 as a limited liability company under the Oregon Limited Liability Act and subsequently converted into a Delaware limited liability company under the laws of the State of Delaware in April 2016. In October 2020, we completed a reorganization whereby we converted from a Delaware limited liability company to a Delaware corporation under the name Absci Corporation. Our principal executive office is located at 101 E 6th Street, Suite 350, Vancouver, WA 98660, and our telephone number is (360) 949-1041. Our website address is www.absci.com. We do not incorporate the information on or accessible through our website into this prospectus.

Trademarks

This prospectus contains references to our trademarks and service marks and to those belonging to third parties. Absci®, SoluPro®, and SoluPure® are our registered trademarks with the U.S. Patent and Trademark Office. We also use various other trademarks, service marks and trade names in our business, including the Absci logo, ACE Assay, HiPrBind Assay, Bionic Proteins, Translating Ideas into

Drugs, Bionic SoluPro, Integrated Drug Creation, Denovium, and Denovium Engine. All other trademarks, service marks or trade names referred to in this prospectus are the property of their respective owners. Solely for convenience, the trademarks and trade names in this prospectus may be referred to with or without the ® and ™ symbols, but references which omit the ® and ™ symbols should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto.

Implications of Being an Emerging Growth Company and a Smaller Reporting Company

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

- being permitted to present only two years of audited financial statements in this prospectus and only two years of related "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our periodic reports and registration statements, including this prospectus;
- not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended (Sarbanes-Oxley Act);
- reduced disclosure obligations regarding executive compensation in our periodic reports, proxy statements, and registration statements, including in this prospectus; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

We may take advantage of these exemptions for up to five years from the date of effectiveness of this registration statement or such earlier time that we are no longer an emerging growth company. We would cease to be an emerging growth company on the date that is the earliest of (i) the last day of the fiscal year in which we have total annual gross revenues of $1.07 billion or more; (ii) the last day of our fiscal year following the fifth anniversary of the date of the completion of this offering; (iii) the date on which we have issued more than $1.0 billion in nonconvertible debt during the previous three years; or (iv) the last day of the fiscal year in which we are deemed to be a large accelerated filer under the rules of the Securities and Exchange Commission (SEC) which means the market value of our common stock that is held by non-affiliates exceeds $700 million as of the prior June 30th. We may choose to take advantage of some but not all of these exemptions. We have taken advantage of reduced reporting requirements in this prospectus. Accordingly, the information contained herein may be different from the information you receive from other public companies in which you hold stock.

We have elected to utilize the exemption for the delayed adoption of certain accounting standards, and, therefore, we will adopt new or revised accounting standards at the time private companies adopt the new or revised accounting standard and will do so until such time that we either (i) irrevocably elect to "opt out" of such extended transition period or (ii) no longer qualify as an emerging growth company. We may choose to early adopt any new or revised accounting standards whenever such early adoption is permitted for private companies. As a result of this election, the information that we provide in this prospectus may be different than the information you may receive from other public companies in which you hold equity interests.

We are also a "smaller reporting company" as defined in the Securities Exchange Act of 1934, as amended. We may continue to be a smaller reporting company even after we are no longer an emerging growth company. We may continue to be a smaller reporting company after this offering if either (i) the market value of our shares held by non-affiliates is less than $250 million as measured on the last business day of our second fiscal quarter or (ii) our annual revenue was less

than $100 million during the most recently completed fiscal year and the market value of our shares held by non-affiliates is less than $700 million as measured on the last business day of our second fiscal quarter. Specifically, as a smaller reporting company, we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K and have reduced disclosure obligations regarding executive compensation. Further, if we are a smaller reporting company with less than $100 million in annual revenue, we would not be required to obtain an attestation report on internal control over financial reporting issued by our independent registered public accounting firm.

The Offering

Common stock offered by us	shares
Option to purchase additional shares	We have granted the underwriters an option to purchase up to additional shares of common stock from us. The underwriters can exercise this option at any time within 30 days from the date of this prospectus.
Common stock to be outstanding immediately after this offering	shares (or shares if the underwriters exercise their option to purchase additional shares in full).
Use of proceeds	We estimate that we will receive net proceeds from the sale of our common stock in this offering of approximately $ million, or $ million if the underwriters exercise in full their option to purchase additional shares, assuming an initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We intend to use the net proceeds from this offering to further our investment in expanding our Integrated Drug Creation Platform's capabilities, continued growth of our business development organization and activities, and for general corporate purposes, including working capital, capital expenditures, and operating expenses. We may also use a portion of the remaining net proceeds, if any, to acquire complementary businesses, products, services or technologies, including scientific expertise, although we have no binding agreements or commitments to do so at this time. See "Use of Proceeds" for additional information.
Risk Factors	You should read carefully "Risk Factors" beginning on page 16 and other information included in this prospectus for a discussion of factors that you should consider before deciding to invest in our common stock.
Proposed Nasdaq Global Market symbol	"ABSI"

The number of shares of our common stock to be outstanding after this offering is based on shares of common stock (after giving effect to the conversion of 13,752,043 shares of our redeemable convertible preferred stock outstanding as of December 31, 2020, as well as the issuance and subsequent conversion of 254,886 shares of Series E redeemable convertible preferred stock issued and sold in February 2021 and the conversion of the Convertible Notes issued in March 2021, into an aggregate of shares of our common stock immediately prior to the completion of this offering; and which includes shares outstanding that are subject to

forfeiture or our right to repurchase as of such date) outstanding as of December 31, 2020, and excludes:

- 516,587 shares of our common stock issuable upon the exercise of options outstanding as of December 31, 2020, with a weighted-average exercise price of $3.63 per share;
- 1,250,753 shares of our common stock issuable upon the exercise of options granted after December 31, 2020, with a weighted-average price of $4.43 per share;
- 93,007 shares of our common stock issuable upon the exercise of warrants to purchase common stock outstanding as of December 31, 2020, with a weighted-average exercise price of $1.00 per share;
- 1,445,460 shares of our common stock reserved for future issuance under our 2020 Stock Option and Grant Plan (2020 Plan) as of December 31, 2020;
- shares of our common stock reserved for future issuance under our 2021 Stock Option and Incentive Plan (2021 Plan) which will become available for issuance upon the effectiveness of the registration statement of which this prospectus is a part, as well as any future increases in the number of shares of our common stock reserved for issuance under the 2021 Plan; and
- shares of our common stock reserved for future issuance under our 2021 Employee Stock Purchase Plan (2021 ESPP) which will become available for issuance upon the effectiveness of the registration statement of which this prospectus is a part, as well as any future increases in the number of shares of our common stock reserved for issuance under the 2021 ESPP.

Unless otherwise indicated, this prospectus reflects and assumes the following:

- a -for- reverse stock split of our common stock effected on , 2021;
- the conversion of all outstanding shares of our redeemable convertible preferred stock as of December 31, 2020 and all of our shares of Series E redeemable convertible preferred stock issued and sold in February 2021 into an aggregate of 14,006,929 shares of our common stock immediately prior to the completion of this offering;
- the conversion of our convertible promissory notes issued in March 2021 (Convertible Notes) into an aggregate of shares of common stock upon the completion of this offering, assuming an initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover of this prospectus, and that the offering is completed on , 2021;
- no exercise of the outstanding options described above;
- no exercise by the underwriters of their option to purchase up to additional shares of our common stock in this offering; and
- the filing and effectiveness of our amended and restated certificate of incorporation and the adoption of our amended and restated bylaws, which will occur immediately prior the completion of this offering.

Summary Consolidated Financial Data

The following summary consolidated statements of operations and comprehensive loss data for the years ended December 31, 2019 and 2020 and the summary consolidated balance sheet data as of December 31, 2020 have been derived from our audited consolidated financial statements appearing elsewhere in this prospectus, except for the pro forma and pro forma adjusted data. You should read the following summary consolidated financial data together with the "Selected Consolidated Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" sections of this prospectus and our consolidated financial statements and the related notes appearing elsewhere in this prospectus. Our historical results are not necessarily indicative of the results that may be expected in any future periods.

	For the Years Ended December 31,	
	2020	2019
	(in thousands, except for share and per share data)	
Consolidated Statements of Operations Data:		
Revenues		
Technology development revenue	$ 4,117	$ 2,044
Collaboration revenue	663	16
Total revenues	4,780	2,060
Operating expenses		
Research and development	11,448	4,311
Selling, general and administrative	5,502	3,523
Depreciation and amortization	1,131	491
Total operating expenses	18,081	8,325
Operating loss	(13,301)	(6,265)
Other income (expense)		
Interest expense	(634)	(268)
Other expense, net	(418)	(51)
Total other expense, net	(1,052)	(319)
Net loss and other comprehensive loss	(14,353)	(6,584)
Adjustment of redeemable convertible preferred units and stock	(34,336)	(17,286)
Cumulative undeclared preferred stock dividends	(780)	—
Net loss applicable to common stockholders and unitholders	$ (49,469)	$ (23,870)
Net loss per share attributable to common stockholders and unitholders: Basic and diluted	$ (10.55)	$ (5.18)
Weighted-average common shares and units outstanding: Basic and diluted	4,691,020	4,606,505
Pro forma net loss per share attributable to common shareholders: Basic and Diluted [(1)]		
Pro forma weighted-average common shares outstanding: Basic and Diluted [(1)]		

(1) See the subsection titled "Management's Discussion and Analysis of Financial Condition and Results of Operations— Pro Forma Information" for an explanation of the calculations of our basic and diluted pro forma net loss per share, and the weighted-average number of shares outstanding used in the computation of the per share amounts.

	As of December 31, 2020		
	Actual	Pro Forma[1]	Pro Forma, As Adjusted[2][3]
	(in thousands, except for share and per share data)		
Consolidated Balance Sheet Data:			
Cash and cash equivalents	$ 69,867		
Working capital[4]	63,138		
Total assets	88,569		
Total liabilities	21,565		
Redeemable convertible preferred stock	156,433		
Accumulated deficit	(90,066)		
Total other stockholders' deficit	(89,429)		

(1) The pro forma column in the balance sheet data table above gives effect to (i) the conversion of all outstanding shares of our redeemable convertible preferred stock as of December 31, 2020 into an aggregate of 13,752,043 shares of our common stock immediately prior to the completion of this offering; (ii) our receipt of aggregate gross proceeds of approximately $5.0 million from the sale of additional shares of our Series E redeemable convertible preferred stock in February 2021 and the conversion of these shares into an aggregate of 254,886 shares of our common stock immediately prior to the completion of this offering; and (iii) our receipt of aggregate gross proceeds of $125.0 million from the sale of the Convertible Notes in March 2021 and the issuance of shares of common stock upon the conversion of all outstanding principal and accrued interest on the Convertible Notes upon the completion of this offering, assuming an initial public offering price per share of $, the midpoint of the price range set forth on the cover of this prospectus, and assuming that the offering is completed on , 2021.

(2) The pro forma as adjusted column in the balance sheet data table above gives effect to (i) the pro forma adjustments set forth in footnote (1) above; and (ii) the sale of shares of common stock in this offering at an assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

(3) Each $1.00 increase or decrease in the assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, the amount of cash and cash equivalents, working capital, total assets and total other stockholders' (deficit) equity by approximately $ million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. Each increase or decrease of 1.0 million in the number of shares we are offering would increase or decrease, as applicable, the amount of each of cash and cash equivalents, working capital, total assets and total other stockholders' (deficit) equity by approximately $ million, based on the assumed initial public offering price per share, the midpoint of the price range as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. The pro forma as adjusted information is illustrative only, and we will adjust this information based on the actual initial public offering price and other terms of this offering determined at pricing.

(4) We define working capital as current assets less current liabilities.

Risk Factors

Investing in our common stock involves a high degree of risk. You should carefully consider the risks described below, as well as the other information in this prospectus, including our consolidated financial statements and the related notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations," before deciding whether to invest in our common stock. The occurrence of any of the events or developments described below could materially harm our business, financial condition, results of operations and prospects. In such an event, the market price of our common stock could decline, and you may lose all or part of your investment. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations.

Risks Related to Limited Operating History, Financial Condition and Prospects

Our current business has a limited operating history, which may make it difficult to evaluate our business and predict our future performance.

Our current business has a limited operating history. We began commercial operations in 2018. Before engaging in commercial operations, we focused primarily on technology development. Our revenue for the fiscal years ended December 31, 2019 and 2020 was $2.1 million and $4.8 million, respectively, and was generated primarily for technology development activities. We are very early in the adoption phase of our business model, and, to date, no partner has entered into a license for clinical or commercial use of any intellectual property rights related to biologic drug candidates or cell lines generated utilizing our platform. Moreover, we have only agreed upon clinical or commercial license terms for two of our Active Programs in the event an option is exercised by a partner to license such intellectual property rights. We may never achieve commercial success and we have limited historical financial data upon which we may base our projected revenue. We also have limited historical financial data upon which we may base our planned operating expense or upon which you may evaluate our business and prospects. Based on our limited experience in developing and marketing new technologies, we may not be able to effectively:

- drive adoption of our technologies;
- attract and retain partners;
- enter into licensing arrangements with our partners following completion of our technology development activities;
- establish partnerships that contain economic terms sufficient to make our business model viable;
- achieve sufficient near term revenue or capital to sustain our business to enable us to receive the downstream economics of our existing or future partnerships;
- expand the scope of our existing partnerships;
- anticipate and adapt to changes in our the existing and emerging markets in which we operate;
- focus our technology development efforts in areas that generate returns on these efforts;
- succeed in achieving our technology development goals.
- maintain and develop strategic relationships with suppliers to acquire necessary materials and equipment for the development of our technologies on appropriate timelines, or at all;

- implement an effective business development strategy to drive adoption of our Integrated Drug Creation Platform by new and existing partners;
- scale our technology development activities to meet potential demand at a reasonable cost;
- acquire, in-license or otherwise obtain technologies that enable us to expand our platform capabilities;
- avoid infringement of third-party intellectual property rights;
- obtain licenses on commercially reasonable terms to third-party intellectual property rights, as needed for our current and planned operations;
- obtain and maintain valid and enforceable patents and other intellectual property rights that give us a competitive advantage;
- protect our proprietary technologies; and
- attract, retain and motivate qualified personnel.

In addition, a substantial portion of our expenses have been and will continue to be fixed. Accordingly, if we do not generate revenue as and when anticipated, our losses may be greater than expected and our operating results will suffer. You should consider the risks and difficulties frequently encountered by companies like ours in new and rapidly evolving markets when making a decision to invest in our common stock.

We have incurred significant losses since inception, we expect to incur losses in the future and we may not be able to generate sufficient revenue to achieve and maintain profitability.

We have incurred significant losses since our inception. For the years ended December 31, 2019 and 2020, we incurred net losses of $6.6 million and $14.4 million, respectively. As of December 31, 2020, we had an accumulated deficit of $90.1 million. We expect that our operating expenses will continue to increase as we grow our business and will also increase as a result of our becoming a public company. Since our inception, we have financed our operations primarily from private placements of our preferred equity securities, convertible promissory notes and the incurrence of other indebtedness, and to a lesser extent, revenue derived from our Integrated Drug Creation Platform. We have devoted substantially all of our resources to the development of our Integrated Drug Creation Platform and commercialization of resulting technology development capabilities. We will need to generate significant additional revenue to achieve and sustain profitability, and even if we achieve profitability, we cannot be sure that we will remain profitable for any substantial period of time. We may never be able to generate sufficient revenue to achieve or sustain profitability and our recent and historical growth should not be considered indicative of our future performance.

Even if this offering is successful, we will need to raise additional capital to fund our operations and improve our platform. If we are unable to raise additional capital on terms acceptable to us or at all, 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 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 12 months following the date of this prospectus. If our available cash resources together with our net proceeds from this offering and anticipated cash flow from operations are insufficient to satisfy our liquidity requirements, including because of lower demand for the application of our Integrated Drug Creation Platform to biologic drug discovery or cell line development, or the realization of other risks described in this prospectus, we will 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 sources of 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 business development efforts to drive market recognition of our platform and address competitive developments;
- fund business development efforts for our current and future programs;
- expand the capabilities of our platform into additional areas of biopharmaceutical research and development, such as drug target discovery;
- acquire, license or invest in additional technologies or complementary businesses or assets;
- pursue opportunities to apply our protein creation technologies beyond the biopharmaceutical industry; 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 business development efforts;
- our rate of progress in selling access to our platform and business development activities associated therewith;
- our rate of progress in, and cost of development of new technologies;
- the effect of competing technological and market developments; 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 stockholders would result. Any preferred equity securities issued also would likely provide for rights, preferences or privileges senior to those of holders of our common stock. 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 stock. 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 asset acquisitions, making capital expenditures, or declaring dividends.

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.

Substantially all of our historical revenue is related to technology development activities, and we have not demonstrated the ability to enter into a sufficient number of partnerships providing for long-term license arrangements under which we are entitled to receive milestone payments or royalties on net product sales. We have not received

any such milestone or royalty revenues to date, and it may be years before we realize any such revenues, if at all.

For the years ended December 31, 2019 and 2020, substantially all of our revenue was generated by technology development fees through performing technology development activities addressing molecules in programs for our programs. To date, such fees have generally been payable upon both the inception of, and the demonstration of technical achievement of program milestones, under technology development agreements with our partners. Our business model is dependent on the successful completion of the technology development phase under these arrangements and, more importantly, on our subsequent entry into long-term license arrangements with our partners that entitle us to development, regulatory and commercial milestones and/or royalties with respect to product candidates generated through our platform, which may include product candidates discovered and/or manufactured in cell lines developed by us. We are still in the very early stages of implementing our business model and, to date, no partner has entered into a license for clinical or commercial use of any intellectual property rights related to biologic drug candidates or cell lines generated utilizing our platform. Moreover, we have only agreed upon clinical or commercial license terms for two of our Active Programs in the event an option is exercised by a partner to license such intellectual property rights. If we are unable to enter into license agreements for our Active Programs, we will not receive any downstream payments under these programs, which will have a material and adverse effect on our business prospects. Additionally, any such license agreements that we may enter into may not be on terms that are favorable to us, or such license agreements may be terminated.

Technology development fees are generated by technology development activities that we perform for our partners, the timing and nature of which are dictated by the timing of program commencement, which depends on various permissions, information and supplies provided by our partners and/or third party vendors as well as the pace of program progression and receipt of ongoing input from our partners. Our eligibility to receive milestone payments is generally subject to the negotiation of future arrangements, as described above. As a result, we currently do not generate significant recurring revenue and, until we are able to 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 advancing subject programs, and our partners achieving development milestones or commercial sales with respect to drug candidates discovered and/or manufactured in cell lines developed by us.

Risks Related to Our Business Model and Partnerships

Our commercial success depends on the technological capabilities of our Integrated Drug Creation Platform and its utilization by our existing partners and adoption by new partners.

We utilize our Integrated Drug Creation Platform to identify biopharmaceutical drug candidates and associated production cell lines for further development and potential commercialization by our partners. As a result, the quality and sophistication of our platform and technology are critical to our ability to conduct our technology development activities and to deliver more promising molecules and cell lines and to accelerate and lower the costs of discovery and cell line development for our existing and potential partners, as compared to other methods. In particular, our business depends, among other things, on:

- our platform’s ability to successfully identify appropriate molecules and production cell lines for our partners and provide them to our partners on the desired timeframes;
- our partners’ determination that the product candidates and/or production cell lines that we provide to them can ultimately be used to advance our partners’ clinical development programs;

- our partners' willingness to enter into license agreements with economic terms that are acceptable to us, which is based substantially in the value our partners believe can be recognized from the product candidates and/or production cell lines that we provide to them;
- our ability to execute on our strategy to enter into new partnerships with new or existing partners on technology development terms that are acceptable to us;
- our ability to increase awareness of the capabilities of our technologies and solutions;
- our partners’ and potential partners’ willingness to adopt our technologies;
- whether our platform reliably provides advantages over legacy and other alternative technologies and is perceived by partners to be cost effective;
- the rate of adoption of our technologies by pharmaceutical companies, biotechnology companies of all sizes, government organizations and non-profit organizations and others;
- prices we charge for our technology and the discoveries that we make;
- the relative reliability and robustness of our platform;
- our ability to develop new technologies for partners;
- our platform’s ability to offer sufficient cost effectiveness, efficiency, and performance to warrant partners’ continued adoption of and ongoing reliance on our technologies;
- our platform’s ability to screen a high number of cells and drug candidates;
- whether competitors develop a platform that enables biologic drug discovery and cell line development more effectively than our platform;
- the status of the market for next-generation biologics, which may become less attractive due to business or regulatory factors;
- our ability to bioengineer our bespoke E. coli SoluPro and Bionic SoluPro strains to produce certain types of proteins;
- our ability to adapt our assays to screen effectively for certain types of drug modalities or targets;
- our ability to construct diverse genetic libraries covering sufficient diversity of protein sequence variants and folding and expression solutions combinations;
- our ability to reliably adapt our assays to each program to screen large strain libraries and routinely identify molecules/strains that meet the program deliverables;
- our ability to optimize our fermentation conditions to scale at an effective level;
- our ability to use our deep learning AI to generate actionable biological insights;
- our platform’s ability to create new drug modalities and novel conjugates;
- our platform’s ability to incorporate non-standard amino acids into proteins with high efficiency and fidelity;
- the timing and scope of any approval that may be required by the U.S. Food and Drug Administration (FDA) or any other regulatory body for drugs that are developed based on molecules discovered and/or manufactured using our Integrated Drug Creation Platform technologies;

- our partners' and the biopharmaceutical industry's continued interest and investment in next-generation biologic drug development, and the continued market growth and clinical success of this category collectively;
- 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 and enhance our platform through research and technology development activities.

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.

We are substantially dependent on the successful application of our Integrated Drug Creation Platform to biologic drug discovery and cell line development partnerships, and we have only recently begun to enter into biologic drug discovery partnerships.

To date, we have invested nearly all of our efforts and financial resources in technology development relating to our bespoke *E. coli* SoluPro and Bionic SoluPro strains. The biologic drug discovery and cell line development business is capital intensive, particularly for early stage companies that do not have significant off-setting revenues.

Our success is dependent on our ability to drive adoption of our platform by partners, developing technologies for our partners, and entering into license agreements with such partners. Further, our success depends upon our expansion of our existing partnerships, and entry into new partnerships, to include our Discovery applications, as well as continuing to drive adoption of our Cell Line Development applications. Substantially all of our revenue generated to date is from technology development arrangements for our Cell Line Development applications. To date, we have very limited experience and expertise in the biologic drug discovery using our platform and have not demonstrated success in expanding our platform into biologic drug discovery. In order to realize the benefits of such an expanded scope of our Integrated Drug Creation Platform, we need to further advance our technology and further market our expanded capabilities to existing and new partners.

Our future revenue growth and market potential may depend on our ability to leverage our Integrated Drug Creation Platform, together with our custom libraries and other proprietary tools, into other areas of biopharmaceutical research and development, such as biologics drug discovery. However, we may not be able to successfully validate that our Integrated Drug Creation Platform will accelerate the hit identification and lead optimization steps of biologic drug discovery or that they will allow us to discover more effective drugs.

Our inability to continue these initiatives and initiate new technology development efforts could result in a failure to develop our platform, improve upon existing technologies, develop and advance the opportunities like biologics drug discovery, and expand our addressable market, each of which could have a material and adverse impact on our business development, business, financial position and results of operations.

We do not expect to generate significant recurring revenue unless and until such time as we enter into further agreements that, in the aggregate, result in regular and continuous fees for our performance of technology development activities, and, more importantly, agreements under which we would be eligible for future payments upon our partners' achievement of development and regulatory milestones or commencement of commercial sales with respect to any drug candidates generated using our platform. We are unable to predict whether and the extent to which payments will be made to us under our arrangements and whether and the extent to which

we will be able to enter into future arrangements under which we are eligible to generate additional revenues, or the timing of the achievement of any milestones under these agreements, if they are achieved at all. The timing and likelihood of payments to us under these agreements is dependent on our partners' successful utilization of the molecules discovered using our platform, which is outside of our control. Because of these factors, our operating results could vary materially from quarter to quarter.

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

Our business model is dependent on the eventual progression of biologic drug candidates discovered or initially developed utilizing our Integrated Drug Creation Platform into clinical trials and commercialization. This requires us to attract partners and enter into agreements with them that contain obligations for the partners to pay us milestone payments as well as royalties on sales of approved products for the biologic drug candidates they develop that are generated utilizing our platform. Given the nature of our relationships with our partners, we do not control the progression, clinical development, regulatory strategy or eventual commercialization, if approved, of these product candidates. As a result, our future success and the potential to receive milestones and royalties are entirely dependent on our partners efforts for which we have no control. If our partners determine not to proceed with the future development of a product candidate discovered or initially developed utilizing our Integrated Drug Creation Platform or if it implements a clinical or regulatory strategy that ultimately does not enable the further development or approval of the product candidate, we will not receive the benefits of our partnerships, which may have a material and adverse effect on our operations.

In addition, biologic drug development is inherently uncertain and very few product candidates ultimately progress through clinical development and receive approval for commercialization. See the risk factor section below "*Risks Related to Biologic Drug Development*" for additional information related to the risks of biologic drug development. If our partners do not receive regulatory approval for a sufficient number of product candidates originating from our partnerships, we may not be able sustain our business model. Further, we will have little control over how diversified our portfolio of potential milestone payments or royalties will end up being.

While as a general matter we intend to periodically report on the status of our business development initiatives, including anticipated next steps, we may not provide forward-looking guidance on the timing of those next steps. In addition, we do not control the timing of disclosure by our partners of any milestones or other information related to any drug candidates generated using our platform. Any disclosure by us or our partners of data or other information regarding any such drug candidates that is perceived as negative may have a material adverse impact on our stock price or overall valuation. Our stock price may also decline as a result of negative clinical trial results, including adverse safety events involving any drug candidate that is subject to one of our partnerships.

If we cannot maintain our current relationships with partners, fail to expand our relationships with our current partners, or if we fail to enter into new relationships, our future operating results would be adversely affected as a general matter.

In the years ended December 31, 2019 and 2020, revenue from our top 3 partners and top 2 partners accounted for 87% and 77% of our total revenue, respectively. The revenue attributable to these partners may fluctuate in the future, which could have an adverse effect on our business financial condition, results of operations and prospects. Our existing partners may cease to use our technologies depending on their own technological developments, availability of other competing technologies and internal decisions regarding allocation of time and resources to the discovery and development of biologic product candidates, over which we have no control. Our existing and future partners may have limited bandwidth to initiate new programs, which could limit their

adoption or scale of application of our technologies. In addition, existing partners may choose to produce some or all of their requirements internally by using or developing their own manufacturing capabilities or by using capabilities from acquisitions of assets or entities from third parties with such capabilities. A loss of one of our partners could adversely impact our revenue, results of operations, cash flows or reputation in any given year.

Our future success also depends on our ability to expand relationships with our existing partners and to establish relationships with new partners. We engage in discussions with other companies and institutions regarding potential technology development and license opportunities on an ongoing basis, which can be time consuming. There is no assurance that any of these discussions will result in a technology development and/or license agreement, or if an agreement is reached, that the resulting relationship will be successful, or that the terms of such agreement will be favorable to us. In addition, although we have entered into a Joint Marketing Agreement with KBI Biopharma, Inc., this agreement may not lead to any future business opportunities. In addition, our ability to monitor the achievement of clinical, regulatory and commercial milestones by our partners and enforce the payment of any corresponding fees is limited. Furthermore, the termination of these relationships could result in a temporary or permanent loss of revenue. Additionally, speculation in the industry about our existing or potential commercial relationships can be a catalyst for adverse speculation about us and our technology, which can adversely affect our reputation and our business.

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

Our revenue under our development and other partner agreements for any particular period, or on an absolute basis, can be difficult to forecast.

Because of the complexities and long development timelines inherent in the biologic drug development business, it is difficult to predict the timing of payments under our technology development and other partner agreements. In particular, payments under our technology development agreements are subject to the achievement of project milestones and our partners' decisions to initiate or continue the technology development work, and any future downstream payments with respect to product candidates generated using our platform will be subject to our partners' advancement of the product candidates, over which we have no control, As a result, our revenue for any particular period can be difficult to forecast. Our revenue may grow at a slower rate than in past periods or even decline on a year-over-year basis. Because of these factors, our operating results could vary materially from quarter to quarter from our forecasts. Also, due to the limited probability of success for advancement of a clinical candidate by a partner at any given stage of development and the unpredictability of when a partner may choose to continue development of a product candidate and whether any milestone payments will be due to us, our revenue may be difficult to forecast on an absolute basis.

Additionally, we recognize revenue either as we perform our technology development, upon completion of performing our technology development or upon achieving certain licensing, clinical, regulatory, and commercialization milestones. As a result, much of our revenue is generated from agreements entered into during previous periods. Consequently, a decline in demand for our platform, a decline in new or renewed business in any one quarter or any delays in the achievement, or any failure to achieve, development, regulatory and commercial milestones by our partners with respect to product candidates generated using our platform, may not significantly reduce our revenue for that quarter but could negatively affect our revenue in future quarters. Our revenue recognition model also makes it difficult for us to rapidly increase our revenue through increased operations in any period, as revenue from partners is recognized over the course of their drug development and commercialization process.

We expect to make significant investments in our continued research and development of new technology development and platform expansion, which may not be successful.

We are seeking to leverage our Integrated Drug Creation Platform as a consolidated technology for simultaneous biologic drug discovery and cell line development. We are seeking to expand our platform and the scope of our capabilities, which may or may not be successful. This includes, but is not limited to, drug discovery, incorporation of non-standard amino acids (nsAAs), and application of artificial intelligence across our Integrated Drug Creation Platform. We expect to incur significant expenses to advance these research and development efforts or to invest in, or acquire complementary technologies, but these efforts may not be successful. For instance, we have very limited experience with the discovery of novel biologic drug candidates and incorporation of nsAAs, and have not yet deployed these technologies in the context of partnered programs. Additional development will be required for the routine and robust use of these technologies in partnered programs. Through the course of additional technology development, significant unanticipated challenges may arise that adversely affect our future partnership prospects. To expand the scope of our platform, we acquired Denovium, an AI company leveraging deep learning for protein discovery and engineering, in January 2021. We are working to integrate the Denovium deep learning technology into our Integrated Drug Creation Platform to accelerate drug discovery and cell line development efforts. Our long-term goals for this technology, such as constructing deep learning models capable of *in silico* drug and cell line design, will require significant investment and long development times and may ultimately never materialize.

Additionally, we may make significant investments in proprietary drug candidates we seek to discover, and any discovery and subsequent development efforts for such drug candidates may not be successful. Such investments may be costly, and given the uncertain nature of biologic drug discovery and development, our efforts in this field may not be successful. We may also make significant investments in pursuing technology development in industries other than the biopharmaceutical industry, and such pursuits may not be successful. We have no prior experience in using our technology platform in industries outside of the biopharmaceutical industry, and the economic structure of any future transactions in other industries may be more unfavorable to us than transactions in the biopharmaceutical industry.

Developing new technologies is a speculative and risky endeavor. Technologies that initially show promise may fail to achieve the desired results or may not achieve acceptable levels of analytical accuracy or clinical utility. We may need to alter our technologies in development before we identify a potentially successful technology. Technology development is expensive, may take years to complete and can have uncertain outcomes. Failure can occur at any stage of the development. Additionally, development of any technology may be disrupted or made less viable by the development of competing technologies, and changes in the industry in which our technologies are applied could obsolete our technologies. For example, advancements in gene therapy or RNA-based vaccine technologies could significantly reduce the market share of protein-based biologics.

New potential technologies may fail any stage of development or commercialization and if we determine that any of our current or future technologies are unlikely to succeed, we may abandon them without any return on our investment. If we are unsuccessful in developing or acquiring additional technologies, our potential for growth may be impaired.

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 generated using our platform 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 future partners may be located in markets subject to political and social risk, corruption and infrastructure problems, and could be 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 and have a material adverse effect on our business, financial condition and results of operations.

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 our anticipated revenue.

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 may in the future make statements about their goals and expectations for partnerships with us. The actual timing of these events can vary dramatically due to a number of factors such as delays or failures in our or our current and future partners' 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. Additionally, to date, none of our partners has successfully completed any regulatory submissions, such as investigational new drug (IND) applications or biologics license applications (BLAs), for any drug candidates generated using our platform. 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 we may never receive the anticipated revenues from these partnerships.

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 stock may decline as a result of announcements of unexpected or negative 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 product candidates generated 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 expect, or they may not report such information at all, in which case we would not report that information either. In addition, if a partner chooses to announce a partnership with us, there is no guarantee that we will receive technology development revenue in that quarter or even the following quarter, as such revenue is only payable to us in accordance with the terms of the agreements governing such partnerships. The price of our common stock may decline as a result of the public announcement of unexpected results or developments in our partnerships, or as a result of our partners withholding such information.

Risks Related to Biologic Drug Development

Biologic drug development is inherently uncertain, and it is possible that our technology may not succeed in discovering appropriate molecules or producing cell lines. Even if we

do succeed, it is possible that none of the drug candidates discovered using our platform, if any, that are further developed by our partners will achieve development or regulatory milestones, including marketing approval, or become viable commercial technologies, on a timely basis or at all, which would harm our ability to generate revenue.

We use our platform to identify biologic drug candidates and develop cell lines for the production of drug candidates for partners who are engaged in biologic drug discovery and development. These partners include large pharmaceutical companies, smaller biotechnology companies and may in the future include non-profit and government organizations. While we receive payments for performing research activities and successfully completing technical program deliverables and milestones for our partners, we anticipate that the vast majority of the economic value of the contracts that we enter into with our partners will be in the downstream payments that would be payable if certain milestones are met by our partners with respect to product candidates identified and manufactured using bespoke cell lines developed by our Integrated Drug Creation Platform and royalties on net sales if such product candidates are approved for marketing and successfully commercialized. As a result, our future growth is dependent on the ability of our partners to successfully develop and commercialize therapies based on molecules generated 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 indirectly through the activities of our partners. Even if our platform is capable of identifying high quality biologic drug candidates, there can be no assurance that our partners will successfully develop, secure marketing approvals for and commercialize any drug candidates based on the proteins that we discover. As a result, we may not realize the intended benefits of our partnerships.

Due to the uncertain, time-consuming and costly clinical development and regulatory approval process, our partners may not successfully develop any drug candidates generated using our platform, 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.

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 generated 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 de-emphasize or terminate the development or commercialization of any drug candidate generated using our platform. 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. For example, the number of BLAs approved by the FDA varies significantly over time and if changes in applicable laws, regulations, or policy or other events lead to an extended reduction in the number of BLAs approved by the FDA or otherwise reduce the number of biologics in development, our industry would contract and our business would be materially harmed.

Our partners' failure to effectively develop or commercialize any drug candidates generated using our platform could have a material adverse effect on our business, financial condition, results of operations and prospects, and cause the market price of our common stock to decline. In addition to the inherent uncertainty in drug development addresses above, our ability to forecast our future revenues may be limited.

In addition, we may in the future seek to advance proprietary drug candidates through preclinical validation, and may seek to license or co-develop such proprietary drug candidates with a partner for clinical development. In such case, we would also be dependent on our ability to enter into partnerships with respect to the drug candidate with license or joint development terms that are acceptable to us in a timely manner. We may also in the future invest in advancing proprietary drug candidates through some or all clinical-stage development activities and regulatory filings for approval to commercialize such proprietary drug candidates. If we were to do this, we would be subject to all of the risks of biologic drug development described above and elsewhere in this prospectus, and our failure to effectively develop or commercialize such proprietary drug candidates could have a material adverse effect on our business, financial condition, results of operations and prospects, and cause the market price of our common stock to decline.

If our partners experience any of a number of possible unforeseen or negative events in connection with preclinical or clinical development, regulatory approval or commercialization of product candidates generated through our partnership, this could negatively affect our revenue opportunity for that program, and/or have broader deleterious effects on our reputation and future partnership prospects.

Our partners may experience numerous unforeseen events during, or as a result of, preclinical studies or clinical trials that could delay or prevent their ability to conduct further development or obtain regulatory approval or licensure of, or commercialize, biologic drug candidates generated through our partnerships, including:

- Preclinical studies designed to enable the submission of IND applications, or other preclinical development activities, by our partners may not result in data sufficient to support the advancement of the applicable product candidates into clinical development, or our partners may abandon development activities for such product candidates prior to any IND submission for a variety of reasons;
- regulatory authorities or ethical review boards, including institutional review boards (IRBs), may not authorize commencement of a clinical trial or conduct a clinical trial at a prospective trial site;
- there may be delays in reaching or failure to reach agreement on acceptable clinical trial contracts or clinical trial protocols with prospective trial sites;
- the FDA or other regulatory authorities may disagree with a clinical trial design or a sponsor's interpretation of data even after such regulatory authorities have reviewed and commented on the clinical trial design;
- differences in trial design between early stage clinical trials and later-stage clinical trials may make it difficult to extrapolate the results of earlier clinical trials to later-stage clinical trials;
- the FDA or other regulatory authorities may disagree about whether study endpoints are clinically meaningful or recommend study endpoints that require lengthy periods of observation;
- the number of patients, or amount of data, required to complete clinical trials may be larger than anticipated, patient enrollment in these clinical trials may be slower than anticipated or patients may drop out of clinical trials at a higher rate than anticipated;

- contract research organizations and other contracted third parties may fail to perform their duties in accordance with the study protocol or applicable laws and regulations;
- changes may be made to product candidates after commencing clinical trials, which may require that previously completed stages of clinical testing be repeated or delay later stages of testing;
- clinical trials may fail to satisfy the applicable regulatory requirements of the FDA or other regulatory authorities responsible for oversight of the conduct of clinical trials in other countries;
- regulators may elect to impose a clinical hold, or our partners, governing IRBs, data safety monitoring boards or ethics committees may elect to suspend or terminate our partners' clinical research or trials for various reasons, including non-compliance with regulatory requirements or a finding that the participants are being exposed to unacceptable risks to their health or the privacy of their health information being disclosed;
- the cost of clinical trials of the applicable product candidates, or improvements to such product candidates, may be greater than our partners anticipate, causing them to delay or terminate their clinical development efforts;
- the supply or quality of materials necessary to conduct clinical trials of the applicable product candidates may be insufficient or inadequate;
- the outcome of our partners' preclinical studies and early clinical trials may not be predictive of the success of later clinical trials, and interim results of a clinical trial do not necessarily predict final results;
- product candidates may be associated with negative or inconclusive results in clinical trials, and our partners may decide to deprioritize or abandon these product candidates, or regulatory authorities may require our partners to abandon them or may impose onerous changes or requirements, which could lead to de-prioritization or abandonment;
- product candidates may have undesirable side effects which could lead to serious adverse events, or other unexpected characteristics. One or more of such effects or events could cause regulators to impose a clinical hold on the applicable trial, or cause our partners or their investigators, IRBs or ethics committees to suspend or terminate the trial of the applicable product candidates; and
- clinical trials may suggest or demonstrate that products are not safe and effective, or as safe and effective as competing therapies on the market or in development.

In addition, disruptions caused by the COVID-19 pandemic may increase the likelihood that our partners encounter such difficulties or delays in initiating, enrolling, conducting or completing their planned and ongoing clinical trials. Delays of this nature could also allow competitors to bring products to market before our partners do, potentially impairing our partners' abilities to successfully commercialize products generated in partnership with us and harming our business and results of operations. Any delays in the development of the product candidates developed by our partners generated using our technology our partners may significantly harm our business, financial condition and prospects. Many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory clearance, authorization or approval of partnered products in development.

The biopharmaceutical 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 biopharmaceutical platform technology market. Our technologies address therapeutic discovery and bioproduction 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, discovery screening, cell line generation and the sale of instruments and devices. Potential competitors addressing components or adjacent aspects of the broad processes involved in biologic drug discovery and cell line development include the following:

- In the field of biologic drug discovery screening and protein therapeutic engineering, we face competition from companies such as AbCellera Biologics Inc., Adimab LLC, Ambrx Inc., Ligand Pharmaceuticals Inc. and Sutro Biopharma, Inc.; and
- In the field of cell line generation and single-cell screening, we face competition from companies such as HiFiBio Inc. and Ligand Pharmaceuticals Inc., and companies offering instrumentation, such as Berkeley Lights Inc., Menarini Silicon Biosystems, Miltenyi Biotec and Sphere Fluidics Ltd.

Our target partners may also elect to develop their processes on in house systems, or using other methods, rather than implementing our technologies and may decide to stop using our technologies. These companies are likely to exhaust all internal alternatives to our technology before adopting our technologies. In addition, there are many large established companies in the life science technology market that we do not currently compete with but that could develop systems, technologies, tools or other products that will compete with us in the future. These large established companies have substantially greater financial and other resources than us, including larger research and development staff or more established marketing and sales forces.

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

- longer operating histories;
- larger partner bases;
- greater brand recognition and market penetration;
- greater financial resources;
- greater technological and research and development resources;
- better system reliability and robustness;
- greater business development 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 partner requirements, devote greater resources to the development, promotion and sale of their platforms or solutions than we can, or sell their platforms or solutions, 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 of our platform technologies for the biologic drug discovery and cell line development, which could prevent us from increasing our revenue or sustaining profitability.

The market, including potential partners and potential investors, may be skeptical of the viability and benefits of our technology platform because it is based on novel and complex synthetic biology technology.

The market, including customers and potential investors, may be skeptical of the viability and benefits of our technology platform because it is based on novel and complex synthetic biology technology. There can be no assurance that our technologies will be understood, approved, or accepted by potential partners and potential investors or that we will be able to enter into new partnerships with new or existing partners. The synthetic biology market is relatively new, and potential partners may be hesitant to allocate resources in a relatively unproven field. If we are unable to convince these potential partners of the utility and value of our technologies or that our technologies are superior to the technologies they currently use, we will not be successful in entering these markets and our business and results of operations will be adversely affected. If potential investors are skeptical of the success of our technologies, our ability to raise capital and the value of our stock may be adversely affected.

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

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

There is significant uncertainty related to the insurance coverage and reimbursement of newly cleared, authorized or approved therapeutics in the United States and other jurisdictions. Due to the trend toward value-based pricing and coverage, the increasing influence of health maintenance organizations and additional legislative changes, we expect our partners to experience pricing pressures on therapeutics generated using our platform that our partners may commercialize. The downward pressure on healthcare costs in general, particularly novel therapeutics, has become very

intense. As a result, increasingly high barriers are being erected to the entry of new products, which would negatively impact our ability to generate revenues.

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

Payors, whether domestic or foreign, or governmental or private, are developing increasingly sophisticated methods of controlling healthcare costs and those methods are not always specifically adapted for new technologies. In both the United States and certain foreign jurisdictions, there have been a number of legislative and regulatory changes to the health care system that could impact our ability to sell our products profitably. In particular, in 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010 (ACA), was enacted, which, among other things, subjected biologic products to potential competition by lower-cost biosimilars; addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected; increased the minimum Medicaid rebates owed by most manufacturers under the Medicaid Drug Rebate Program; extended the Medicaid Drug Rebate program to utilization of prescriptions of individuals enrolled in Medicaid managed care organizations; subjected manufacturers to new annual fees and taxes for certain branded prescription drugs; created a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% (increased to 70% pursuant to the Bipartisan Budget Act of 2018, effective as of January 1, 2019) point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D; and provided incentives to programs that increase the federal government's comparative effectiveness research. If efforts to contain the price of biopharmaceutical products are successful, the magnitude of milestone payments and royalties we would expect to receive in connection with our partners' future prioritization and investment in developing novel biologics may be impacted.

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 operations are currently not subject to the direct regulation by the FDA or other regulatory bodies. However, our business could in future become subject to more direct oversight by the FDA, or other domestic or international agencies. For example, we may be subject to evolving and variable regulations governing the production of genetically engineered organisms. Furthermore, while we have no active plans to operate a manufacturing facility designed to comply with current good manufacturing practices (cGMPs), future market pressures or the lack of available capacity at cGMP manufacturing facilities may necessitate our entry into this market. Complying with such regulations may be expensive, time-consuming and uncertain, and our failure to obtain or comply with such approvals and clearances could have an adverse effect on our business, financial condition and operating results.

Risks Related to Our Operations

Our loan and security agreement contains covenants that restrict our operating activities, and we may be required to repay the outstanding indebtedness in an event of default, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

In June 2018, we entered into a Loan and Security Agreement (LSA), which was subsequently amended, with Bridge Bank (Lender) pursuant to which the Lender agreed to provide us a term loan up to $3.0 million with a maturity date in May, 2022. We initially borrowed $0.3 million that was funded in June, 2018. In March 2019, we entered into a First Amendment to the loan and service agreement to increase total borrowings to $3.0 million. In March 2020, we entered into a

Second Amendment to the loan service agreement that increased total borrowings to $5.0 million. Until we have repaid such indebtedness, the loan and security agreement subjects us to various customary covenants, including requirements as to financial reporting, liquidity ratios and insurance and restrictions on our ability to dispose of our business or property, to change our line of business, to liquidate or dissolve, to enter into any change in control transaction, to merge or consolidate with any other entity or to acquire all or substantially all the capital stock or property of another entity, to incur additional indebtedness, to incur liens on our property, to pay any dividends or make other distributions on capital stock other than dividends payable solely in capital stock, to redeem capital stock, to enter into in-bound licensing agreements, to engage in transactions with affiliates, and to encumber our intellectual property. Our business may be adversely affected by these restrictions on our ability to operate our business.

Following the amendments, we are permitted to make interest only payments on the LSA through May 2021, at which time amortization begins. However, we may be required to repay the outstanding indebtedness under the loan facility if an event of default occurs under the loan and security agreement. An event of default will occur if, among other things, we fail to make required payments under the loan and security agreement; we breach any of our covenants under the loan and security agreement, subject to specified cure periods with respect to certain breaches; the Lender determines that a material adverse change (as defined in the loan and security agreement) has occurred; we or our assets become subject to certain legal proceedings, such as bankruptcy proceedings; we are unable to pay our debts as they become due; or we default on contracts with third parties which would permit the third party to accelerate the maturity of such indebtedness or that could have a material adverse change on us. We may not have enough available cash or be able to raise additional funds through equity or debt financings to repay such indebtedness at the time any such event of default occurs. In such a case, we may be required to delay, limit, reduce or terminate our operations or grant to others rights to develop and market our Integrated Drug Creation Platform that we would otherwise prefer to develop and market ourselves. The Lender could also exercise its rights as secured lender to take possession of and to dispose of the collateral securing the term loan, which collateral includes substantially all of our property (excluding intellectual property, which is subject to a negative pledge). Our business, financial condition, results of operations and prospects could be materially adversely affected as a result of any of these events.

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

We rely on a limited number of suppliers, or in many cases single suppliers, to provide certain consumables and equipment that we use in our laboratory operations, as well as reagents and other laboratory materials involved in the development of our technology. Fluctuations in the availability and price of laboratory materials and equipment could have an adverse effect on our ability to meet our technology development goals with our partners and thus our results from operations as well as future partnership opportunities. An interruption in our laboratory operations or technology transfer could occur if we encounter delays, quality issues or other difficulties in securing these consumables, equipment, reagents or other materials, and if we cannot then obtain an acceptable substitute. In addition, we would likely be required to incur significant costs and devote significant efforts to find new suppliers, acquire and qualify new equipment, validate new reagents and revalidate aspects of our existing assays, which may cause delays in our processing of samples or development and commercialization of our technology. Any such interruption could significantly affect our business, financial condition, results of operations and reputation.

In particular, we have purchased and rely on the Sartorius Ambr system. Sartorius AG (Sartorius) supplies us with the Ambr bioreactor system and related equipment and consumables, which are critical to our business. The Ambr system and its related consumables are provided solely by Sartorius. We are also materially reliant on the liquid handling robotics and associated consumables

produced solely by the Hamilton Company. Any disruption in the supply chain for these products would materially affect our business. While there are alternative types of equipment that we could use as a replacement for the Ambr system and/or the Hamilton workstations, switching to different systems would require significant capital investment, long lead times and significant training and validation.

Our Integrated Drug Creation Platform 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 activities as compared to the use of legacy and other alternative technologies, and will enable more efficient or improved pharmaceutical and biotechnology product development and/or biomanufacturing. There is no assurance that we will be able to meet our partners' needs in the future, or at all. To date, we have not yet had a program enter clinical testing or progress to manufacture in a cGMP environment, which may reduce our partners confidence in our platform. We also believe that pharmaceutical and biotechnology companies are likely to be particularly sensitive to defects in, or suboptimal performance 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.

We will need to develop and expand our workforce, commercial infrastructure and laboratory operations to support anticipated growth in demand for our technology development programs, and we may encounter difficulties in managing this development and expansion.

We will need to expand our workforce, commercial infrastructure and laboratory operations to support anticipated growth in demand for our technology development programs. If we are unable to support fluctuations in the demand for our technology development programs, including ensuring that we have adequate capacity to meet increased demand, our business could suffer. As of March 31, 2021, we had 102 full-time employees and we expect to increase the number of employees and the scope of our operations as we continue to develop our technologies. As we seek to increase the number of our partnerships, expand the scope of our existing partnerships and further develop our technological capabilities, we may need to incorporate new equipment, implement new technology systems and laboratory processes and hire new personnel with different qualifications. Failure to manage this growth or transition could result in turnaround time delays, higher technology development costs, declining technology development quality, deteriorating alliance management success, and slower responses to competitive challenges. A failure in any one of these areas could make it difficult for us to meet market expectations for our technologies, and could damage our reputation and the prospects for our business.

To manage our anticipated expansion, we must continue to implement and improve our managerial, operational and financial systems, expand our facilities and continue to recruit and train additional qualified personnel. Also, our management team may need to divert a disproportionate amount of its attention away from its day-to-day activities and devote a substantial amount of time to managing these business expansion activities. Due to our limited resources and early stage of growth, we may not be able to effectively manage this simultaneous execution and the expansion of our operations. This may result in weaknesses in our infrastructure, operational mistakes, slower development of our technology development programs, loss of business opportunities, loss of employees and reduced productivity among our employees.

If our management is unable to effectively manage our expected development and expansion, our expenses may increase more than expected, our ability to generate or increase our revenue could be reduced and we may not be able to implement our business strategy. Our future financial

performance, and our ability to develop and commercialize our technologies and compete effectively, will depend, in part, on our ability to effectively manage our future development and expansion.

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

We currently have a limited number of business development professionals. We will need to expand our commercial organization in order to effectively market our platform capabilities 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 business development organization, which could negatively impact market adoption of our platform and limit our revenue growth and potential profitability. In addition, the time and cost of establishing a specialized business development or sales team for a particular future service, technology, asset, or set of assets, 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 and business development professionals could adversely affect our business.

Our success depends on the skills, experience and performance of key members of our senior management team, including Sean McClain, our founder and Chief Executive Officer, and Matthew Weinstock, 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, their employment with us is at-will, which means that either we or the executive may terminate their employment at any time, and we therefore cannot guarantee their retention for any period of time.

Our technology development programs and laboratory operations depend on our ability to attract and retain highly skilled personnel. We may not be able to attract or retain qualified personnel due to the intense competition for highly skilled scientists, including those focused on biologic drug discovery and cell line development, as well as qualified business development and sales professionals, among life sciences companies. Additionally, our geographic location in Vancouver, Washington, which does not have as high a concentration of innovative biotechnology companies as other geographic locations may negatively impact our ability to attract top talent.

We also face competition from universities and public and private research institutions in recruiting and retaining highly qualified scientific personnel. We may have difficulties locating, recruiting or retaining qualified salespeople. Recruiting and retention difficulties can limit our ability to support our research and business development programs. A key risk in the area of retention is that all of our employees are at-will.

We may not realize the expected benefits of our acquisition of Denovium because of difficulties related to integration.

In January 2021, we consummated the Denovium acquisition. 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 Denovium's businesses with ours, the anticipated benefits of the Denovium 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 team of computational biologists and artificial intelligence experts along with a proprietary deep learning platform geared for protein discovery and engineering. There is no guarantee that Denovium will continue to benefit projects or that we will be able to achieve our ultimate goal of *in silico* protein and cell line design. Further, it is possible that we will experience disruption of either company's or both companies' ongoing businesses, including as we continue to service a limited number of Denovium's ongoing 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, significant, non-recurring costs in connection with the acquisition of Denovium and integrating our operations with Denovium's, including costs to maintain employee morale and to retain key employees. 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 Denovium acquisition on our business, employees, partners, 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 Denovium 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 Denovium in a seamless manner that minimizes any adverse impact on our employees, 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 Denovium's business that may exceed the costs that we currently anticipate. Accordingly, the contemplated benefits of the Denovium acquisition may not be realized fully, or at all, or may take longer to realize than expected.

We have made technology acquisitions and expect to acquire businesses or assets or make investments in other companies or technologies that could negatively affect our operating results, dilute our stockholders' ownership, 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. Additionally, we may invest in certain wholly-owned preclinical and/or clinical development programs with the goal of licensing them to partners for clinical development. Although we have acquired other businesses or assets in the past, including our acquisition of Denovium, Inc. in January 2021, 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 stockholders. Additional funds may not be available on terms that are favorable to us, or at all. If the price of our common stock is low or volatile, we may not be able to acquire companies or assets using our securities as consideration.

We may be subject to laws that generally govern the biopharmaceutical industry.

Biopharmaceutical companies are subject to additional healthcare regulation and enforcement by the federal government and by authorities in the states and foreign jurisdictions in which they conduct their business. These laws and regulations may constrain our relationships with our customers and partners. Such laws include, without limitation, state and federal anti-kickback, fraud and abuse, false claims, and transparency laws and regulations related to drug pricing and payments and other transfers of value made to physicians and other healthcare providers. If our partners' operations are found to be in violation of any of such laws or any other governmental regulations that apply, we may be subject to penalties, including, without limitation, administrative, civil and criminal penalties, damages, fines, disgorgement, the curtailment or restructuring of operations, integrity oversight and reporting obligations, exclusion from participation in federal and state healthcare programs and responsible individuals may be subject to imprisonment.

Our inability to collect on our accounts receivable by a significant number of partners may have an adverse effect on our business, financial condition and results of operations.

Invoices issued to our partners are generally made on open credit terms. While we haven't experienced an inability to collect on accounts receivable from our partners historically, it may occur in the future. Management assesses the need to maintain an allowance for potential credit losses each reporting period. If our partners' cash flow, working capital, financial conditions or results of operations deteriorate, they may be unable or even unwilling to pay trade receivables owed to us promptly or at all. As a result, we could be exposed to a certain level of credit risk. If a major partner experiences, or a significant number of partners experience, financial difficulties, the effect on us could be material and have an adverse effect on our business, financial condition and results of operations.

If our operating facility becomes damaged or inoperable or we are required to vacate our facility, our ability to conduct and pursue our technology development efforts may be jeopardized.

We currently operate primarily through a single facility located in Vancouver, Washington. 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 for some period of time. We may be unable to execute on our technology development activities 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 technology 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 technology development efforts, we may be unable to negotiate commercially reasonable terms to engage with the third party.

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 business operations, including the operation of our AI platform (Denovium Engine), our computational biology system, our knowledge management system, our partner reporting, our platform, our advanced automation systems, and advanced application software. These systems involve computational resources and data storage distributed between onsite servers, cloud platforms hosted by numerous third-party providers (e.g., Amazon Web Services), and a private GPU cluster owned by Absci but located and maintained at a facility in Texas. 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, partner service and support, billing, research and development activities, scientific and general administrative activities. A significant risk in implementing these systems includes the integration and communication between separate IT systems, and any failure to integrate these systems effectively could adversely affect various aspects of our operations.

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

Because we currently market our technologies and our partners may market products derived from our technologies outside of the United States and we or our partners may market future technologies, products and services outside of the United States, if cleared, authorized or approved, our business is subject to risks associated with doing business outside of the United States, including an increase in our expenses and diversion of our management’s attention from the development of future products and services. Accordingly, our business and financial results in the future could be adversely affected due to a variety of factors, including:

- multiple, conflicting and changing laws and regulations such as privacy security and data use regulations, tax laws, export and import restrictions, economic sanctions and embargoes, employment laws, anticorruption laws, regulatory requirements, reporting and disclosure obligations, reimbursement or payor regimes and other governmental approvals, permits and licenses;
- failure by us, our partners or our distributors to obtain regulatory clearance, authorization or approval for the use of our technologies in various countries;

- additional potentially relevant third-party patent rights;
- complexities and difficulties in obtaining intellectual property protection and enforcing our intellectual property;
- difficulties in staffing and managing foreign operations;
- complexities associated with managing multiple payor reimbursement regimes, government payors or patient self-pay systems;
- difficulties in negotiating favorable reimbursement negotiations with governmental authorities;
- complexities in technology transfer regulations and logistics related to delivery of our bioengineered *E. coli* to partners;
- logistics and regulations associated with shipping samples, including infrastructure conditions and transportation delays;
- limits in our ability to penetrate international markets if we are not able to conduct our operations locally;
- 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 technologies, exposure to foreign currency exchange rate fluctuations and different tax jurisdictions;
- natural disasters, political and economic instability, including wars, terrorism and political unrest, outbreak of disease, boycotts, curtailment of trade and other business restrictions;
- 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 U.S. Foreign Corrupt Practices Act (FCPA), its books and records provisions, or its anti-bribery provisions, or laws similar to the FCPA in other jurisdictions in which we may now or in the future operate, such as the United Kingdom's Bribery Act of 2010; and
- onerous anti-bribery requirements of several member states in the European Union (EU), such as the United Kingdom's Bribery Act of 2010, and other countries that are constantly changing and require disclosure of information to which U.S. legal privilege may not extend.

Any of these factors could significantly harm our future international expansion and operations and, consequently, our revenue and results of operations.

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. 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.

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. Our SoluPro system is based on bioengineered *E. coli*, which could pose a health risk if improperly handled. Additionally, we employ various synthetic biology processes, which could involve the use or emission of harmful materials. Federal, state and local laws and regulations govern the use, generation, manufacture, storage, handling and disposal of these materials and wastes. We may be subject to periodic inspections by relevant 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, technology 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.

Public health crises such as pandemics or similar outbreaks could cause a disruption of the development of our platform technologies, and 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, including Vancouver, Washington, 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 across the United States and in other countries. In response to the spread of COVID-19, and in accordance with guidance from federal, state, and local government authorities, we have restricted access to our facilities mostly to personnel and third parties who 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, required universal facial masking in accordance with U.S. Centers for Disease Control recommendations, and requested (and facilitated) 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 technology 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.

With such restrictions in place our business has been and may continue to be impacted negatively in a number of ways. For example, we have experienced delays in technology development activities

due to supply chain interruptions related to diversion of personal protective equipment and biotechnology research and biomanufacturing supplies to healthcare organizations and COVID-19 vaccine developers. In addition, the global focus on the pandemic and uncertainties of markets has extended our business development timelines, and has negatively impacted our partners' and potential partners' willingness to advance negotiations in a timely manner. We have also experienced difficulties recruiting personnel, especially from outside our region, due to travel restrictions and overall uncertainties and reluctance of prospective employees to relocate during the COVID-19 pandemic.

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 and/or federal governments that could impact our ability to conduct our technology development and other activities;
- 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 technology development activities, business operations and business development, or delay necessary interactions with local regulators, 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.

We rely and expect in the future to rely on a limited number of outside parties to perform the cGMP manufacturing for clinical development and commercialization of any biologic product candidates produced using our technology. Limitations in this global cGMP manufacturing capacity could delay or prevent clinical development and/or commercialization efforts.

We develop manufacturing processes that are required to use our cell lines, but we do not currently have capabilities to manufacture products in accordance with cGMPs. We rely on the in-house manufacturing capabilities of our partners or capabilities of established third-party contract development and manufacturing organizations (CDMOs) to manufacture biologic drug candidates generated with our technology. Manufacturing capacity maintained by our partners or third-party

CDMOs is a finite resource that is in demand. Shortages in cGMP manufacturing capacity are difficult to predict and could hamper our operations and harm our business.

Risks Related to Our Intellectual Property

If we are unable to obtain and maintain sufficient intellectual property protection for our technologies, including our platform and Denovium deep learning technology, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize technologies or a platform similar or identical to ours, and our ability to successfully leverage our platform technologies 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 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 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 technology 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 March 31, 2021, we own 35 issued or allowed patents and 32 pending patent applications worldwide, which includes four issued U.S. patents and eight pending U.S. patent applications. 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 (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 technologies.

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 (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 any future in-licensed patent applications and the enforcement or defense of our owned or any future 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 technologies 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 may come to rely on in-licenses from third parties. If we were to lose these rights, our business could be materially adversely affected, our ability to develop improvements to our platform or technologies could be negatively and substantially impacted, and if disputes arise, we could 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 may need to obtain licenses from third parties to advance our research, development and commercialization activities. 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 technologies. These engagements may take the form of an exclusive license or of actual ownership of intellectual property rights or technologies from third parties. Our rights to use the technologies we license may be 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 technology development 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 partnership agreements;
- 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 any future 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 technology 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 future components of our platform, may be licensed to us on a non-exclusive basis. The owners of these non-exclusively licensed technologies would therefore be 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 technologies 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 these technologies. 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 technology 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, upfront or technology access fees, payments based on certain development, regulatory or commercial milestones such as sales volumes, or royalties based royalties received or milestones achieved by our partners. In addition, such licenses may be non-exclusive, which could give our competitors access to the same intellectual property licensed to us.

In spite of our best efforts, our licensors might conclude that we have materially breached our license agreements and might therefore terminate the license agreements, thereby removing our ability to develop and commercialize technologies 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 technologies 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 or our partners' ability to further commercialize our technologies or products generated using our technologies 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 partners 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 technologies and services. 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 advancing ongoing or initiating new technology development programs 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 developing technologies or advancing partnerships, which could harm our business, financial condition, results of operations and prospects.

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

Filing, prosecuting and defending patents on our platform, technologies, software, systems and processes in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as the laws of the United States, and even where such protection is nominally available, judicial and governmental enforcement of such intellectual property rights may be lacking. Whether filed in the United States or abroad, our patent applications may be challenged or may fail to result in issued patents. Further, we may encounter difficulties in protecting and defending such rights in foreign jurisdictions. Consequently, we may not be able to prevent third parties from practicing our inventions in some or all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own platform or technologies and may also sell their products or services to territories where we have patent protection, but enforcement is not as strong as that in the United States. These platforms and technologies may compete with ours. Our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing. In addition, certain countries have compulsory licensing laws under which a patent owner may be compelled to grant licenses to other parties. Furthermore, many countries limit the

enforceability of patents against other parties, including government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of any patents. In many foreign countries, patent applications and/or issued patents, or parts thereof, must be translated into the native language. If our patent applications or issued patents are translated incorrectly, they may not adequately cover our technologies; in some countries, it may not be possible to rectify an incorrect translation, which may result in patent protection that does not adequately cover our technologies in those countries.

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

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 generated by our technologies that our partners may develop but that are not covered by the claims of the patents that we own or may license or own in the future;
- we, or our current or future partners, might not have been the first to make the inventions covered by the issued patents and pending patent applications that we own or may license or own in the future;
- we, or our current or future partners, might not have been the first to file patent applications covering certain of our or their inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our owned or any future 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 technologies or will provide us with any competitive advantages;
- we cannot ensure that our commercial activities or technologies will not infringe upon the patents of others;
- we cannot ensure that we or our partners or future licensees will be able to further commercialize our technologies on a substantial scale, if approved, before the relevant patents that we own or may 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 technologies 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, technologies 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 technologies, we take steps to protect our intellectual property and proprietary technologies by entering into agreements, including confidentiality agreements, non-disclosure agreements and intellectual property assignment agreements, with our employees, consultants, academic institutions, corporate and/or strategic partners, potential or existing investors and, when needed, our advisers. However, we cannot be certain that such agreements have been entered into with all relevant parties, and we cannot be certain that our trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. For example, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Such agreements may not be enforceable or may not provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosure or other breaches of the agreements, and we may not be able to prevent such unauthorized disclosure, which could adversely impact our ability to establish or maintain a competitive advantage in the market. If we are required to assert our rights against such party, it could result in significant cost and distraction.

Monitoring unauthorized disclosure and detection of unauthorized disclosure is difficult, and we do not know whether the steps we have taken to prevent such disclosure are, or will be, adequate. If we were to enforce a claim that a third party had illegally obtained and was using our trade secrets, it would be expensive and time-consuming, and the outcome would be unpredictable. In addition, some courts both within and outside the United States may be less willing, or unwilling, to protect trade secrets. Further, we may need to share our trade secrets and confidential know-how with current or future business partners, collaborators, contractors and others located in countries at

heightened risk of theft of trade secrets, including through direct intrusion by private parties or foreign actors, and those affiliated with or controlled by state actors.

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

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

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

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

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

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

have and may in the future enter into agreements with owners of such third party trade names or trademarks to avoid potential trademark litigation which may limit our ability to use our trade names or trademarks in certain fields of business.

Although we have registered Absci, SoluPure and SoluPro with the U.S. Patent and Trademark Office and certain other jurisdictions, we have not yet registered certain of our trademarks in all of our potential markets, and failure to secure those registrations could adversely affect our business. If we apply to register these trademarks in other countries, and/or other trademarks in the United States and other countries, our applications may not be allowed for registration in a timely fashion or at all; and further, our registered trademarks may not be maintained or enforced. In addition, opposition or cancellation proceedings may in the future be filed against our trademark applications and registrations, and our trademarks may not survive such proceedings. In addition, third parties may file first for our trademarks in certain countries. If they succeed in registering such trademarks, and if we are not successful in challenging such third party rights, we may not be able to use these trademarks to market our technologies in those countries. If we do not secure registrations for our trademarks, we may encounter more difficulty in enforcing them against third parties than we otherwise would. If we are unable to establish name recognition based on our trademarks and trade names, we may not be able to compete effectively, which could harm our business, financial condition, results of operations and prospects. And, over the long-term, if we are unable to establish name recognition based on our trademarks, then our business development abilities may be materially adversely impacted.

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

We or any future licensors may be subject to claims that former employees, partners or other third parties have an interest in our owned or any future 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 such licensors' ownership of our owned or any future in-licensed patents, trade secrets or other intellectual property. If we or our future 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. 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.

If we become involved in patent litigation or other proceedings related to a determination of rights, we could incur substantial costs and expenses, substantial liability for damages or be required to stop our development and commercialization efforts of our technologies.

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

We may, in the future, become involved with litigation or actions at the USPTO or foreign patent offices with various third parties. We expect that the number of such claims may increase as our business, visibility and partnership base expand and the number of our technology development programs and resultant licensed technologies increases, and as the level of competition in our industry increases. Any infringement claim, regardless of its validity, could harm our business by, among other things, resulting in time-consuming and costly litigation, diverting management's time

and attention from the development of our business, requiring the payment of monetary damages (including treble damages, attorneys' fees, costs and expenses) or royalty payments.

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

As we move into new markets and expand our technology offerings, 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. 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.

Third parties may assert that we are employing their proprietary technology without authorization. Given that biologic drug discovery and cell line development platform technology fields are highly competitive areas, there may be third-party intellectual property rights that others believe could relate to our technologies.

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

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, during the course of this kind of litigation, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock.

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

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 such fees due to 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 any future licensors fail to maintain the patents and patent applications covering technologies 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 technologies 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.

Some of our jointly owned intellectual property has 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, and compliance with such regulations may limit our exclusive rights and our ability to contract with non-U.S. manufacturers.

The United States federal government retains certain rights in inventions produced with its financial assistance under the Bayh-Dole Act. The federal government retains a "nonexclusive, nontransferable, irrevocable, paid-up license" for its own benefit. The Bayh-Dole Act also provides

federal agencies with “march-in rights”. March-in rights allow the government, in specified circumstances, to require the contractor or successors in title to the patent to grant a “nonexclusive, partially exclusive, or exclusive license” to a “responsible applicant or applicants” if it determines that (1) adequate steps have not been taken to commercialize the invention and achieve practical application of the government-funded technology, (2) government action is necessary to meet public health or safety needs, (3) government action is necessary to meet requirements for public use under federal regulations or (4) we fail to meet requirements of federal regulations. If the patent owner refuses to do so, the government may grant the license itself. Some of our licensed patents are subject to the provisions of the Bayh-Dole Act. If our licensors fail to comply with the regulations of the Bayh-Dole Act, they could lose title to any patents subject to such regulations, which could affect our license rights under the patents and our ability to stop others from using or commercializing similar or identical technology and products, or limit patent protection for our technology and products.

Risks Related to This Offering and Our Common Stock

Our share price may be volatile, and you may be unable to sell your shares at or above the offering price.

The market price of our common stock is likely to be volatile and could be subject to wide fluctuations in response to many risk factors listed in this section, and others beyond our control, including:

- actual or anticipated fluctuations in our financial condition and operating results, including fluctuations in our quarterly and annual results;
- the termination of partnership agreements by our partners or announcements that our partners will cease developing a product originating from our platform;
- the introduction of new technologies or enhancements to existing technology by us or others in our industry;
- our inability to establish additional partnerships;
- departures of key 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;
- changes in the regulatory landscape that subject us to additional regulatory and legal requirements;
- publication of research reports about us or our industry, or biologic drug discovery or cell line development in particular, or positive or negative recommendations or withdrawal of research coverage by securities analysts;
- release of unfavorable publicity about us, our partners, our competitors, or the biopharmaceutical industry, including through press coverage or social media;
- changes in the market valuations of similar companies;
- overall performance of the equity markets;
- sales of our common stock by us or our stockholders in the future;
- trading volume of our common stock;

- disputes or other developments relating to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies;
- significant lawsuits, including patent or stockholder litigation;
- the impact of 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 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 stock, regardless of our actual operating performance. If the market price of our common stock after this offering does not exceed the initial public offering price, you may not realize any return on your investment in us and may lose some or all of your investment. 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 identified a material weakness in our internal control over our financial reporting process. If we are unable to remediate this material weakness, we may not be able to accurately or timely report our financial condition or results of operations.

While we and our independent registered public accounting firm did not and were not required to perform an audit of our internal control over financial reporting, in connection with the audits of our 2019 and 2020 consolidated financial statements, we and our independent registered public accounting firm identified control deficiencies in the design and operation of our internal control over financial reporting that constituted a material weakness. 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 a company's annual or interim financial statements will not be prevented or detected on a timely basis. We identified a material weakness in our internal control over our financial statement close process specifically related to there not being a sufficient complement of accounting and finance personnel with the necessary U.S. GAAP technical expertise to timely identify and account for complex or non-routine transactions.

These control deficiencies could result in a misstatement of our accounts or disclosures that would result in a material misstatement of our financial results that would not be prevented or detected, and accordingly, we determined that these control deficiencies constitute a material weakness.

We are working to remediate the material weaknesses and are taking steps to strengthen our internal control over financial reporting through the hiring of additional finance and accounting personnel with the requisite technical knowledge and skills. With the additional personnel, we intend to take appropriate and reasonable steps to remediate these material weaknesses through the implementation of appropriate segregation of duties, formalization of accounting policies and controls and retention of appropriate expertise for complex accounting transactions. We will not be able to fully remediate these control deficiencies until these steps have been completed and have been operating effectively for a sufficient period of time. The hiring of additional finance and accounting personnel and the implementation of improvements to our accounting and proprietary systems and controls may be costly and time consuming and the cost to remediate may impair our results of operations in the future.

We cannot assure you that the measures we have taken to date will be sufficient to remediate the material weakness we identified or avoid the identification of additional material weaknesses in the

future. If the steps we take do not remediate the material weakness in a timely manner, there could continue to be a reasonable possibility that this material weakness or other control deficiencies could result in a material misstatement of our annual or interim financial statements that would not be prevented or detected on a timely basis. If we fail to remediate our material weakness, identify future material weaknesses in our internal control over financial reporting or fail to meet the demands that will be placed upon us as a public company, including the requirements of the Sarbanes-Oxley Act, we may be unable to accurately report our financial results or report them within the timeframes required by law or stock exchange regulations. Failure to comply with Section 404 of the Sarbanes-Oxley Act could also potentially subject us to sanctions or investigations by the SEC or other regulatory authorities. If additional material weaknesses exist or are discovered in the future, and we are unable to remediate any such material weakness, our reputation, results of operations and financial condition could suffer.

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 adequate internal financial and accounting controls and procedures in place so that we can produce accurate financial statements on a timely basis is a costly and time-consuming effort that needs to be re-evaluated frequently. 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 this offering, we intend to begin the process of documenting, reviewing and improving our internal controls and procedures for compliance with Section 404 of the Sarbanes-Oxley Act of 2002, as amended(Sarbanes-Oxley Act) which will require annual management assessment of the effectiveness of our internal control over financial reporting. We have begun recruiting additional finance and accounting personnel with certain skill sets that we will need as a public company.

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 new 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 our existing any new 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 common stock.

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

In addition to our financial results, we expect to review 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. To date, we have only entered into partnerships for 10 programs with respect to which we have or are positioned to negotiate royalty- and milestone-bearing licenses. Accordingly, we do not presently have sufficient information to make accurate predictions regarding our potential revenue and financial performance.

Any metrics that we may identify 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 we fail to review other relevant information or change or substitute the key business metrics we review as our business grows, our 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.

If you purchase our common stock in this offering, you will incur immediate and substantial dilution in the book value of your shares.

The initial public offering price is expected to be substantially higher than the net tangible book value per share of common stock. Investors purchasing shares of common stock in this offering will pay a price per share that substantially exceeds our net tangible book value per share after this offering. Based on the initial public offering price of $ per share, and after deducting the underwriting discounts and commissions and estimated offering expenses payable by us, investors purchasing shares of common stock in this offering will incur immediate dilution of $ per share as of March 31, 2021, representing the difference between our pro forma as adjusted net tangible book value per share, after giving effect to this offering, and the initial public offering price. Further, investors purchasing shares of common stock in this offering will contribute approximately % of the total amount invested by stockholders since our inception but will own only approximately % of the total number of shares of common stock outstanding after this offering.

This dilution is due to our investors who purchased shares prior to this offering having paid substantially less when they purchased their shares than the price offered to the public in this offering. To the extent that outstanding stock options or warrants are exercised, there will be further dilution to new investors. As a result of the dilution to investors purchasing shares of common stock in this offering, investors may receive significantly less than the purchase price paid in this offering, if anything, in the event of our liquidation. For a further description of the dilution that you will experience immediately after this offering, see the section of this prospectus titled “Dilution.”

A significant portion of our total outstanding shares are restricted from immediate resale but may be sold into the market in the near future. This could cause the market price of our common stock to drop significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares intend to sell their shares, could result in a decrease in the market price of our common stock. Immediately after this offering, we will have outstanding shares of common stock based on the number of shares outstanding as of March 31, 2021. This includes the shares that we are selling in this offering, which may be resold in the public market immediately without restriction, unless purchased by our affiliates. Of the remaining shares, shares are currently restricted as a result of securities laws, 180-day market stand-off provisions in agreements with us or 180-day lock-up agreements with the underwriters, but will be able to be sold after the offering as described in the section of this prospectus entitled “Shares Eligible for Future Sale.” Moreover, after this offering, holders of an aggregate of up to shares of our common stock issuable upon the conversion of shares of our redeemable convertible preferred stock and the holder of our outstanding warrant to purchase shares of our common stock, will have rights, subject to some conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders as

described in the section of this prospectus entitled “Description of Capital Stock—Registration Rights.” We also intend to register all shares of common stock that we may issue under our equity compensation plans. Once we register these shares, they can be freely sold in the public market, subject to volume limitations applicable to affiliates and the market stand-off provisions and lock-up agreements described in the section of this prospectus entitled “Underwriting.”

Future sales and issuances of our common stock or rights to purchase common stock, including pursuant to the adoption of our 2021 Plan and 2021 ESPP, could result in additional dilution of the percentage ownership of our stockholders 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 technology development activities, and costs associated with operating as a public company. To raise capital, we may sell common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time. If we sell common stock, 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 stockholders, and new investors could gain rights, preferences, and privileges senior to the holders of our common stock, including common stock sold in this offering.

Pursuant to our new 2021 Plan and 2021 ESPP, which will become effective upon the effectiveness of the registration statement of which this prospectus forms a part, our management is authorized to grant stock options to our employees, directors and consultants.

Initially, the aggregate number of shares of our common stock that may be issued pursuant to share awards under the 2021 Plan and 2021 ESPP will be shares. The number of shares of common stock reserved for issuance under the 2021 Plan and 2021 ESPP shall be cumulatively increased on January 1, 2022 and each January 1 thereafter by % of the total number of shares of common stock 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 stockholders will experience additional dilution, which could cause our share price to fall.

We may allocate the net proceeds from this offering in ways that you and other stockholders may not approve.

Our management will have broad discretion in the application of the net proceeds from this offering, including for any of the purposes described in the section titled “Use of Proceeds.” Because of the number and variability of factors that will determine our use of the net proceeds from this offering, their ultimate use may vary substantially from their currently intended use. Our management might not apply our net proceeds in ways that ultimately increase the value of your investment, and the failure by our management to apply these funds effectively could harm our business. Pending their use, we may invest the net proceeds from this offering in short- and intermediate-term, interest-bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government. These investments may not yield a favorable return to our stockholders. If we do not invest or apply the net proceeds from this offering in ways that enhance stockholder value, we may fail to achieve expected results, which could cause our stock price to decline.

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

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 stock. Any return to stockholders will therefore be limited to the appreciation of their common stock, which may never occur.

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

Based on the number of shares outstanding on a fully diluted basis as of March 31, 2021, our executive officers, directors, and 5% stockholders will beneficially own approximately % of our common stock. Non-executive employees will beneficially own an additional % of our common stock on a fully diluted basis. After the sale and issuance of shares in this offering, our executive officers, directors, and 5% stockholders will beneficially own approximately % of our common stock (including any shares purchased by our executive officers, directors and 5% stockholders in this offering). Therefore, after this offering, these stockholders will have the ability to influence us through this ownership position. These stockholders may be able to determine all matters requiring stockholder approval. For example, these stockholders 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 stock that you may feel are in your best interest as one of our stockholders.

Future sales of our common stock in the public market could cause our share price to fall.

Sales of a substantial number of shares of our common stock in the public market after this offering, or the perception that these sales might occur, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. Based on the number of shares of common stock outstanding as of March 31, 2021, upon the closing of this offering, we will have shares of common stock outstanding, assuming no exercise of our outstanding options.

All of the common stock sold in this offering will be freely tradable without restrictions or further registration under the Securities Act of 1933, as amended (Securities Act), except for any shares held by our affiliates as defined in Rule 144 under the Securities Act. The remaining shares of common stock outstanding after this offering, based on shares outstanding as of March 31, 2021, will be restricted as a result of securities laws, lock-up agreements or other contractual restrictions that restrict transfers for at least 180 days after the date of this prospectus, subject to certain extensions.

The underwriters may, in their sole discretion, release all or some portion of the shares subject to lock-up agreements with the underwriters prior to expiration of the lock-up period. See also the section of this prospectus captioned “Shares Eligible for Future Sale.” For more information regarding the lock-up agreements with the underwriters see the section of this prospectus captioned “Underwriting.”

The holders of shares of common stock, or % based on shares outstanding on an as-converted basis as of March 31, 2021, will be entitled to rights with respect to registration of such shares under the Securities Act pursuant to a registration rights agreement between such holders and us. See “Certain Relationships and Related Party Transactions—Registration Rights Agreement” below. If such holders, by exercising their registration rights, sell a large number of shares, they could adversely affect the market price for our common stock. If we file a registration statement for the purpose of selling additional shares to raise capital and are required to include shares held by these holders pursuant to the exercise of their registration rights, our ability to raise capital may be impaired. We intend to file a registration statement on Form S-8 under the Securities Act to register shares of common stock for issuance under the 2021 Plan, the 2020 Plan and the 2021 ESPP. Our 2021 Plan and the 2021 ESPP will provide for automatic increases in the shares

reserved for issuance under the plans which could result in additional dilution to our stockholders. Once we register the shares under these plans, they can be freely sold in the public market upon issuance and vesting, subject to a 180-day lock-up period and other restrictions provided under the terms of the applicable plan and/or the option agreements entered into with option holders.

No public market for our common stock currently exists, and an active trading market may not develop or be sustained following this offering.

Prior to this offering, there has been no public market for our common stock. An active trading market may not develop following the closing of this offering or, if developed, may not be sustained. The lack of an active market may impair your ability to sell your shares at the time you wish to sell them or at a price that you consider reasonable. The lack of an active market may also reduce the fair market value of your shares. An inactive market may also impair our ability to raise capital to continue to fund operations by selling shares and may impair our ability to acquire other companies or technologies by using our shares as consideration. The initial public offering price was determined by negotiations between us and the underwriters and may not be indicative of the future prices of our common stock.

Provisions in our corporate charter documents and under Delaware law could make an acquisition of us more difficult and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our amended and restated certificate of incorporation and our amended and restated bylaws that will become effective upon the closing of this offering may discourage, delay or prevent a merger, acquisition or other change in control of us that stockholders may consider favorable, including transactions in which stockholders might otherwise receive a premium for their shares. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. In addition, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors. Because our board of directors is responsible for appointing the members of our management team, these provisions could in turn affect any attempt by our stockholders to replace current members of our management team. Among others, these provisions include that:

- our board of directors has the right to expand the size of our board of directors and to elect directors to fill a vacancy created by the expansion of the board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors;
- our board of directors is divided into three classes, Class I, Class II and Class III, with each class serving staggered three-year terms, which may delay the ability of stockholders to change the membership of a majority of our board of directors;
- our stockholders may not act by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders;
- a special meeting of stockholders may be called only by the chair of the board of directors, the chief executive officer, or a majority of the board of directors, which may delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors;
- our amended and restated certificate of incorporation prohibits cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;
- our board of directors may alter our bylaws without obtaining stockholder approval;

- the required approval of the holders of at least two-thirds of the voting power of all of the then outstanding shares of voting stock to adopt, amend or repeal our bylaws or repeal the provisions of our amended and restated certificate of incorporation regarding the election and removal of directors;
- stockholders must provide advance notice and additional disclosures in order to nominate individuals for election to the board of directors or to propose matters that can be acted upon at a stockholders' meeting, which may discourage or deter a potential acquiror from conducting a solicitation of proxies to elect the acquiror's own slate of directors or otherwise attempting to obtain control of our company; and
- our board of directors is authorized to issue shares of preferred stock and to determine the terms of those shares, including preferences and voting rights, without stockholder approval, which could be used to significantly dilute the ownership of a hostile acquiror.

Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner.

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

Our amended and restated certificate of incorporation that will become effective upon the closing of this offering specifies that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for most legal actions involving actions brought against us by stockholders; provided that, if and only if the Court of Chancery of the State of Delaware dismisses any such action for lack of subject matter jurisdiction, such action may be brought in another state or federal court sitting in the State of Delaware. Our amended and restated certificate of incorporation will also provide that the federal district courts of the United States of America will be the exclusive forum for the resolution of any complaint asserting a cause of action against us or any of our directors, officers, employees or agents and arising under the Securities Act. The choice of forum provisions will not apply to suits brought to enforce any liability or duty created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction.

We believe these provisions may benefit us by providing increased consistency in the application of Delaware law and federal securities laws by chancellors and judges, as applicable, particularly experienced in resolving corporate disputes, efficient administration of cases on a more expedited schedule relative to other forums and protection against the burdens of multi-forum litigation. These choice of forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or any of our directors, officers, other employees or stockholders, which may discourage lawsuits with respect to such claims or make such lawsuits more costly for stockholders, although our stockholders will not be deemed to have waived our compliance with federal securities laws and the rules and regulations thereunder. There is uncertainty as to whether a court would enforce such provisions, and the enforceability of similar choice of forum provisions in other companies' charter documents has been challenged in legal proceedings. While the Delaware courts have determined that such choice of forum provisions are facially valid, a stockholder may nevertheless seek to bring a claim in a venue other than those designated in the exclusive forum provisions, and there can be no assurance that such provisions will be enforced by a court in those other jurisdictions. If a court were to find these types of

provisions to be inapplicable or unenforceable, and if a court were to find the exclusive forum provision in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving the dispute in other jurisdictions, which could materially adversely affect our business.

Our ability to use our net operating losses and certain other tax attributes may be limited.

Under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended (the Code) if a corporation undergoes an "ownership change," generally defined as a cumulative change of more than 50 percentage points (by value) in its equity ownership by certain stockholders over a rolling three-year period, the corporation's ability to use its pre-change NOL carryforwards and other pre-change tax attributes (such as research tax credits) to offset its post-change taxable income or taxes may be limited. We have experienced at least one ownership change in the past, and we may experience ownership changes in the future as a result of shifts in our stock ownership (some of which shifts are outside our control), including in connection with this offering. As a result, if we earn net taxable income, our ability to use our pre-change NOL carryforwards to offset such taxable income may be subject to limitations. Similar provisions of state tax law may also apply to limit our use of accumulated state tax attributes. As a result, even if we attain profitability, we may be unable to use a material portion of our NOL carryforwards and other tax attributes, which could adversely affect our future cash flows.

General Risk Factors

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 stock 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 stock 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 stock 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 stock could decrease, which might cause our share price and trading volume to decline.

Unfavorable U.S. or global economic conditions could adversely affect our business, financial condition or results of operations.

Our results of operations could be adversely affected by general conditions in the global economy and financial markets. The most recent global financial crisis caused extreme volatility and disruptions in the capital and credit markets. A severe or prolonged economic downturn could result in a variety of risks to our business, including weakened demand for our technologies and our ability to raise additional capital when needed on favorable terms, if at all. A weak or declining economy could strain our partners, possibly resulting in supply disruption, or cause delays in their payments to us. Any of the foregoing could harm our business and we cannot anticipate all of the ways in which the current economic climate and financial market conditions could adversely impact our business.

Raising additional capital may cause dilution to our existing stockholders, 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 stockholder. Any 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.

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

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 generate products.

We also expect that operating as a public company will make it more difficult and more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. As a result, it may be more difficult for us to attract and retain qualified people to serve on our board of directors, our board committees or as executive officers. We do not know 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 may work remotely, additional risks may arise as a result of depending on the networking and security put into place by the employees. The secure processing, storage, maintenance and transmission of this critical information are vital to our operations and business strategy, and we devote significant resources to protecting such information. Although we take reasonable measures to protect sensitive data from unauthorized access, use or disclosure, no security measures can be perfect and our information technology and infrastructure may be vulnerable to attacks by hackers or infections by viruses or other malware or breached due to employee erroneous actions or inactions by our employees or contractors, malfeasance or other malicious or inadvertent disruptions. Any such breach or interruption could compromise our networks and the information stored there could be accessed by unauthorized parties, publicly disclosed, lost or stolen. Any such access, breach, or other loss of information could result in legal claims or proceedings. Unauthorized access, loss or dissemination could also disrupt our operations and damage our reputation, any of which could adversely affect our business.

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.

We are an emerging growth company, and the reduced reporting requirements applicable to emerging growth companies could make our common stock 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 this prospectus and our periodic reports and proxy statements, exemptions from the requirements of holding nonbinding advisory votes on executive compensation and stockholder 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 complete this offering, 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 this offering, (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 stock 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 stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our share price may be more volatile.

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

As a public company, we will incur significant legal, accounting, insurance and other expenses that we did not incur as a private company. We will be subject to the reporting requirements of the Exchange Act, which will require, 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 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 (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. The JOBS Act permits emerging growth companies to implement many of these requirements over a longer period and up to five years from the pricing of this offering. We intend to take advantage of the reduced reporting requirements available to emerging growth companies under the JOBS Act, but we cannot guarantee that we will not be required to implement the more stringent requirements sooner than budgeted or planned and thereby incur unexpected expenses. Stockholder activism, the current political environment and the current high level of government intervention and regulatory reform may lead to substantial new regulations and disclosure obligations, which may lead to additional compliance costs and impact the manner in which we operate our business in ways we cannot currently anticipate.

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

We or our partners may be adversely affected by natural or man-made disasters or other business interruptions, such as cybersecurity attacks, and our business continuity and disaster recovery plans, or those of our partners, may not adequately protect us from the effects of a serious disaster.

Natural and man-made disasters and other events beyond our control could severely disrupt our operations, or those of our partners, and have a material adverse impact on our business, results of operations, financial condition and prospects. If a natural disaster, power outage, cybersecurity attack or other event occurred that prevented us from using all or a significant portion of our headquarters, damaged critical infrastructure, such as our laboratory facilities or those of our partners, limited our or our partners' ability to access or use our respective digital information systems or that otherwise disrupted our respective operations, it may be difficult or, in certain cases, impossible for us or our partners to continue our respective businesses for a substantial period of time. The disaster recovery and business continuity plans we and our partners currently have in place are limited and are unlikely to prove adequate in the event of a serious disaster or similar event. Our cybersecurity liability insurance may not cover any or all damages, depending on the severity and extent, we or our partners could sustain based on any breach of our respective computer security protocols or other cybersecurity attack. We may incur substantial expenses as a result of the limited nature of our respective disaster recovery and business continuity plans, which could have a material adverse impact on our business.

Our results of operations and financial condition could be materially adversely affected by changes in accounting principles.

The accounting for our business is subject to change based on the evolution of our business model, interpretations of relevant accounting principles, enforcement of existing or new regulations and changes in policies, rules, regulations and interpretations, of accounting and financial reporting requirements of the SEC or other regulatory agencies. Adoption of a change in accounting principles or interpretations could have a significant effect on our reported results of operations and could affect the reporting of transactions completed before the adoption of such change. It is difficult to predict the impact of future changes to accounting principles and accounting policies over financial reporting, any of which could adversely affect our results of operations and financial condition and could require significant investment in systems and personnel.

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 (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 partners, stock-based compensation, and valuation of our common stock. Our results of operations may be adversely affected if our assumptions change or if actual circumstances differ from those in our assumptions, which could cause our results of operations to fall below the expectations of securities analysts and investors, resulting in a decline in the trading price of our common stock.

Additionally, 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.

Upon completion of this offering, we will become 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.

Cautionary Note Regarding Forward-Looking Statements

This prospectus contains forward-looking statements, within the meaning of the Private Securities Litigation Reform Act of 1995, concerning our business, operations and financial performance and condition, as well as our plans, objectives and expectations for our business operations and financial performance and condition that are based on our management's belief and assumptions and on information currently available to our management. Although we believe that the expectations reflected in these forward-looking statements are reasonable, these statements relate to our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans, objectives of management and expected market growth, and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. Forward-looking statements in this prospectus include, but are not limited to, statements about:

- our expectations regarding our further development of, successful application of, and the rate and degree of market acceptance of, our Integrated Drug Creation Platform;
- our expectations regarding the markets for our services and technologies, including the growth rate of the biologics and next-generation biologics markets;
- our ability to attract new partners and enter into technology development agreements that contain milestone and royalty obligations in favor of us;
- the potential to receive revenue for the achievement of milestones and royalties under agreements for sales of products originating from our integrated drug creation platform;
- our ability to enter into license agreements with the partners in our existing Active Programs for which our partners don't have current milestone and royalty obligations;
- our ability to manage and grow our business by expanding our relationships with existing partners or introducing our Integrated Drug Creation Platform to new partners;
- our expectations regarding our current and future partners continued development of biologic drugs generated utilizing our platform;
- our estimates of our expenses, ongoing losses, future revenue, capital requirements and our need for or ability to obtain additional funding before we can expect to generate any revenue;
- our estimates of the sufficiency of our cash resources;
- our ability to establish or maintain collaborations, partnerships or strategic relationships;
- our ability to provide our partners with a full biologic drug discovery and cell line development solution from target to IND-ready, including non-standard amino acid incorporation capabilities;
- our ability to obtain and maintain intellectual property protection for our platform, products and technologies, the duration of such protection and our ability to operate our business without infringing on the intellectual property rights of others;
- our ability to attract, hire and retain key personnel and to manage our future growth effectively;
- our expectations regarding use of the proceeds from this offering;
- our financial performance;

- the volatility of the trading price of our common stock;
- our competitive position and the development of and projections relating to our competitors or our industry;
- the potential impact of the ongoing COVID-19 pandemic on our business or operations;
- the impact of laws and regulations;
- our expectations regarding the time during which we will be an emerging growth company under the JOBS Act; and
- our expectations about market trends.

In some cases, you can identify forward-looking statements by terminology such as “may,” “will,” “should,” “expects,” “intends,” “plans,” “anticipates,” “believes,” “estimates,” “predicts,” “potential,” “continue” or the negative of these terms or other comparable terminology. These statements are only predictions. You should not place undue reliance on forward-looking statements because they involve known and unknown risks, uncertainties and other factors, which are, in some cases, beyond our control and which could materially affect results. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed under “Risk Factors” and elsewhere in this prospectus. If one or more of these risks or uncertainties occur, or if our underlying assumptions prove to be incorrect, actual events or results may vary significantly from those implied or projected by the forward-looking statements. No forward-looking statement is a guarantee of future performance. You should read this prospectus and the documents that we reference in this prospectus and have filed with the SEC as exhibits to the registration statement, of which this prospectus is a part, completely and with the understanding that our actual future results may be materially different from any future results expressed or implied by these forward-looking statements.

The forward-looking statements in this prospectus represent our views as of the date of this prospectus. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we assume no obligation to update or revise any forward-looking statements except to the extent required by applicable law. You should, therefore, not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this prospectus.

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 prospectus, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and 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 you are cautioned not to rely unduly upon these statements.

Market and Industry Data and Forecasts

We obtained the industry, market and competitive position data used throughout this prospectus from our own internal estimates and research, as well as from independent market research, industry and general publications and surveys, governmental agencies and publicly available information in addition to research, surveys and studies conducted by third parties, including market information from April 2021 Evaluate Pharma data. Internal estimates are derived from publicly available information released by industry analysts and third-party sources, our internal research and our industry experience, and are based on assumptions made by us based on such data and our knowledge of our industry and market, which we believe to be reasonable. In some cases, we do not expressly refer to the sources from which these data are derived. In that regard, when we refer to one or more sources of this type of data in any paragraph, you should assume that other data of this type appearing in the same paragraph is derived from the same sources, unless otherwise expressly stated or the context otherwise requires. In addition, while we believe the industry, market and competitive position data included in this prospectus is reliable and based on reasonable assumptions, such data involve risks and uncertainties and are subject to change based on various factors, including those discussed in “Risk Factors.” These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties or by us.

Use of Proceeds

We estimate that the net proceeds from our issuance and sale of shares of our common stock in this offering will be approximately $ million, or approximately $ million if the underwriters exercise in full their option to purchase additional shares, assuming an initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

Each $1.00 increase or decrease in the assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease, as applicable the net proceeds to us from this offering by approximately $ million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Each increase or decrease of 1.0 million shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase or decrease, as applicable, our net proceeds from this offering by approximately $ million, assuming the assumed initial public offering price to the public remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We do not expect that a change in the initial price to the public or the number of shares by these amounts would have a material effect on the uses of the proceeds from this offering, although it may accelerate the time at which we will need to seek additional capital.

The principal purpose of this offering is to obtain additional capital to support our operations and growth, create a public market for our common stock, and enable access to the public equity markets for us and our stockholders.

As of March 31, 2021, we had cash and cash equivalents of $185.1 million. We currently expect to use our net proceeds from this offering, together with our existing cash and cash equivalents, to further our investment in expanding our Integrated Drug Creation Platform's capabilities, continued growth of our business development organization and activities, and for general corporate purposes, including working capital, capital expenditures, and operating expenses. We may also use a portion of the remaining net proceeds, if any, to acquire complementary businesses, products, services or technologies, including scientific expertise, although we have no binding agreements or commitments to do so at this time.

Based on our current plans, we believe that the net proceeds from this offering, together with our existing cash and cash equivalents, will be sufficient to fund our operating expenses and capital expenditure requirements at least through . We have based this estimate on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect.

The expected use of net proceeds from this offering represents our intentions based upon our present plans and business conditions. We cannot specify with certainty all of the particular uses for the net proceeds to be received upon the closing of this offering. Due to uncertainties inherent in the product development process, it is difficult to estimate the exact amounts of the net proceeds that will be used for any particular purpose. We may use our existing cash and cash equivalents and the future payments, if any, generated from any future collaboration agreements to fund our operations, either of which may alter the amount of net proceeds used for a particular purpose. In addition, the amount, allocation and timing of our actual expenditures will depend upon numerous factors, including the results of our research and development efforts as well as our interactions with regulatory authorities. Accordingly, we will have broad discretion in using these proceeds.

Pending the uses described above, we plan to invest the net proceeds of this offering in short- term, interest-bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government.

Dividend Policy

We have never declared or paid any cash dividends on our capital stock. We do not anticipate paying any dividends on our capital stock in the foreseeable future. We currently intend to retain all available funds and any future earnings to fund the development and growth of our business. Any future determination to declare dividends will be subject to the discretion of our board of directors and will depend on various factors, including applicable laws, our results of operations, financial condition, future prospects and any other factors deemed relevant by our board of directors. In addition, under our loan and security agreement with Bridge Bank we are prohibited from declaring and issuing dividends without the Lenders consent. Investors should not purchase our common stock with the expectation of receiving cash dividends.

Capitalization

The following table sets forth our cash and cash equivalents and total capitalization as of December 31, 2020:

- on an actual basis;
- on a pro forma basis to give effect to (i) the conversion of all outstanding shares of our redeemable convertible preferred stock as of December 31, 2020 into an aggregate of 13,752,043 shares of our common stock immediately prior to the completion of this offering; (ii) our receipt of aggregate gross proceeds of approximately $5.0 million from the sale of additional shares of our Series E redeemable convertible preferred stock in February 2021 and the conversion of these shares into an aggregate of 254,886 shares of our common stock immediately prior to the completion of this offering; (iii) our receipt of aggregate gross proceeds of $125.0 million from the sale of the Convertible Notes in March 2021 and the issuance of shares of common stock upon the conversion of all outstanding principal and accrued interest on the Convertible Notes upon the completion of this offering, assuming an initial public offering price per share of $, the midpoint of the price range set forth on the cover of this prospectus, and assuming that the offering is completed on , 2021, and (iv) the filing and effectiveness of our amended and restated certificate of incorporation immediately prior to the completion of this offering; and
- on a pro forma as adjusted basis to give effect to (i) the pro forma adjustments described above, and (ii) the issuance and sale of shares of our common stock in this offering at an assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions, and estimated offering expenses payable by us.

You should read this information together with our audited financial statements and related notes appearing elsewhere in this prospectus and the information set forth under the heading “Selected

Financial Data” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

	As of December 31, 2020		
	Actual	Pro Forma	Pro Forma As Adjusted[1]
			(unaudited)
			(in thousands, except share and per share data)
Cash and cash equivalents	$ 69,867	$	
Convertible Notes	—		
Long-Term Debt, including current portion	$ 5,044		
Redeemable convertible preferred stock, par value $0.0001 per share; 13,845,050 shares authorized, 13,752,043 issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	156,433		
Other stockholders' (deficit) equity:			
Common stock, par value $0.0001 per share; 22,000,000 shares authorized, 5,415,414 shares issued and outstanding, actual; shares authorized, shares issued and outstanding, pro forma; shares authorized, shares issued and outstanding, pro forma as adjusted	—		
Preferred stock, $0.0001 par value per share; no shares authorized, issued or outstanding, actual; shares authorized, no shares issued or outstanding, pro forma and pro forma as adjusted	—		—
Additional paid-in capital	637		
Accumulated deficit	(90,066)		
Total stockholders' (deficit) equity	$ (89,429)		
Total capitalization	$ 72,048		$

(1) Each $1.00 increase or decrease in the assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, each of pro forma as adjusted cash and cash equivalents, additional paid-in capital, total stockholders’ (deficit) equity, and total capitalization by approximately $ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same. We may also increase or decrease the number of shares we are offering. Each increase or decrease of 1.0 million in the number of shares we are offering would increase or decrease, as applicable, each of pro forma as adjusted cash and cash equivalents, additional paid-in capital, total stockholders’ (deficit) equity, and total capitalization by approximately $ million, assuming the assumed initial public offering price per share, as set forth on the cover page of this prospectus, remains the same. The pro forma as adjusted information is illustrative only, and we will adjust this information based on the actual initial public offering price and other terms of this offering determined at pricing.

The number of shares of common stock issued and outstanding pro forma and pro forma as adjusted in the table above is based on 5,415,414 shares of common stock outstanding as of December 31, 2020, and 13,752,043 shares of our common stock issuable upon the conversion of all outstanding shares of our redeemable convertible preferred stock immediately prior to the completion of this offering, and excludes:

- 516,587 shares of our common stock issuable upon the exercise of options outstanding as of December 31, 2020, with a weighted-average exercise price of $3.63 per share;
- 1,250,753 shares of our common stock issuable upon the exercise of options granted after December 31, 2020, with a weighted-average price of $4.43 per share;

- 93,007 shares of our common stock issuable upon the exercise of warrants to purchase common stock outstanding as of December 31, 2020, with a weighted-average exercise price of $1.00 per share;
- 1,445,460 shares of our common stock reserved for future issuance under our 2020 Plan as of December 31, 2020;
- shares of our common stock reserved for future issuance under our 2021 Plan, which will become available for issuance upon the effectiveness of the registration statement of which this prospectus is a part, as well as any future increases in the number of shares of our common stock reserved for issuance under the 2021 Plan; and
- shares of our common stock reserved for future issuance under our 2021 ESPP, which will become available for issuance upon the effectiveness of the registration statement of which this prospectus is a part, as well as any future increases in the number of shares of our common stock reserved for issuance under the 2021 ESPP.

Dilution

If you invest in our common stock in this offering, your ownership interest will be diluted to the extent of the difference between the initial public offering price per share of our common stock and the pro forma as adjusted net tangible book (deficit) value per share of our common stock immediately after this offering.

Our historical net tangible book (deficit) value per share is determined by dividing our total tangible assets less our total liabilities and redeemable convertible preferred stock, which are not included within stockholders' deficit by the number of shares of common stock outstanding. Our historical net tangible book (deficit) value as of December 31, 2020 was $(89.4 million), or $(16.51) per share.

Our pro forma net tangible book (deficit) value as of December 31, 2020 was $ million, or $ per share. Our pro forma net tangible book (deficit) value per share represents the amount of our total tangible assets reduced by the amount of our total liabilities and divided by the total number of shares of our common stock outstanding as of December 31, 2020, assuming (i) the conversion of all outstanding shares of our redeemable convertible preferred stock as of December 31, 2020 into an aggregate of 13,752,043 shares of common stock immediately prior to the completion of this offering, (ii) our receipt of aggregate gross proceeds of approximately $5.0 million from the sale of additional shares of our Series E redeemable convertible preferred stock in February 2021 and the conversion of these shares into an aggregate of 254,886 shares of our common stock immediately prior to the completion of this offering; and (iii) our receipt of aggregate gross proceeds of $125.0 million from the sale of the Convertible Notes in March 2021 and the issuance of shares of common stock upon the conversion of all outstanding principal and accrued interest on the Convertible Notes upon the completion of this offering, assuming an initial public offering price per share of $, the midpoint of the price range set forth on the cover of this prospectus, and assuming that the offering is completed on , 2021.

Our pro forma as adjusted net tangible book (deficit) value represents our pro forma net tangible book (deficit) value, plus the effect of the sale of shares of common stock in this offering at an assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Net tangible book value dilution per share to new investors represents the difference between the amount per share paid by purchasers of shares of common stock in this offering and the pro forma as adjusted net tangible book value per share of common stock immediately after completion of this offering. After giving effect to our sale of shares of common stock in this offering at an assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of December 31, 2020 would have been $ million, or $ per share. This represents an immediate increase in net tangible book value of $ per share to existing stockholders and an immediate dilution in net

tangible book value of $ per share to purchasers of common stock in this offering, as illustrated in the following table:

Assumed initial public offering price per share			$	
Historical net tangible book value (deficit) per share as of December 31, 2020	$	(89,428)		
Pro forma increase in net tangible book value (deficit) per share as of December 31, 2020	$	—		
Pro forma net tangible book value per share as of December 31, 2020	$	—		
Increase in pro forma net tangible book value per share attributable to new investors participating in this offering	$	—		
Pro forma as adjusted net tangible book value per share after this offering			$	—
Dilution per share to new investors participating in this offering			$	

If the underwriters' option to purchase additional shares from us is exercised in full, the pro forma as adjusted net tangible book value per share after this offering would be $ per share, the increase in pro forma as adjusted net tangible book value per share to existing stockholders would be $ per share and the dilution to new investors purchasing shares in this offering would be $ per share.

Each $1.00 increase (decrease) in the assumed public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) our pro forma as adjusted net tangible book value by $ million, or $ per share, and dilution per share to investors in this offering by $ per share, assuming that the number of shares offered by us, as set forth on the cover of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. An increase (decrease) of 1,000,000 in the number of shares we are offering would increase (decrease) our pro forma as adjusted net tangible book value by approximately $ million, or approximately $ per share and would increase or decrease, as applicable, dilution per share to investors in this offering by approximately $ per share, assuming the assumed initial public offering price per share remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

If the underwriters' option to purchase additional shares from us is exercised in full, the pro forma as adjusted net tangible book value per share after this offering would be $ per share, the increase in pro forma as adjusted net tangible book value per share to existing stockholders would be $ per share and the dilution to new investors purchasing shares in this offering would be $ per share.

The following table shows, as of December 31, 2020, on a pro forma as adjusted basis (but before deducting underwriting discounts and commissions and estimated offering expenses payable by us), the differences between the existing stockholders and the purchasers of shares in this offering with respect to the number of shares purchased from us, the total consideration paid, which includes net proceeds received from the issuance of common and redeemable convertible preferred stock, cash

received from the exercise of stock options, and the value of any stock issued for services and the average price paid per share (in thousands, except per share amounts and percentages):

	Shares purchased		Total consideration		Average price per share
	Number	Percent	Amount	Percent	
Existing stockholders before this offering		%		%	$
New investors participating in this offering					$
Totals		100 %		100 %	

The foregoing tables and calculations (other than the historical net tangible book value calculations) are based on 5,415,414 shares of common stock outstanding as of December 31, 2020 and also reflects (i) the conversion of the outstanding shares of our redeemable convertible preferred stock as of December 31, 2020 into an aggregate of 13,752,043 shares of our common stock immediately prior to the completion of this offering, (ii) our receipt of aggregate gross proceeds of approximately $5.0 million from the sale of additional shares of our Series E redeemable convertible preferred stock in February 2021 and the conversion of these shares into an aggregate of 254,886 shares of our common stock immediately prior to the completion of this offering; and (iii) our receipt of aggregate gross proceeds of $125.0 million from the sale of the Convertible Notes in March 2021 and the issuance of shares of common stock upon the conversion of all outstanding principal and accrued interest on the Convertible Notes upon the completion of this offering, assuming an initial public offering price per share of $, the midpoint of the price range set forth on the cover of this prospectus, and assuming that the offering is completed on , 2021, and excludes:

- 516,587 shares of our common stock issuable upon the exercise of options outstanding as of December 31, 2020, with a weighted-average exercise price of $3.63 per share;
- 1,250,753 shares of our common stock issuable upon the exercise of options granted after December 31, 2020, with a weighted-average price of $4.43 per share;
- 93,007 shares of our common stock issuable upon the exercise of warrants to purchase common stock outstanding as of December 31, 2020, with a weighted-average exercise price of $1.00 per share;
- 1,445,460 shares of our common stock reserved for future issuance under our 2020 Plan as of December 31, 2020;
- shares of our common stock reserved for future issuance under our 2021 Plan, which will become available for issuance upon the effectiveness of the registration statement of which this prospectus is a part, as well as any future increases in the number of shares of our common stock reserved for issuance under the 2021 Plan; and
- shares of our common stock reserved for future issuance under our 2021 ESPP, which will become available for issuance upon the effectiveness of the registration statement of which this prospectus is a part, as well as any future increases in the number of shares of our common stock reserved for issuance under the 2021 ESPP.

To the extent that any outstanding options are exercised, new options are issued under our stock-based compensation plans or we issue additional shares of common stock or convertible debt in the future, there will be further dilution to investors participating in this offering.

Selected Consolidated Financial Data

The selected consolidated statements of operations and comprehensive loss data for the years ended December 31, 2019 and 2020 and the consolidated balance sheets data as of December 31, 2019 and 2020 have been derived from our audited consolidated financial statements appearing elsewhere in this prospectus, except for the pro forma data. You should read the following selected consolidated financial data together with the "Management's Discussion and Analysis of Financial Condition and Results of Operations" section of this prospectus and our consolidated financial statements and the related notes appearing elsewhere in this prospectus. Our historical results are not necessarily indicative of the results that may be expected in any future periods.

	For the Years Ended December 31,	
	2020	2019
	(in thousands, except for share and per share data)	
Consolidated Statements of Operations Data:		
Revenues		
Technology development revenue	$ 4,117	$ 2,044
Collaboration revenue	663	16
Total revenues	4,780	2,060
Operating expenses		
Research and development	11,448	4,311
Selling, general and administrative	5,502	3,523
Depreciation and amortization	1,131	491
Total operating expenses	18,081	8,325
Operating loss	(13,301)	(6,265)
Other income (expense)		
Interest expense, net	(634)	(268)
Other expense	(418)	(51)
Total other expense, net	(1,052)	(319)
Net loss and other comprehensive loss	(14,353)	(6,584)
Adjustment of redeemable convertible preferred units and stock	(34,336)	(17,286)
Cumulative undeclared preferred stock dividends	(780)	—
Net loss attributable to common stockholder and unitholders	$ (49,469)	$ (23,870)
Net loss per share attributable to common stockholder and unitholders: Basic and diluted	$ (10.55)	$ (5.18)
Weighted-average common shares and units outstanding: Basic and diluted	4,691,020	4,606,505
Pro forma net loss per share attributable to common stockholders and unitholders: Basic and Diluted[(1)]		
Pro forma weighted-average common shares and units outstanding: Basic and Diluted[(1)]		

	December 31,	
	2020	2019
		(in thousands)
Consolidated Balance Sheet Data:		
Cash and cash equivalents	$ 69,867	$ 13,086
Working capital[(2)]	63,138	10,181
Total assets	88,569	19,471
Total liabilities	21,565	7,867
Redeemable convertible preferred stock	156,433	52,763
Accumulated deficit	(90,066)	(41,376)
Total equity	(89,429)	(41,159)

(1) See the subsection titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations— Pro Forma Information” for an explanation of the calculations of our basic and diluted pro forma net loss per share, and the weighted-average number of shares outstanding used in the computation of the per share amounts.
(2) We define working capital deficit as current assets less current liabilities. See our financial statements appearing elsewhere in this prospectus.

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 entitled “Selected Financial Data” and our consolidated financial statements and related notes included elsewhere in this prospectus. This discussion and other parts of this prospectus contain forward-looking statements that involve risks and uncertainties, such as our plans, objectives, expectations, intentions and beliefs. Our actual results could differ materially from those discussed in these forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those identified below and those discussed in the section entitled “Risk Factors” included elsewhere in this prospectus.

Overview

With our AI-powered Integrated Drug Creation Platform we enable the creation of novel protein-based drugs (biologics) by unifying biologic drug discovery and cell line development into one simultaneous process. We leverage proprietary synthetic biology technologies and deep learning AI to predict, design, construct, screen, select and scale production of novel biologic drug candidates. We believe our approach delivers disruptive efficiency, but more importantly enables our partners to create novel and human/AI-designed new-to-nature biologics (next-generation biologics). While next-generation biologics have exciting medical potential and are a rapidly growing field of drug development, because their protein architectures (scaffolds or modalities) are biologically foreign, they present challenges for conventional biologic discovery and cell line development methods. These methods typically involve a linear series of steps to screen and select desired molecular parts and reformat them into their final protein scaffold, and subsequent laborious and often unsuccessful generation of a suitable manufacturing cell line. We are transforming the biologic discovery and cell line development process by rapidly screening up to billions of drug candidates *in* the desired final protein scaffold that goes into patients and *in* the scalable manufacturing cell line that scales up for clinical and commercial manufacturing. Our platform integrates a fragmented set of processes and bypasses the molecular reformatting and cell line development challenges that can lead to inefficiencies and failures. To accomplish this, we use proprietary high-throughput single cell assays that can evaluate billions of drug sequence variants, each within its production cell line, for target binding affinity, protein quality, and production level (titer). We also harness the large datasets we generate to train and refine our deep learning models which guide our protein and cell line designs, and enable *in silico* optimization of multiple attributes. We believe our platform is the only commercially available solution that allows for high-throughput screening for simultaneous biologic drug discovery and cell line development for next-generation biologics. We believe our unique approach to biologic drug creation has the potential to significantly accelerate preclinical development timelines and expand therapeutic possibilities for the biopharmaceutical industry.

Our business model is to establish partnerships with biopharmaceutical companies to use our platform for creating biologic drug candidates and production cell lines on their behalf. Our partnerships are expected to provide us with the opportunity to participate in the future success of the biologics generated utilizing our platform, through milestone payments as well as royalties on sales of approved products. We aim to build a diversified portfolio of biologic drug candidates across multiple disease indications in which we have downstream economic participation rights. We currently have nine “Active Programs” (across seven partnerships) in which we have or are positioned to negotiate license agreements with potential downstream milestone payments and royalties. Eight of the Active Programs are focused on developing production cell lines for partners’ biologic drug candidates (five preclinical, one Phase 1, one Phase 3, and one animal health), reflecting the 2018 commercial launch of our Cell Line Development (CLD) applications. We have one Discovery program under way, focused on lead optimization, which we signed shortly after our December 2020 expansion of our platform to include our initial Discovery applications. Our current

partners include two of the top 20 pharmaceutical companies based on 2020 global revenues. However, we are still in the very early stages of implementing our business model and, to date, no partner has entered into a license for clinical or commercial use of any intellectual property rights related to biologic drug candidates or cell lines generated utilizing our platform. Moreover, we have only agreed upon clinical or commercial license terms for two of our Active Programs in the event an option is exercised by a partner to license such intellectual property rights.

With initial success, we aim to increase the number of molecules with each partner, as well as expand the application of our platform across each partner's discovery and cell line development activities.

Total revenue increased 132% to $4.8 million for the year ended December 31, 2020, as compared to $2.1 million for 2019, due to the increased scale and volume of new and ongoing programs utilizing our Integrated Drug Creation Platform. Throughout 2020, we continued making investments in our operating capacity which enabled us to achieve additional project-based milestones in our technology development agreements. Since our inception in 2011, we have devoted substantially all of our resources to research and development activities, including with respect to our Integrated Drug Creation Platform, establishing and maintaining our intellectual property portfolio, hiring personnel, raising capital and providing general and administrative support for these activities. As a result, we have incurred net losses in each year. Our net losses were $6.6 million and $14.4 million for the years ended December 31, 2019 and 2020, respectively. As of December 31, 2020, we had an accumulated deficit of $90.1 million and cash and cash equivalents totaling $69.9 million. Research and development expenses increased to $11.4 million for the year ended December 31, 2020, as compared to $4.3 million for 2019.

To date, we have financed our operations through private placements of redeemable convertible preferred stock and convertible notes. From the date of our company formation through March 31, 2021, we have raised aggregate gross proceeds of $230.0 million. As of December 31, 2020, we had $69.9 million of cash and cash equivalents.

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:

- implement an effective business development strategy to drive adoption of our Integrated Drug Creation Platform by new and existing partners;
- continue to engage in research and development efforts and scale our technology development activities to meet potential demand at a reasonable cost;
- develop, acquire, in-license or otherwise obtain technologies that enable us to expand our platform capabilities;
- attract, retain and motivate highly qualified personnel;
- implement operational, financial and management information systems; and
- operate as a public company.

We currently lease a 14,549 square foot office and laboratory space and due to our continued growth, in December 2020, we entered into an operating lease, which was subsequently amended in March 2021, for a 77,974 square foot corporate headquarters facility that will include office and laboratory space. We intend to relocate to the new facility upon completion of certain modifications by June 2021.

Recent Developments

In October 2020, we completed an equity financing, raising an aggregate of $65.0 million in gross proceeds through the sale and issuance of Series E redeemable convertible preferred stock.

In January 2021, we completed the Denovium acquisition as part of our strategy to utilize AI technology that includes deep learning computational models of protein function. We are currently integrating the acquired technology and team into our business model and partnership strategy.

In February 2021, Merck Global Health Innovation Fund purchased 254,886 shares of our Series E Preferred Stock for an aggregate price of $5.0 million.

In March 2021, we issued $125.0 million aggregate principal amount of Convertible Notes to certain existing and new investors. The Convertible Notes are convertible upon a qualifying financing into shares of our common stock under certain circumstances. The Convertible Notes will convert into an aggregate of million shares upon the closing of this offering, assuming an initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover of this prospectus, and that the offering is completed on , 2021.

COVID-19 Pandemic

As a result of the COVID-19 pandemic, 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 and/or federal governments that could impact our ability to conduct our technology development and other activities;
- 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.

The ongoing build-out of our expansion facilities may also be delayed by COVID-related restrictions. Furthermore, COVID-19 has adversely affected the broader economy and financial markets, resulting in an economic downturn that could curtail the research and development budgets of our partners, our ability to hire additional personnel and our financing prospects. Any of the foregoing could harm our operations and we cannot anticipate all the ways in which our business could be adversely impacted by health epidemics such as COVID-19.

For additional details, see the section titled “Risk Factors.”

LLC Conversion

We were originally formed in August 2011 as an Oregon limited liability company and later converted into a Delaware limited liability company in April 2016 under the name AbSci LLC. In October 2020, we completed a reorganization whereby we were converted from a Delaware limited liability company named AbSci LLC to a Delaware corporation named under the name Absci Corporation (the LLC Conversion) and all outstanding membership interests in AbSci LLC were exchanged for equity interests in Absci Corporation. All of the share information referenced throughout this prospectus have been retroactively adjusted to reflect the change in capital structure.

Key Factors Affecting Our Results of Operations and Future Performance

We believe that our future financial performance will 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."

- **Establish new partnerships:** Our potential to grow revenue and long-term earnings will require us to successfully identify and establish technology development arrangements with new partners. We have been expanding and expect to continue to expand our business development team and our capabilities to find new partners and we believe that we have a significant opportunity to continue to increase the number of partners and programs we address with our Integrated Drug Creation Platform.
- **Increase the number of molecules and programs under existing partnerships:** The execution of our long term strategy relies substantially on the value our partners believe can be recognized from the product candidates and/or production cell lines that we provide to them. Our continued growth depends on our ability to expand the scope of our existing partnerships and add new molecules for cell line development with current partners.
- **Successfully complete our technology development activities and enter licensing arrangements with our partners:** Certain of our technology development agreements anticipate that our partners will elect a license or enter into a license agreement following the completion of our technology development activities. Our business model depends upon partners licensing the technologies we develop and advancing the drug candidates we generate through clinical development to commercialization. Our ability to successfully complete technology development activities to meet the needs of our partner, and the partner's prioritization of the subject program, both impact the likelihood and timing of licensing the technologies we develop.
- **Our partners successfully developing and commercializing the drug candidates generated with our technology:** Our business model is dependent on the eventual progression of biologic drug candidates discovered or initially developed utilizing our Integrated Drug Creation Platform into clinical trials and commercialization. Given the nature of our relationships with our partners, we do not control the progression, clinical development, regulatory strategy or eventual commercialization, if approved, of these product candidates. As a result, our future success and the potential to receive milestones and royalties are entirely dependent on our partners efforts for which we have no control. The timing and scope of any approval that may be required by the U.S. Food and Drug Administration (FDA), or any other regulatory body, for drugs that are developed based on molecules discovered and/or manufactured using our Integrated Drug Creation Platform technologies can result in significant impact to our results of operations and future performance.
- **Continued significant investments in our research and development of new technologies and platform expansion:** We are seeking to further refine and expand our platform and the scope of our capabilities, which may or may not be successful. This includes, but is not limited to, *de novo* discovery, incorporation of non-standard amino acids and application of artificial intelligence across our Integrated Drug Creation Platform. We may in the future also invest significantly in developing our own proprietary lead drug candidates and advancing them through preclinical validation. We expect to incur significant expenses to advance these research and development efforts or to invest in, or acquire complementary technologies, but these efforts may not be successful.

- **Drive commercial adoption of our Integrated Drug Creation Platform capabilities:** Driving the adoption of our Integrated Drug Creation Platform across existing and new markets will require significant investment. We plan to further invest in research and development to support the expansion of our platform capabilities including new molecules to existing partners or help deliver our platform to new markets.

Key Business Metrics

We are in the process of identifying key business metrics to evaluate our business, measure our performance, identify trends affecting our business, formulate financial projections and make strategic decisions. Currently, given our stage of development, we believe that the following metrics are the most important for understanding our current business trajectory. 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 drug candidates generated with our technologies enter clinical development, or as we may enter partnerships addressing programs over multiple years, or as certain programs may be discontinued by partners, we anticipate updating these metrics to reflect such changes.

	2019	2020
Partners, Cumulative	12	16
Programs, Cumulative	23	29
Active Programs	4	8

Partners represents the unique number of partners with whom we have executed technology development agreements. We view this metric as an indication of our ability to execute our business development activities and level of our market penetration.

Programs represents the number of molecules we have addressed or are addressing with our platform. We view this metric as an indication of the robustness of our technology and the commercial success of our platform.

Active Programs represents the number of programs in which we have or are positioned to negotiate license agreements with potential downstream milestone payments and royalties. We view this metric as an indication of our ability to generate future revenue from milestone payments and royalties.

We have not negotiated terms for a sufficient number of royalty- and milestone-bearing licenses, to enable us to make accurate predictions regarding our potential revenue and financial performance.

Components of Results of Operations

Revenue

Our revenue currently consists primarily of fees earned from our partners in conjunction with technology development agreements (TDAs), which are delineated as technology development revenue in our results of operations. These fees are earned and paid at various points throughout the terms of these agreements including upfront and upon the achievement of specified project-based milestones. In addition, in certain TDAs, we earn success-based fees upon achievement of specified technology goals.

We expect revenue to increase over time as we enter into additional partnership agreements and grant licenses to our partners for the clinical and commercial use of intellectual property rights to the biological assets we create, and as the partners advance product candidates into and through clinical development and commercialization. We expect that our revenue will fluctuate from period to period due to the timing of executing additional partnerships, the uncertainty of the timing of milestone achievements and our dependence on the program decisions of our partners.

KBI BioPharma, Inc. Collaboration Agreement

In December 2019, we executed a four-year Joint Marketing Agreement (JMA) with KBI BioPharma, Inc. (KBI) to co-promote technologies through joint marketing efforts. The JMA provides for a non-refundable upfront payment of $0.75 million and milestone payments of $2.75 million in the aggregate, of which $2.25 million had been received as of December 31, 2019. Additionally, KBI is obligated to make royalty payments to us during the fourth year of the JMA representing a percentage of its sales generated through the arrangement.

Operating Expenses

Research and Development

Research and development expenses include the cost of materials, personnel-related costs (comprised of salaries, benefits and share-based compensation), consulting fees, equipment and allocated facility costs (including occupancy and information technology). These expenses are exclusive of depreciation. Research and development activities consist of technology development for partners as well as continued development of our Integrated Drug Creation Platform. We derive improvements to our platform from both types of activities. As our research and development efforts apply to our platform broadly and across programs, we have not historically tracked our research and development expenses on a partner-by-partner basis or on a program-by-program basis.

We expect research and development to continue to increase in absolute dollars as we enter into additional partnerships and continue to invest in platform enhancements.

Selling, General, and Administrative

Selling, general, and administrative expenses include personnel-related costs (comprised of salaries, benefits and share-based compensation) for executive, business development, alliance management, legal, finance and other administrative functions. Marketing expenses include costs associated with attending conferences and other promotion efforts of our Integrated Drug Creation Platform. Additionally, these expenses include external legal expenses, accounting and tax service expenses, consulting fees, and allocated facilities costs (including occupancy and information technology). These expenses are exclusive of depreciation.

We expect our selling costs to increase in absolute dollars as we continue to grow our business development efforts, and increase marketing activities to drive awareness and adoption of our platform. We expect selling costs to fluctuate as a percentage of total revenue due to the timing and magnitude of these expenses, and to decrease as a percentage of total revenue in the long term.

We expect general and administrative expenses to continue to increase in absolute dollars as we increase headcount and incur costs associated with operating as a public company, including expenses related to legal, accounting, regulatory, maintaining compliance with exchange listing and requirements of the U.S. Securities and Exchange Commission (SEC), director and officer insurance premiums and investor relations. We expect these expenses to increase in absolute dollars and vary from period to period as a percentage of revenue in the near term, and to decrease as a percentage of revenue in the long term.

Depreciation and amortization

Depreciation and amortization expense consists of the depreciation expense of our property and equipment. Our equipment is used most actively as part of our lab operations.

We expect depreciation expense to continue to increase in absolute dollars as we increase purchases of lab equipment to expand our operating facilities.

Other Expenses

Interest Expense

Interest expense, net, consists primarily of interest related to borrowings under our term debt and laboratory equipment leases.

Other Expense, net

Other expenses to date consist primarily of adjustments of our preferred stock warrant liability to fair value.

Results of Operations

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

	For the Years Ended December 31,	
	2020	**2019**
	(in thousands, except for share and per share data)	
Revenues		
Technology development revenue	$ 4,117	$ 2,044
Collaboration revenue	663	16
Total revenues	4,780	2,060
Operating expenses		
Research and development	11,448	4,311
Selling, general and administrative	5,502	3,523
Depreciation and amortization	1,131	491
Total operating expenses	18,081	8,325
Operating loss	(13,301)	(6,265)
Other income (expense)		
Interest expense	(634)	(268)
Other expense, net	(418)	(51)
Total other expense, net	(1,052)	(319)
Net loss and other comprehensive loss	$ (14,353)	$ (6,584)

Comparison of the Years Ended December 31, 2019 and 2020

The following table summarizes our results of operations for the for years ended December 31, 2019 and 2020 (In thousands):

Revenue

	For the Years Ended December 31,			
	2020	2019	$ Change	% Change
Revenues				
Technology development revenue	$ 4,117	$ 2,044	$ 2,073	101 %
Collaboration revenue	663	16	647	4,044 %
Total revenues	$ 4,780	$ 2,060	$ 2,720	132 %

Total revenue was $4.8 million for the year ended December 31, 2020 compared to $2.1 million for the year ended December 31, 2019, representing an increase of $2.7 million, or 132%.

Technology development revenue increased by $2.1 million, or 101%, for the year ended December 31, 2020 compared to the year ended December 31, 2019, driven by an increase in the number of technology development agreements and the achievement of additional project-based milestones under such agreements.

Collaboration revenue increased by $0.6 million, or 4,044%, for the year ended December 31, 2020 compared to the year ended December 31, 2019 as a result of achieving a significant milestone in the Joint Marketing Agreement with KBI Biopharma, Inc., entered into in December 2019.

Operating Expenses

	For the Years Ended December 31,			
	2020	2019	$ Change	% Change
Operating expenses				
Research and development	11,448	4,311	7,137	166 %
Selling, general and administrative	5,502	3,523	1,979	56 %
Depreciation and amortization	1,131	491	640	130 %
Total operating expenses	$ 18,081	$ 8,325	$ 9,756	117 %

Research and development

Research and development expenses increased by $7.1 million, or 166%, from the year ended December 31, 2019 to the year ended December 31, 2020. The increase was generally driven by increased costs associated with increased technology development activity with our partners and increased costs associated with continued platform development. These increased costs were primarily attributable to increased headcount, and related personnel costs, allocation of facility overhead, and increased purchases of consumables necessary for our technology development agreements and internal research activities.

Selling, General and Administrative Expenses

Selling, general, and administrative expenses increased by $2.0 million, or 56%, from the year ended December 31, 2019 to the year ended December 31, 2020. The increase was primarily driven by increased headcount and related personnel and recruitment costs. Additionally, we recognized

approximately $0.4 million in increased legal expenses during the year ended December 31, 2020, partly due to costs associated with the LLC conversion.

Depreciation and amortization

Depreciation and amortization expense increased by $0.6 million, or 131%, from the year ended December 31, 2019 to December 31, 2020. The increase was primarily due to the increased purchases of lab equipment necessary to complete our increased level of technology development agreements.

Other Expenses

	For the Years Ended December 31,			
	2020	**2019**	**$ Change**	**% Change**
Other income (expense)				
Interest expense	(634)	(268)	$ (366)	137 %
Other expense, net	(418)	(51)	$ (367)	720 %
Total other expense, net	$ (1,052)	$ (319)	$ (733)	230 %

Interest Expense

Interest expense, was $0.6 million for the year ended December 31, 2020 compared to $0.3 million for the year ended December 31, 2019, representing an increase of $0.4 million, or 137%. We increased borrowings on our term debt in May 2020, which led to an increase in interest expense. In addition, we incurred additional interest expense in connection with finance leases of additional laboratory equipment as we expanded our laboratory capacity from 2019 through 2020.

Other Expense, net

Other expense, net, increased by $0.4 million, or 720%, from the year ended December 31, 2019 to the year ended December 31, 2020. The increase was primarily driven by an adjustment to the preferred stock warrant liability's fair value.

Pro Forma Information

Immediately prior to the completion of this offering, all outstanding shares of our redeemable convertible preferred stock will automatically convert into shares of our common stock assuming the sale of shares in this offering at the assumed public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus. The pro forma basic and diluted net loss per share for the year ended December 31, 2020 were computed using the weighted-average number of shares of common stock outstanding, including the pro forma effect of the conversion of all outstanding shares of redeemable convertible preferred stock into shares of common stock, as if such conversion had occurred at the beginning of the period, or their issuance dates if later. Pro forma net loss per share does not include the shares expected to be sold in this offering.

The following table sets forth the computation of the pro forma basic and diluted net loss per share of common stock for the periods presented: (in thousands, except share and per share data)

		2020
Numerator:		
Net loss	$	(14,353)
Adjustment of redeemable convertible preferred stock and units		(34,336)
Cumulative undeclared preferred stock dividends		(780)
Net loss available to common stockholder and unitholders	$	(49,469)
Denominator:		
Weighted-average common shares outstanding		4,691,020
Weighted-average redeemable convertible preferred stock		
Weighted-average convertible debt		
Pro forma weighted-average shares outstanding, basic and diluted		
Pro forma net loss per share, basic and diluted		

Liquidity and Capital Resources

Overview

As of December 31, 2020, we had $69.9 million of cash and cash equivalents.

We have incurred net operating losses since inception. As of December 31, 2020, our accumulated deficit was $90.1 million. To date, we have funded operations through issuances and sales of equity securities and debt, in addition to revenue generated from our technology development agreements. We believe that our existing cash and cash equivalents will be sufficient to meet our operating expenses, working capital and capital expenditure needs over at least the next 12 months following the date of this prospectus.

Our future capital requirements will depend on many factors, including, but not limited to our ability to raise additional capital through equity or debt financing, our ability to successfully secure additional partnerships under contract with new partners and increase the number of programs covered under contracts with existing partners, the successful preclinical and clinical development by our partners of product candidates generated using our Integrated Drug Creation Platform and the successful commercialization by our partners of any such product candidates that are approved. If we are unable to execute on our business plan and adequately fund operations, or if our 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 stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our common stockholders. 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 the issuance and sale of our redeemable convertible preferred stock, borrowings under long-term debt agreements, and to a lesser extent, cash flow from operations.

Redeemable convertible preferred stock

Through December 31, 2020, we have raised a total of $99.7 million from the issuance of redeemable convertible preferred stock, net of issuance costs. In 2020, we issued shares of Series E redeemable convertible preferred stock for net proceeds of $64.7 million. In 2021, we issued additional shares of Series E redeemable convertible preferred stock for gross proceeds of $5.0 million.

Bridge Bank Loan and Security Agreement

In June 2018, we entered into a Loan and Security Agreement with Bridge Bank. We initially borrowed the first tranche of $0.3 million in June 2018. We increased our borrowings to $3.0 million in March 2019, and to $5.0 million in May 2020. As of December 31, 2020, we had borrowed $5.0 million in outstanding principal under the facility. The loan matures in May 2022, at which time all outstanding principal and accrued and unpaid interest is due and payable. This loan is secured by substantially all our tangible assets; intellectual property is excluded from this secured collateral, but is subject to a negative pledge in favor of Bridge Bank.

Convertible notes

In March 2021, we issued $125.0 million aggregate principal amount of Convertible Notes to certain existing and new investors. The Convertible Notes are convertible into our preferred shares or common shares under certain circumstances or qualified financings, including upon the closing of this offering. The Convertible Notes converted upon the closing of this offering will convert at a price per share equal to the lower of (a) 82% of the initial public offering price or (b) a price determined based on the pre-money valuation of $1.5 billion divided by the total outstanding shares of the common stock immediately prior to this offering, as calculated on as converted and fully diluted basis as set forth in the Convertible Notes.

Cash Flows

The following summarizes our cash flows for the years ended December 31, 2019 and 2020 (In thousands):

	For the Years Ended December 31,	
	2020	**2019**
Net cash provided by (used in)		
Operating activities	$ (10,970)	$ (6,032)
Investing activities	(2,171)	(1,089)
Financing activities	70,973	12,706
Net increase in cash, cash equivalents, and restricted cash	$ 57,832	$ 5,585

Cash Flows from Operating Activities

Net cash used in operating activities increased by $5.0 million from $6.0 million in the year ended December 31, 2019 to $11.0 million in the year ended December 31, 2020. The increase resulted primarily from increased net losses and changes in net working capital.

Cash Flows from Investing Activities

Net cash used in investing activities increased by $1.1 million from $1.1 million in the year ended December 31, 2019 to $2.2 million in the year ended December 31, 2020. This increase resulted primarily from increased purchases of lab equipment as we expanded our operations and overall capacity.

Cash Flows from Financing Activities

Net cash provided by financing activities increased by $58.3 million from $12.7 million in the year ended December 31, 2019 to $71.0 million in the year ended December 31, 2020. This increase resulted primarily due to $69.3 million from proceeds from the issuance of Series D and E redeemable convertible preferred units and stock, net of issuance costs in 2020 compared to $10.3 million from the issuance of Series D redeemable convertible preferred units, net of issuance costs in 2019.

Contractual Obligations and Other Commitments

The following table summarizes our contractual obligations as of December 31, 2020 (in thousands):

	<1 Year	1 to 3 Years	3 to 5 Years	More than 5 Years
Debt obligations, including interest	$ 903	$ 3,348	$ 899	$ —
Operating lease commitments	1,318	3,658	3,233	501
Finance lease commitments	1,784	2,606	495	—
	$ 4,005	$ 9,612	$ 4,627	$ 501

Off-Balance Sheet Arrangements

We have not entered into any off-balance sheet arrangements and do not have holdings in any variable interest entities.

Internal Control over Financial Reporting

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 U.S. generally accepted accounting principles (GAAP). Under standards established by the Public Company Accounting Oversight Board (PCAOB) a deficiency in internal control over financial reporting exists when the design or operation of a control does not allow management or personnel, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis. The PCAOB defines a material weakness as a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of annual or interim financial statements will not be prevented, or detected and corrected, on a timely basis.

While we and our independent registered public accounting firm did not and were not required to perform an audit of our internal control over financial reporting, in connection with the audits of our consolidated financial statements included elsewhere in this prospectus, we and our independent registered public accounting firm identified material weaknesses related to there being an insufficient complement of accounting and finance personnel with the necessary U.S. GAAP technical expertise to timely identify and account for complex or non-routine transactions.

Under standards established by the PCAOB, a material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected and corrected on a timely basis.

We are working to remediate the material weakness and are taking steps to strengthen our internal control over financial reporting through the hiring of additional finance and accounting personnel. With the additional personnel with the requisite technical knowledge and skills, we intend to take appropriate and reasonable steps to remediate the material weakness through the implementation of appropriate segregation of duties, formalization of accounting policies and controls and retention of appropriate expertise for complex accounting transactions. However, we cannot assure you that these measures will significantly improve or remediate the material weakness described above.

The actions that we are taking are subject to ongoing executive management review, and will also be subject to audit committee oversight. If we are unable to successfully remediate the material weakness, or if in the future, we identify further material weaknesses in our internal control over financial reporting, we may not detect errors on a timely basis and our financial statements may be materially misstated.

Quantitative and Qualitative Disclosures about Market Risk

Interest Rate Risk

Our cash and cash equivalents consist of cash in readily available checking accounts and money market funds. As a result, the fair value of our portfolio is relatively insensitive to interest rate changes.

Critical Accounting Polices and Significant Judgments and Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our financial statements, which have been prepared in accordance with United States generally accepted accounting principles. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported expenses incurred during the reporting periods. Our estimates are based on our 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 may differ from these estimates under different assumptions or conditions.

While our significant accounting policies are described in more detail in Note 2 to our financial statements appearing elsewhere in this prospectus, we believe that the following accounting policies are those most critical to the judgments and estimates used in the preparation of our financial statements.

Revenue recognition

We recognize revenue as control of our products and services are transferred to the customer in an amount that reflects the consideration expected to be received in exchange for those products and services. This process involves identifying the contract with a customer, determining the performance obligations in the contract, determining the contract price, allocating the contract price to the distinct performance obligations in the contract, and recognizing revenue when (or as) the performance obligations have been satisfied. A performance obligation is considered distinct from other obligations in a contract when it provides a benefit to the customer either on its own or together with other resources that are readily available to the customer and is separately identified in the contract. We consider a performance obligation satisfied once control of a good or service has been transferred to the customer, meaning the customer has the ability to use and obtain the benefit of the good or service. Technology development revenue includes revenue associated with the development and technology readiness phases of our technology development agreements. We refer to our customers as "partners" when describing their relationship in an agreement.

Technology development revenue

Our Technology Development Agreements (TDAs) generally include multiple phases of Cell Line Development (CLD) such as library design, assay development, strain screening, fermentation optimization, purification, and analytics that all represent a single performance obligation. These agreements may include options for additional goods and services such as readying the technology to transfer to the partner and licensing terms. The transaction prices for these arrangements include fixed consideration for the single performance obligation as well as variable consideration for success-based achievements. Any variable consideration is constrained to the extent that it is probable that a significant reversal of cumulative revenue will not occur. Depending on the specific terms of the arrangement, we either recognize revenue over time or at a point in time. While there is no alternative use to us for the asset created, the agreement's terms vary as to whether an enforceable right to payment for performance completed as of that date exists. Primarily all of our contracts include an enforceable right to payment.

We measure progress toward the completion of the performance obligations satisfied over time using an input method based on an overall estimation of the effort incurred to date at each reporting period to satisfy a performance obligation. This method provides an appropriate depiction of completed progress toward fulfilling our performance obligations for each respective arrangement. In certain technology development agreements that require a portion of the contract consideration to be received in advance at the commencement of the contract, such advance payment is initially recorded as a contract liability.

KBI BioPharma, Inc. Collaboration Agreement

In December 2019, we executed a four-year Joint Marketing Agreement (JMA) with KBI BioPharma, Inc. (KBI) to co-promote technologies through joint marketing efforts. The JMA provides for a non-refundable upfront payment of $0.75 million and milestone payments of $2.75 million in the aggregate, of which $2.25 million had been received as of December 31, 2020. Upfront payments that relate to ongoing collaboration efforts required throughout the contract term such as joint marketing are recognized ratably throughout the contract term. We fully constrain revenue associated with the milestone payments until the specified milestones are achieved. Additionally, KBI is obligated to make royalty payments to us during the fourth year of the JMA representing a percentage of its sales generated through the arrangement. Any costs incurred to KBI through the duration of the JMA are recognized as a reduction to collaboration revenue in the period in which they are incurred.

Stock-Based Compensation

We measure stock options and other stock-based awards granted to employees, directors and non-employees based on their fair value on the date of grant and recognize compensation expense of those awards over the requisite service, or vesting period of the respective award. We recognize the impact of forfeitures on stock-based compensation expenses as forfeitures occur. We apply the straight-line method of expense recognition to all awards with only service-based vesting conditions.

To determine the estimated fair value of our stock options on the grant date, we use the Black-Scholes option pricing model, which required the input of highly subjective assumptions and generally requires significant judgment. These assumptions include:

- Fair Value of Common Stock. See the subsection titled "—Common Stock Valuation" below.
- Expected Term. The expected term represents the period that the options granted are expected to be outstanding. The expected term of stock options issued is determined using the simplified method (based on the average of the vesting term and the original contractual term) as we have concluded that our stock option exercise history does not provide a reasonable basis upon which to estimate expected term.

- Expected Volatility. Given that our common stock is privately held, there is no active trading market for our common stock. We derived the expected volatility from the average historical volatilities over a period approximately equal to the expected term of comparable publicly traded companies within our peer group that were deemed to be representative of future stock price trends as we have limited trading history for our common stock. We will continue to apply this process until a sufficient amount of historical information regarding the volatility of our own stock price becomes available.
- Risk-Free Interest Rate. The risk-free interest rate is based on the U.S. Treasury zero-coupon issues in effect at the time of grant for periods corresponding with the expected term of the options.
- Expected Dividend Yield. We have never paid dividends on our common stock and do not anticipate paying any dividends in the foreseeable future. Therefore, we used an expected dividend yield of zero.

See Note 8 to our financial statements included elsewhere in this prospectus for more information concerning certain of the specific assumptions we used in applying the Black-Scholes option pricing model to determine the estimated fair value of our stock options. Certain of such assumptions involve inherent uncertainties and the application of significant judgment. As a result, if factors or expected outcomes change and we use significantly different assumptions or estimates, our stock-based compensation could be materially different.

We recorded stock-based compensation expense of $0.0 million for the year ended December 31, 2019 compared to $0.4 million for the year ended December 31, 2020. As of December 31, 2020, there was $0.7 million of total unrecognized stock-based compensation expense related to unvested stock options which we expect to recognize over a remaining weighted-average period of 3.8 years. Prior to the LLC Conversion, we granted phantom units awards to employees and non-employees. Upon the occurrence of a liquidity event, 100% of phantom units would vest. Upon a liquidity event, the phantom unit holders were entitled to a payment equal to the fair value of common units less a strike price. The payment is to be made in the same form of consideration as received by other unit holders as a result of the liquidity event. Other than this payment upon a liquidity event, Phantom units provide no economic value and they provide no voting rights. Due to the presence of an exercise condition contingent upon a liquidity event, the Company determined that it was not probable that the phantom units would become exercisable and no compensation expense has been recognized as of December 31, 2020. Following the LLC Conversion, and subsequent to December 31 2020, the phantom units were exchanged for a combination of cash payment rights, stock appreciation rights (SARs), and stock options granted under the 2020 Plan. The cash payment rights and SARs are contingent upon a liquidity event, which is not probable of occurring. Therefore, no compensation cost has been recognized as of December 31, 2020.

We expect to continue to grant stock options and other equity-based awards in the future, and to the extent that we do, our stock-based compensation expense recognized in future periods will likely increase.

The intrinsic value of all outstanding options as of December 31, 2020 was $ million based on the assumed initial public offering price of $ per share (the midpoint of the price range set forth on the cover page of this prospectus), of which approximately $ million was related to vested options and approximately $ million was related to unvested options.

Determination of the Fair Value of Common Stock

We are required to estimate the fair value of the common stock underlying our stock-based awards when performing fair value calculations using the Black-Scholes option pricing model. Because our common stock is not currently publicly traded, the fair value of the common stock underlying our stock-based awards has been determined on each grant date by management and approved by our

board of directors, considering our most recently available third-party valuation of common shares. All options to purchase shares of our common stock are intended to be granted with an exercise price per share no less than the fair value per share of our common stock underlying those options on the date of grant, based on the information known to us on the date of grant.

Our determination of the value of our common stock was performed using methodologies, approaches and assumptions consistent with the American Institute of Certified Public Accountants (AICPA), Audit and Accounting Practice Aid Series: Valuation of Privately Held Company Equity Securities Issued as Compensation (AICPA Practice Aid). In addition, our board of directors considered various objective and subjective factors to determine the fair value of our common stock, including:

- valuations of our common stock performed by third-party valuation specialists;
- the anticipated capital structure that will directly impact the value of the currently outstanding securities;
- our results of operations and financial position;
- the composition of, and changes to, our management team and board of directors;
- the lack of liquidity of our common stock as a private company;
- our stage of development and business strategy and the material risks related to our business and industry;
- external market conditions affecting the life sciences and biotechnology industry sectors;
- U.S. and global economic conditions;
- the likelihood of achieving a liquidity event for the holders of our common stock, such as an IPO or a sale of our company, given prevailing market conditions; and
- the market value and volatility of comparable companies.

The AICPA Practice Aid prescribes several valuation approaches for setting the value of an enterprise, such as the cost, income and market approaches, and various methodologies for allocating the value of an enterprise to its common stock. The cost approach establishes the value of an enterprise based on the cost of reproducing or replacing the property less depreciation and functional or economic obsolescence, if present. The income approach establishes the value of an enterprise based on the present value of future cash flows that are reasonably reflective of our future operations, discounting to the present value with an appropriate risk adjusted discount rate or capitalization rate. The market approach is based on the assumption that the value of an asset is equal to the value of a substitute asset with the same characteristics.

In accordance with the AICPA Practice Aid, we considered the various methods for allocating the enterprise value to determine the fair value of our common stock at the valuation date. Under the option pricing method (OPM), shares are valued by creating a series of call options with exercise prices based on the liquidation preferences and conversion terms of each equity class. The value of the common stock is inferred by analyzing these options. The probability weighted expected return method (PWERM) is a scenario-based analysis that estimates the value per share based on the probability-weighted present value of expected future investment returns, considering each of the possible outcomes available to us, as well as the economic and control rights of each share class. In connection with the preparation of our consolidated financial statements for the years ended December 31, 2020 and 2019, we reassessed our estimate of fair value of our common stock for financial reporting purposes. Following this reassessment, it was determined that for financial reporting purposes the fair value of our common stock was higher than the fair value determined by the board of directors at the time of grant on October 28, 2020. The fair value for financial

reporting purposes was determined to be $5.14 per share, compared to a value of $3.63 per share approved by the board of directors.

Starting in 2020, we used a hybrid method to determine the estimated fair value of our common stock, which included both the OPM and PWERM models.

Recent Accounting Pronouncements

See Note 2 to our Financial Statements “Summary of Significant Accounting Policies—Recently Issued Accounting Pronouncements” for more information.

Emerging Growth Company Status and 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:

- being permitted to present only two years of audited financial statements and only two years of related Management’s Discussion and Analysis of Financial Condition and Results of Operations in this prospectus;
- 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); 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.

We have elected to take advantage of certain of the reduced disclosure obligations in the registration statement of which this prospectus is a part and may elect to take advantage of other reduced reporting requirements in future filings. As a result, the information that we provide to our stockholders may be different than the information you receive from other public companies in which you hold stock.

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.

Business

Our Mission

Our mission is to change the world, one protein at a time. We founded Absci with the goal of creating better medicines and helping them reach patients sooner. We recognized the extraordinary medical and economic potential of protein-based drugs (biologics), but also the significant challenges the biopharmaceutical industry faces to both discover novel biologics and generate cell lines to manufacture them at commercial scale. We looked at the end game – getting better medicines to patients, faster — and asked: *how?* We built our technology to be that *how*.

We are replacing the fragmented steps and inefficiencies of the conventional biologic drug discovery and cell line development processes with our fully integrated, end-to-end platform designed to create new and better biologics and accelerate their advancement into clinical trials and ultimately into the marketplace where they can serve patients. Combining innovative approaches, including synthetic biology, high-throughput single-cell screening, and deep learning artificial intelligence (AI), we seek to identify optimal drug candidates by exploring expansive protein sequence solution spaces — including considering sequences that nature's evolutionary trajectory has yet to propose. Our platform allows us to expand biological possibilities and generate proteins intractable to produce with other technologies to ensure the best drug candidates have the opportunity to become therapeutic realities for patients. Our goal is to enable the creation of life-saving medicines by *Translating Ideas into Drugs.*

And we are just getting started. Proteins are everywhere making biology happen. Their commercial applications extend far beyond the realm of therapeutics and into other industries including materials science, industrial chemicals, cosmetics, synthetic foods, and agriculture. Today, we are focused on bringing value to the biopharmaceutical industry and generating better medicines. Looking ahead, our vision is that tomorrow’s Absci will be the universal engine creating protein-based solutions to advance the bio-based economy, one protein at a time.

Overview

With our AI-powered Integrated Drug Creation Platform we enable the creation of novel biologics by unifying biologic drug discovery and cell line development into one simultaneous process. We leverage proprietary synthetic biology technologies and deep learning AI to predict, design, construct, screen, select and scale production of novel biologic drug candidates, and learn from the data we generate. We believe our approach delivers disruptive efficiency, but more importantly enables our partners to create novel and human/AI-designed new-to-nature biologics (next-generation biologics). While next-generation biologics have exciting medical potential and are a rapidly growing field of drug development, because their protein architectures (scaffolds or modalities) are biologically foreign, they present challenges for conventional biologic drug discovery and cell line development methods. These methods typically involve a linear series of steps to screen and select desired molecular parts and reformat them into their final protein scaffold, and subsequent laborious and often unsuccessful generation of a suitable manufacturing cell line. We are transforming the biologic drug discovery and cell line development processes by rapidly screening up to billions of drug candidates *in* the desired final protein scaffold that goes into patients and *in* the production cell line that scales up for clinical and commercial manufacturing. Our platform integrates a fragmented set of processes and bypasses the molecular reformatting and cell line development challenges that can lead to inefficiencies and failures. To accomplish this, we use proprietary high-throughput single cell assays that can evaluate billions of drug sequence variants, each within its production cell line, for target binding affinity, protein quality, and production level (titer). We also harness the large datasets we generate to train and refine our deep learning models which guide our protein and cell line designs and enable *in silico* optimization of multiple attributes. We believe our platform is the only commercially available solution that allows

for high-throughput screening for simultaneous biologic drug discovery and manufacturing cell line development for next-generation biologics. We believe our unique approach to biologic drug creation has the potential to significantly accelerate preclinical development timelines and expand therapeutic possibilities for the biopharmaceutical industry.

We believe we represent a new breed of biotechnology company. Our goal is to become the partner of choice for biologic drug discovery and cell line development. Our business model is to establish partnerships with biopharmaceutical companies to use our platform for creating biologic drug candidates and production cell lines on their behalf. Our partnerships are expected to provide us with the opportunity to participate in the future success of the biologics generated utilizing our platform, through potential milestone payments as well as royalties on sales of approved products. We aim to build a diversified portfolio of biologic drug candidates across multiple disease indications in which we have downstream economic participation rights. We currently have drug candidates in nine “Active Programs” (across seven current partners) in which we have or are positioned to negotiate license agreements with potential downstream milestone payments and royalties. Eight of the Active Programs are focused on developing production cell lines for partners’ biologic drug candidates (five preclinical, one Phase 1, one Phase 3, and one animal health), reflecting our 2018 commercialization of our Cell Line Development (CLD) applications. We have one Discovery program underway focused on lead optimization, which we signed shortly after our December 2020 expansion of our platform to include our initial Discovery applications. Our current partners include two of the top 20 pharmaceutical companies based on 2020 global revenues.

Over the last two decades, biologics have emerged as one of the fastest growing class of drugs, accounting for approximately $254 billion in sales worldwide and representing 12 of the top 20 selling therapeutics in 2020. The majority of recently-approved biologic drugs are monoclonal antibodies, but interest and investment are increasingly shifting towards the development of next-generation biologics, which account for 32% of biologics in Phase 1 clinical development today. Despite this increase, we believe that the biopharmaceutical industry remains constrained in pursuing these new biologic modalities because it lacks suitable approaches to efficiently create next-generation biologics. Existing solutions are largely limited to operating within the scope of what nature has already created. They are not adaptable to the full range of possible human-designed scaffolds or to the incorporation of non-standard amino acids (nsAAs) into the protein-of-interest. They do not effectively leverage AI either to derive and apply non-obvious insights across the discovery and manufacturing process development value chain, or to explore potential drug sequences and structures that lie beyond nature’s boundaries.

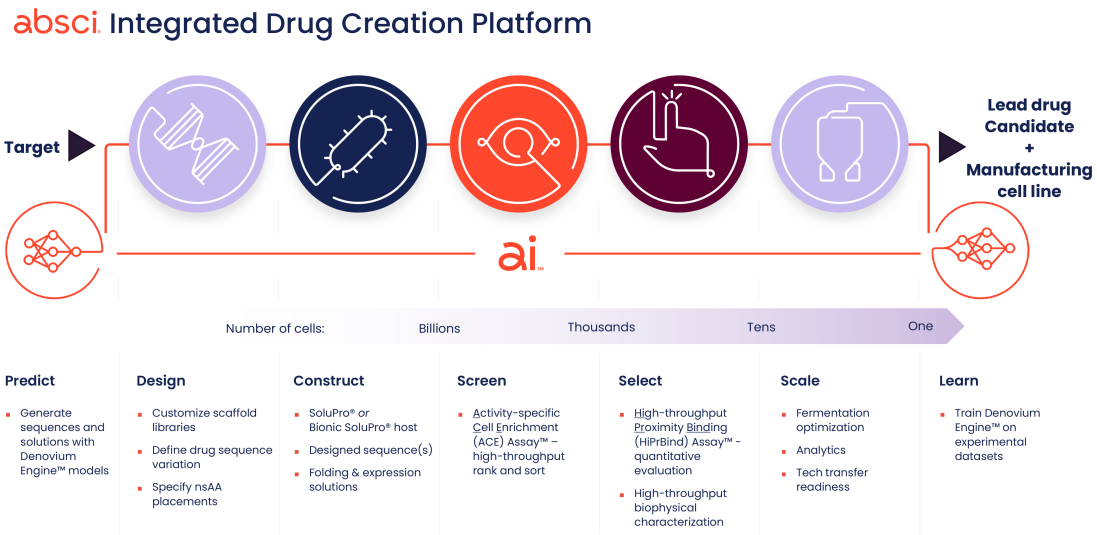
Our Integrated Drug Creation Platform enables the parallel discovery of next-generation biologics and optimized production cell lines by uniquely incorporating engineered biodiversity, proprietary high-throughput single cell assays, and deep learning AI models. We use our platform to predict, design, construct, screen, select and scale production of biologic drug candidates for our partners, and learn from the data we generate. Our designs are AI-informed and our technology platform is scaffold-agnostic. Our AI leverages deep learning models that are trained on our growing datasets. Our datasets delineate detailed determinants of protein function and manufacturability across billions of single-cell experiments. Our single-cell experiments are performed in our patented production cell lines.

The foundational technologies that power our platform are:

- **SoluPro and Bionic SoluPro:** SoluPro is our patented bioproduction system based on bioengineered *E. coli that* we designed to be fundamentally good at making complex mammalian proteins. We further engineered our Bionic SoluPro to facilitate site-specific incorporation of nsAAs into what we call Bionic proteins. We believe our SoluPro cell lines unlock evolutionary opportunities by expanding the biological repertoire of proteins that can be produced to include new-to-nature proteins such as next-generation biologics.

- **Custom Scaffold Libraries:** We can design and generate up to billions of drug candidate sequence variants for each Discovery program. Our platform creates libraries in any scaffold our partner specifies, whether natural, pre-existing, or newly invented. These drug candidate sequence libraries are custom because they are specifically generated for each program and scaffold. We can also specify nsAA incorporation sites as we design these libraries.
- **Folding and Expression Solutions:** We curate a diverse collection of folding and expression solutions, which are genetic tools that we use to customize SoluPro and optimize production of the desired protein. We create up to billions of different cell lines and measure each cell's performance to find the solutions that work best for the protein-of-interest.
- **Breakthrough Assays:** Our proprietary Activity-specific Cell Enrichment (ACE) and High-Throughput Proximity Binding (HiPrBind) Assays allow us to evaluate and sort the millions to billions of drug sequences and cell line variants we generate. Tailored for each of our programs, our high-throughput assays can rank and sort billions of cells based on desired parameters such as target affinity, protein quality, and titer. We capture datasets that have the potential to provide us with highly relevant insights about protein function and manufacturability in our system and beyond.
- **Denovium Engine:** Our Denovium Engine is an AI technology that includes deep learning computational models of protein function. The Denovium Engine models, trained on our high-quality data that are particularly relevant to our system, generate non-obvious predictions about the impact of amino acid sequence and cell line engineering parameters on a given protein's function and manufacturability. In the future, we expect to use AI to inform the choice of drug scaffold, define the scope of sequence variants to generate, and design the cell line attributes. We believe this technology may eventually enable us to optimize complex solution space fully *in silico* without the need to physically screen billions of options.

These foundational technologies work together as our Integrated Drug Creation Platform. The diagram below depicts the core activities we accomplish on our platform.



Our process using our Integrated Drug Creation Platform involves the following steps:

- **Predict:** We expect to use our Denovium Engine AI models to generate non-obvious predictions about what are likely to be optimal drug candidate sequences and cell line designs for any protein-of-interest. The AI combines the collective learnings available in public databases with our own experimental data specifically documenting protein functionality and manufacturability factors relevant to our system. Importantly, our Denovium Engine considers sequences and solutions that it has not seen before, and it may predict entirely new-to-nature protein scaffold elements and sequence motifs or design new biologic modalities.
- **Design:** Based on the program goals, we design custom libraries of protein-of-interest variants in the desired scaffold architecture and specify any desired nsAA placements. Using our Denovium Engine models, we may recommend modifications to the scaffold architecture, as well as define the scope of protein variation to evaluate options beyond sequences that exist in nature. In addition, we also incorporate designs based on folding and expression solutions predicted as relevant by our Denovium Engine models. This entire step is accomplished *in silico*.
- **Construct:** Using synthetic biology approaches, we construct up to billions of genetically distinct SoluPro or Bionic SoluPro cells to evaluate. Each cell contains the instructions to make one version of the protein-of-interest, as well as a different assortment of folding and expression solutions.
- **Screen:** Our proprietary high-throughput ACE Assay allows us to evaluate and sort up to billions of cells. We collect subsets of the population of cells that express the best versions of the protein-of-interest (hits), based on target binding, protein quality, and titer. We also collect large datasets on the genetic determinants of protein function and manufacturability in our system that we use to train our Denovium Engine models.
- **Select:** With our HiPrBind Assay, using automated multiplexed plate-based methods, we grow micro-batches of each of the thousands of hits from the ACE Assay and perform quantitative characterization of protein function, quality, and titer. We also perform high-throughput biophysical characterization to collect additional data on relevant biophysical attributes that impact developability. We are able to select the best several candidates (leads) in their putative production cell lines for further analytics, as well as collect further data insights to enhance our Denovium Engine models.
- **Scale:** We optimize fermentation conditions for the selected lead strain(s) to demonstrate desired productivity, quality, and scalability. We perform comprehensive analytics on the lead drug candidate(s) for evaluation and technology transfer to our partners.
- **Learn:** Throughout our process, we generate large and complex datasets specifying determinants of protein function and manufacturability. We use these data to train our Denovium Engine to enable its models to make increasingly refined predictions for scaffold sequence variants and cell line designs. Our goal is to train the deep learning models with enough data to be able to input a sequence of a new drug target and have the model output a unique, optimal drug scaffold sequence and cell line architecture that we construct and confirm: a process that we refer to as *de novo* biologic drug creation *in silico*.

Because of the flexibility of our platform, we can partner with biopharmaceutical companies to address specific challenges, or we can open up opportunities to create new modalities and generate lead drug candidates that previously had not been possible. Programs we undertake vary across the range of our capabilities, from *de novo* drug discovery in bespoke scaffolds incorporating nsAAs to development of optimized production systems for existing lead drug candidates. Our goal is to demonstrate the value of our fully integrated approach and expand our work with an increasing

number of partners on broad multi-molecule discovery partnerships. We believe we offer a compelling value proposition to our partners by:

- Accelerating timelines from idea to drug candidate;
- Enabling the creation of new biologic modalities;
- Improving the production capability of next-generation biologics;
- Designing better drug candidates; and
- Raising biologics production yields and lowering manufacturing costs.

Our initial focus is on enabling the biopharmaceutical industry by transitioning biologic drug discovery and cell line development processes onto our Integrated Drug Creation Platform and providing access to an expanded solution space for drug creation. Over time we envision deploying our platform into other industries as we live by our mission of changing the world, one protein at a time.

Strategy

We believe we represent a new breed of biotechnology company, integrating powerful artificial intelligence with new synthetic biology technologies to create next-generation biologics. We aim to become a partner of choice to both large pharmaceutical companies and biotechnology companies to enable and empower discovery and cell line development capabilities for biologics. We intend to use our Integrated Drug Creation Platform to empower innovation by creating new modalities, discovering next-generation biologics, driving efficiencies, broadening pipelines, and accelerating preclinical timelines.

Our strategy to accomplish this is as follows:

- **Enable the discovery and development of next-generation biologics and new modalities through our proprietary platform.** Our ability to design, construct and rapidly screen large populations of genetically distinct cells enables us to evaluate billions of unique protein variants and increase the probability of finding the most promising biologic drug candidate. We design and optimize new-to-nature modalities with insights from our Denovium Engine models. We also harness the power of nature, using synthetic biology approaches with our *E. coli* SoluPro strains to produce complex proteins and new modalities. Unlike other biologic drug discovery methods, we evaluate the variants of these desired proteins in the fully-constructed scaffold to enable creation of next-generation biologics while optimizing for target affinity as well as high-titer expression and scalable manufacturability from the beginning of the discovery process. We believe that our platform will empower our partners to bring new and better drugs to market.
- **Accelerate biologic drug discovery and cell line development by unifying these processes as “Integrated Drug Creation.”** Our platform seamlessly integrates multiple steps across the biologic drug discovery and cell line development process and our foundational technologies that power our Integrated Drug Creation Platform improve efficiencies at each step. Our approach also has the flexibility to address challenges at specific points in the biologic drug discovery and cell line development process and enable our partners to pursue more efficient biologic drug discovery across expanded solution spaces. By accessing our platform, infrastructure and expertise, our partners have the potential to eliminate extended timelines, reduce costs associated with setting up biologic drug discovery applications and cell line process development, and advance their preclinical programs more efficiently.
- **Drive rapid adoption by becoming a partner of choice for large pharmaceutical companies and biotechnology companies.** Many large pharmaceutical companies and

biotechnology companies are seeking a partner with technologies, resources and teams to enable next-generation biologic drug discovery and execute on early stage preclinical programs. We strive to form strong partnerships across our target partner base and to drive rapid market adoption through increased business development activities designed to gain new partners and expand our existing partnerships to cover additional programs. We believe our innovative approach and ability to create better biologics faster, along with the scalability of our platform, will enable us to build a diversified portfolio of potential milestone revenues and royalty streams from a variety of next-generation biologics across multiple indications.

- **Advance the promise of *in silico* drug creation by leveraging proprietary data and AI.** Our Denovium Engine AI learns with each new program we undertake. We are enhancing the predictive power of Denovium by training its deep learning models with our unique multi-dimensional data sets. With enough data and iterations, we aim to achieve *in silico* creation of novel drug candidates with desired pharmacologic attributes, in bespoke scaffolds, along with high titer production cell lines. Our Denovium Engine is fed data from every single step we take and each cell and protein variant we evaluate; therefore, with scale and additional partnerships, we believe we have the opportunity to further increase efficiency and to identify novel biologics. Our Denovium AI technology is the link that correlates business scale with speed and precision. The more partners we have, the more data we generate, the more Denovium learns. As Denovium gets smarter, we can create new and better biologic constructs for our partners faster.

- **Continuously invest in our platform to push the boundaries of science and unlock the untapped power of biology.** We intend to maintain our technological differentiation through investments in teams and technologies, and to continue bolstering our capabilities in areas such as bioinformatics, molecular sciences, biology and chemistry, computation, and protein engineering. We expect to grow and enhance our intellectual property portfolio to protect and secure the value of our innovations. Similar to our acquisition of Denovium, we believe we will continue to evaluate strategic technology acquisitions that would be additive to expand and strengthen the capabilities of our platform and deepen our expertise in biologic drug discovery and cell line development.

- **Maintain an entrepreneurial, founder-led, scientifically rigorous, data-driven and inclusive corporate culture.** Our founder-led team lives by the mantra: *"believe in the impossible."* We are disrupting the pharmaceutical industry with bold ideas and fulfilling the promise of life-saving medicines for patients by *Translating Ideas into Drugs*. Each of our team members brings their energy, expertise, and enthusiasm to bear as we pursue the shared mission of changing the world, one protein at a time.

Industry

Over the last two decades, biologics have been at the forefront of medical advances in a wide range of disease areas including oncology, immunology, infectious and metabolic disease, and many more. Biologics have emerged as one of the fastest growing class of drugs. According to Evaluate Pharma, the global protein-based biologics market, which we define as including monoclonal antibodies (mAbs), monoclonal antibody conjugates and recombinant products, reached approximately $254 billion in 2020 and is expected to reach $418 billion by 2026, representing a compound annual growth rate of approximately 9%.

Fueled by the medical promise of protein-based drugs, the biopharmaceutical industry has continued to expand its horizons in terms of the different diseases targeted by biologic drug developers as well as the design and different modalities of biologics. The desire by drug developers to manipulate biological mechanisms to fight diseases, explore targets that have not yet been addressed, and succeed in conquering difficult-to-drug targets has led to the development of increasingly complex biologic modalities and the emergence of the field of next-generation

biologics. As we define them, next-generation biologics comprise a broad class of new protein-based modalities designed by scientists rather than found in nature. They include modified antibodies such as antibody-drug conjugates and bispecific mAbs, scaffolds based on antibody parts such as Fabs, scFvs, and VHHs, hybrid fusion proteins including T-cell engagers, multivalents, cytokine derivatives, and biologics incorporating nsAAs, and any other new-to-nature protein-based drug imaginable. According to our analysis of Evaluate Pharma data, next-generation biologics currently make up approximately 32% of the Phase 1 protein-based biologics in development.

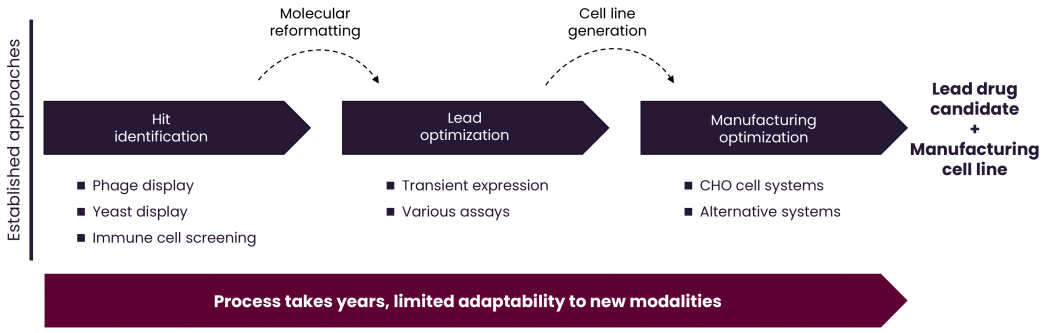
Established methods for biologic drug discovery and cell line development

The biologics industry has experienced significant growth and technology advancement, but the process of developing a clinical stage-ready biologic drug candidate remains complex, inefficient, and failure-prone, and is typically accomplished through an assembly of isolated technologies. Generating a clinical stage-ready candidate includes two broad sets of technology development processes: *biologic drug discovery* and *cell line development*.

Conventional Biologic Drug Discovery: Given a target, conventional methods for biologic drug discovery involve fishing for “hits” that bind the target using methods such as phage display, yeast display or immune cell screening. Unless the hits are already in the desired scaffold, they then must undergo a molecular reformatting step to incorporate the hits into the desired scaffold. It is only once assembled that these “leads” can be evaluated. This reformatting is a low throughput one-by-one process that is prone to challenges such as loss of target specificity once the hit is reformatted into the lead scaffold, or inability to make enough of the lead to even evaluate its promise as a drug candidate. The discovery process, including screening, reformatting, and lead optimization, occurs across several technologies outside of the eventual production cell lines.

Conventional Cell Line Development: Biologics must be biologically synthesized in bespoke cell lines, rather than chemically synthesized like small molecule drugs. Development of cell lines suitable for manufacturing at scale is undertaken only after lead candidates have been selected. With conventional methods, cell line development involves introducing a lead candidate into the host cell line, typically Chinese Hamster Ovary (CHO) cells, and then laboriously optimizing conditions and strain characteristics for production of the new drug candidate, if possible. The limited adaptability of CHO cell lines and engineering challenges have constrained the scope of protein-based drugs that can be successfully developed. This can be particularly true for next-generation biologics, which may be impossible to produce with conventional approaches.

The below diagram illustrates the basic steps of established approaches for biologic drug discovery and manufacturing cell line development:



Limitations of existing approaches

With conventional fragmented approaches, preclinical timelines are extensive - historically 5.5 years from discovery to IND - and failure rates are high, with roughly only one in three lead drug candidates advancing to clinical testing in patients. For those drug candidates that do enter Phase 1 testing, it is estimated that 12% go on to receive marketing authorization, taking another eight years to do so. We believe that these long timelines and high failure rates are reflective of an industry reliant on aging systems and processes. It is our view that existing approaches are burdened by the design constraints of their technologies' evolution, with the current processes representing the culmination of many iterations on the first technologies employed by the industry. New technologies may be tacked on to add incremental expansion of capabilities, but on the whole, the biologic drug discovery and cell line development processes remain fragmented and reliant on legacy component tools. This fragmentation of the processes discourages innovative potential, especially since the current approaches are not readily adaptable to development of next-generation biologics.

We believe the industry suffers from the following challenges and limitations of existing solutions:

- **Current methods involve fragmented steps and a patchwork of outdated technologies; new technologies generally focus on isolated steps and do not integrate the processes.** We believe drug developers primarily use legacy technologies and fragmented processes to accomplish discrete steps in either biologic drug discovery or cell line development. Moving between steps in the process and different technologies may not be seamless, introducing inefficiencies and creating insurmountable hurdles to advancement of a promising drug candidate. While new technologies and new methods for hit identification or cell line development have been commercialized, these methods do not allow for discovery screening to be performed while the candidate is in its production cell line and therefore cannot enable discovery of a new biologic in parallel with generating its production cell line. As a result, even with updated technologies, established methods contribute to long development timelines and low probabilities of success.
- **Commercially available biologic drug discovery platforms are generally constrained as to the types of biologic modalities they can explore.** We believe that most of the current approaches to biologic drug discovery impose technological and biological limitations as to the nature of proteins that can be evaluated. High diversity and high-throughput methods are primarily capable of identifying target specificity of small protein fragments or variants of native mammalian proteins. Consequently, newly-designed proteins in novel scaffolds generally require laborious "one by one" evaluation and/or screening by parts and then iterative assembly into the full scaffold. Similarly, conventional methods do not facilitate efficient discovery of new-to-nature proteins that incorporate nsAAs, a desirable feature for post purification chemical modifications. Constraints on the nature of screenable proteins limit the breadth of opportunities for discovery, and may result in suboptimal lead candidates, extended timelines and susceptibility to failure at different steps throughout the process.
- **Current approaches to biologic drug production are not readily adaptable to novel protein modalities.** Proteins require biological assembly by cellular machinery. Developers of more complex biotherapeutics such as monoclonal antibodies have adapted CHO cells to be reasonably adept bioproduction hosts. However, generation of a CHO cell line to produce any new biologic is not trivial, and an adequate cell line generally takes a year or more to develop. In addition, CHO systems have limited flexibility to produce next-generation modalities; the mammalian cells are difficult to engineer and are not adapted or adaptable to make new-to-nature proteins such as those built in novel scaffolds or incorporating nsAAs. The challenge of generating high-titer manufacturing cell lines is a

critical impediment to advancing many novel biologic drug candidates into and through clinical development.

- **Current approaches do not leverage artificial intelligence to explore beyond opportunities within nature.** The scale and complexity of proteins present significant challenges for developing biotherapeutics. There are more potential protein variants than can ever be evaluated even with the highest throughput approaches. While some computational insights are being gained from experimental observations, there are few if any existing biotherapeutic drug design approaches that make impactful use of high-throughput data in combination with machine learning. We believe there is lost opportunity to train and use deep learning models to predict promising new proteins that lie outside the bounds of what already exists in nature or even what human intelligence can rationally design. The biopharmaceutical industry is still in the early days of augmenting human efforts with artificial intelligence, operating within the bounds of sequence similarities to natural precursors, even when considering functional impact.
- **Existing production organisms, or systems, can be inefficient and costly.** The vast majority of biopharmaceutical production processes today rely on CHO cell systems. The ongoing drug product costs of operating CHO cell bioproduction processes are high due to the nature of the cells' growth characteristics and requirements. CHO cells grow slowly and at low densities, so a single production run generally requires 10 to 14 days of growth in the bioreactor, which limits batch cycles and plant flexibility. The overall productivity of a CHO cell line producing a drug candidate at a 5 gram/liter titer may be less than half a gram per liter per day on average due to the extended growth cycle. Costly growth media and the requirement for downstream viral clearance steps also contribute to the high cost of CHO processes.

As a result of these limitations, we believe the biopharmaceutical industry can benefit from a newly-designed approach that incorporates the best current technologies and AI to accomplish the goal of discovering and advancing promising new biologic drug candidates into clinical development as quickly as possible.

Our Integrated Drug Creation Platform

We built our Integrated Drug Creation Platform to create next-generation biologics including those that lie beyond the scope of nature. To achieve this, we leverage synthetic biology technologies, engineered biodiversity, proprietary functional assays and data-driven deep learning computational models to discover next-generation biologic drug candidates and design optimized production cell lines in parallel. Our platform enables functional evaluation of billions of variants of desired proteins, including complex biologic drug candidates, with simultaneous generation of scalable production cell lines, all in a time- and cost-effective manner. We screen *in* the desired scaffold format and *in* the scalable manufacturing cell line. We believe our platform is the only commercially available solution with this capability, enabling costly and lengthy processes to be collapsed into one integrated step.

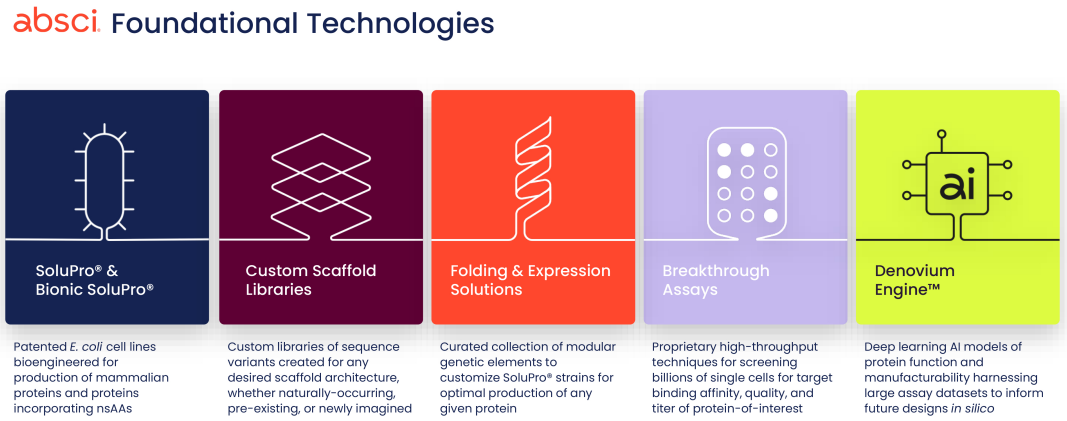
We use our platform to predict, design, construct, screen, select and scale production of biologic drug candidates for our partners, and learn from the data we generate. Our designs are AI-informed and our technology platform is scaffold-agnostic. Our AI leverages deep learning models that are trained on our growing datasets. Our datasets delineate detailed determinants of protein function and manufacturability across billions of single-cell experiments. Our single-cell experiments are performed in our patented production cell lines.

The foundational technologies that power our platform are:

- **SoluPro and Bionic SoluPro:** SoluPro is our patented bioproduction system based on bioengineered *E. coli.* Using synthetic biology techniques, we designed SoluPro to be our

chassis cell line and be fundamentally good at making complex mammalian proteins. We believe our SoluPro unlocks evolutionary opportunities by expanding the biological repertoire of proteins that can be produced to include complex new-to-nature proteins such as next-generation biologics. We further engineered a version of SoluPro to facilitate site-specific incorporation of nsAAs into proteins for scaled production. We refer to these nsAA-containing proteins as Bionic Proteins and the SoluPro strain we use to produce them as Bionic SoluPro.

- **Custom Scaffold Libraries:** We can design and generate custom collections of drug candidate sequence variants for each Discovery program, starting with whatever scaffold our partner specifies, whether natural, pre-existing, or newly-invented, and building out up to billions of different versions to test. These libraries are specifically generated for each program and scaffold, and our AI predictions coupled with our ability to generate libraries in any given scaffold allow us to consider relevant variants that nature could not have proposed. We can also specify nsAA incorporation sites as we design these libraries.
- **Folding and Expression Solutions:** We curate a diverse collection of folding and expression solutions, which are genetic tools that we use to customize SoluPro and optimize production of the desired protein. Each protein we work on has different characteristics when it comes to manufacturability factors, and with the folding and expression solutions parts library and our synthetic biology methods, we create up to billions of different cell lines and measure each cell's performance to find the solutions that work best for the protein-of-interest. The folding and expression solutions collectively comprise an expansive set of genetic modules and techniques we have assembled including ribosome binding site sequences, molecular chaperones, and codon-optimization conventions.
- **Breakthrough Assays:** Our proprietary ACE and HiPrBind Assays allow us to evaluate and sort the millions to billions of drug sequence and cell line variants we generate. Tailored for each of our programs, our high-throughput assays can rank and sort billions of cells based on desired parameters such as target affinity, protein quality, and titer. We are also able to capture datasets correlating protein sequence variants and folding and expression solutions with cell line characteristics. These large, highly complex datasets have the potential to provide us with highly relevant insights about protein function and manufacturability in our system and beyond.
- **Denovium Engine:** Our Denovium Engine is an AI technology that includes deep learning computational models of protein function. The Denovium Engine models, trained on our high-quality data that are particularly relevant to our system, generate non-obvious predictions about the impact of amino acid sequence and cell line characteristics on a given protein's function and manufacturability. A deep learning neural network approach is well-suited to our complex datasets because the models learn what is relevant to the specific objective, without human annotation or bias. We expect the capabilities of the Denovium Engine grow with each new set of data we generate and input. In the future, we intend to use AI to inform the choice of drug scaffold, define the scope of sequence variants to generate, and design the cell line attributes. We believe this technology may eventually enable us to optimize complex solution space fully *in silico* without the need to physically screen billions of options.



We perform our process using our Integrated Drug Creation Platform to predict biologically interesting variants, design custom libraries of protein-of-interest sequence variants, construct diverse populations of cells with these libraries and our folding and expression solutions, screen and sort these cells based on our desired criteria, select lead drug candidate/cell line combinations having the desired functionality and manufacturability qualities, optimize these leads for scaled manufacturing readiness, and learn by feeding data from our multitude of single cell experiments into our AI models to continually refine our predictions. Our process using our Integrated Drug Creation Platform includes the following steps:

- **Predict:** We expect to use our Denovium Engine AI models to generate non-obvious predictions about what are likely to be optimal drug candidate sequences and cell line designs for any protein-of-interest. The AI combines the collective learnings available in public databases with our own experimental data specifically documenting protein functionality and manufacturability factors relevant to our system. Importantly, our Denovium Engine considers sequences and solutions that it has not seen before, and it may predict entirely new-to-nature protein scaffold elements and sequence motifs or design new biologic modalities.
- **Design:** Based on the program goals we design custom libraries of protein-of-interest variants in the desired scaffold architecture and specify any desired nsAA placements. This entire step is accomplished *in silico*, and we incorporate predictions our Denovium Engine models have extracted from our proprietary datasets to improve our designs. We design the synthetic biology components at the DNA level, including gene(s) for the protein-of-interest that will encode the potential future drug candidates. We design custom plasmid libraries for each program we undertake. Plasmids are the carriers of the DNA for the protein-of-interest that will ultimately be delivered into the cell line. We may start with a generic DNA sequence for the desired scaffold and, using our AI predictions, define the parameters of the sequence variation to be evaluated for discovery and/or any targeted nsAA placements. Having designed the gene-of-interest sequences, we augment the computational plasmid designs with a random assortment or selected range of our synthetic biology folding and expression solutions that are included to impart characteristics to the cell lines that optimize production of the protein-of-interest.
- **Construct:** Using synthetic biology approaches, we construct up to billions of genetically distinct SoluPro or Bionic SoluPro cells to evaluate. Each cell contains the instructions to make one version of the protein-of-interest, as well as a different assortment of folding and

expression solutions. We synthesize the designed plasmid libraries and deliver them into our host organism, creating a large population of these host cells for screening. These populations of distinct plasmids modify our base SoluPro strains and generate a large population of genetically distinct cells. The population of cells is cultivated under manufacturing-relevant fermentation conditions to induce production of the protein-of-interest for screening.

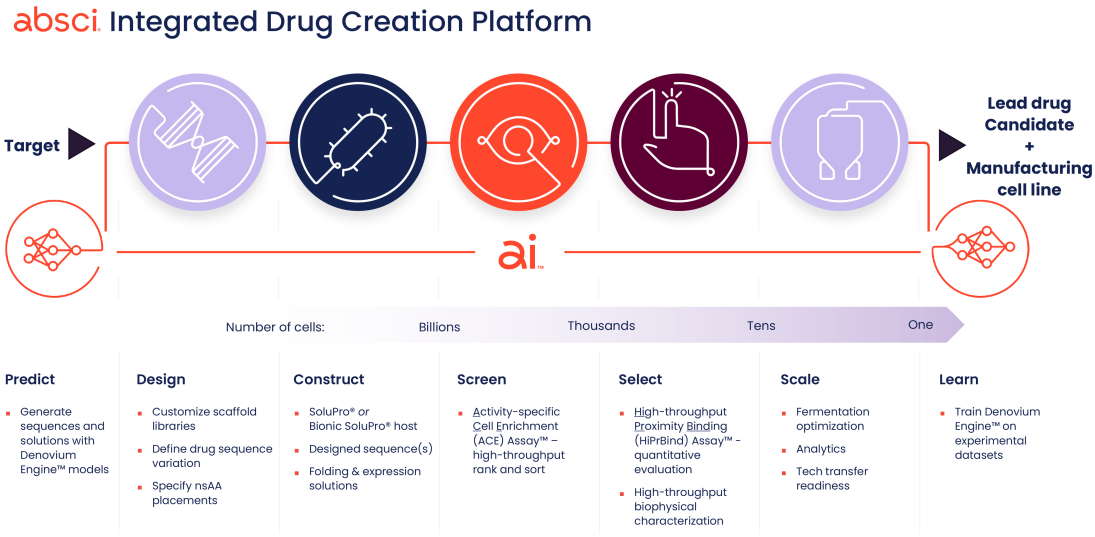
- **Screen:** We screen this large population of cells for the desired characteristics using our proprietary ACE Assay, which enables rapid identification of hits from large genetically diverse populations of cells. The ACE Assay is a binding-based assay that allows us to sort SoluPro cells based on protein-of-interest functionality (such as target affinity) as well as expression level (titer). To accomplish this, we introduce fluorescently labeled binding targets (e.g., the antigen against which we are trying to develop a drug) and use fluorescence activated cell sorting (FACS) to evaluate and sort each cell based on how brightly it fluoresces. Using proprietary methods, we correlate the fluorescent signal with the quantity, quality, and function of the protein-of-interest, and thus we utilize the ACE Assay to characterize millions or billions of independent strains and collect the desired variants based on the parameters we set. In this way we are quickly able to identify the most promising subset of cells from among millions or billions. Our ACE Assay is compatible with a diverse range of protein modalities, including next-generation biologics. We are also generating billions of data points describing sequence modifications and combinations of folding solutions contributing to protein affinity, solubility and manufacturability that we use to train our Denovium Engine deep learning model.

- **Select:** We use our proprietary High-Throughput Proximity Binding (HiPrBind) Assay to select the best leads from among the screened hits. For expanded clonal populations of each of the hits identified we can quantitatively evaluate and characterize functional parameters of the protein-of-interest such as target binding affinity, titer, and product quality. Our proprietary techniques allow us to discriminate between full length properly folded protein and any other improperly folded or incomplete product-related impurities, in a fully quantitative manner, and again collect the data for training the Denovium Engine models. Like the ACE Assay, the HiPrBind Assay is designed to be readily adaptable to a diverse range of protein modalities. We also perform high-throughput biophysical characterization to collect additional data on relevant biophysical attributes that impact developability. We are able to select the best several candidates (leads) in their putative production cell lines for further analytics, as well as collect further data insights to enhance our Denovium Engine models.

- **Scale:** We optimize fermentation conditions for the selected lead strain(s) to demonstrate desired productivity, quality, and scalability. Having narrowed the cell population down from millions or billions to closer to a dozen, we employ several banks of state-of-the-art 250 mL fed batch fermenters to perform fermentation process optimization using design of experiments (DOE) methodologies to identify scalable production processes. To generate purified material for internal analytics and evaluation by our partners, we use standard chromatography purification methods to make small batches of protein-of-interest from the selected strains. We perform comprehensive protein analytics to evaluate product quality and purity, and we generate cell banks and documentation suitable for technology transfer to partners or the contract manufacturers they specify.

- **Learn:** Throughout our process, we generate large and complex datasets specifying determinants of protein function and manufacturability. We use these data to train our Denovium Engine to enable its models to make increasingly refined predictions for scaffold sequence variants and cell line designs. Our goal is to train the deep learning models with enough data to be able to input a sequence of a new drug target and have the model

output a unique, optimal drug scaffold sequence and cell line architecture that we construct and confirm: a process that we refer to as *de novo* biologic drug creation *in silico*.



Applications of our Integrated Drug Creation Platform

Our platform is flexible, and we are able to onboard a given program at multiple points in the biologic drug discovery and cell line development process. Starting with a given target and a desired scaffold format for an eventual drug candidate, we may perform comprehensive *de novo* biologic drug discovery through to cell line development. We may enhance discovery opportunities with our partners by building new scaffolds and designing new molecules to incorporate nsAAs to facilitate post-purification chemical modifications. We may also design and optimize a high titer production cell line for a partner's already-established lead drug candidate. We classify our applications into two key categories: Discovery and Cell Line Development (CLD). Since we deliver a production cell line for each of our projects, we define Discovery as any projects for which we are evaluating variants of the protein-of-interest, and we define CLD as a program for which the production cell line alone is the goal of the partnership.

- **Discovery:** We commercially launched our initial Discovery applications in December 2020, and to date we have one Discovery program underway for lead optimization. Discovery involves screening for hits of the desired target, but unlike other commonly used screening methods used for biologic drug discovery, we are screening for hit variants in the complete scaffold, not a domain fragment to be subsequently reformatted. We also screen in production cell line variants. Our Discovery applications are scaffold-agnostic. Whether we are screening variants of an antibody, a T-cell engager, a multivalent Fc-fusion, or any other human- or AI-designed modality, our platform is adaptable to simultaneously optimize for functionality and manufacturability of lead candidates. We believe there is no other commercially available solution that enables comprehensive scaffold-agnostic drug discovery in the desired scaffold format. The Discovery applications that we currently or in the future expect to address with our Integrated Drug Creation Platform are the following:
    - *De novo discovery* - We may perform *de novo* discovery by starting with a desired scaffold format for the desired drug and creating a library of relevant sequence variants that will establish the target specificity (e.g., CDR regions of antibody). And we create an optimized production cell line.

- *nsAA incorporation* - We may engineer a signal into the gene encoding the drug candidate that directs incorporation of an nsAA into the growing protein chain in a site-specific manner. The nsAA provides a handle for chemical modifications including glycosylation, PEGylation, ADC-payload conjugation, and novel branched proteins and chemical conjugates. And we create an optimized production cell line.

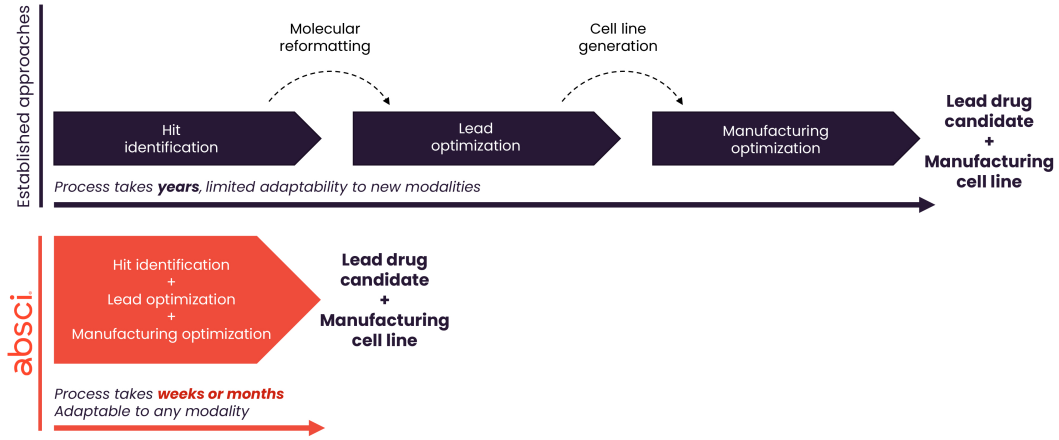
- *Lead optimization* - We may start with drug discovery leads and introduce modifications into the sequences to evaluate variants for improved target affinity, manufacturability, and other pharmacologic characteristics. Thus we can optimize leads that our partners may advance through preclinical development. And we create an optimized production cell line.

- *Scaffold design and drug platform development* - We are uniquely capable of assembling and producing new-to-nature next-generation biologic scaffolds. We may therefore empower our partners with the ability to execute on theoretical modalities, creative fusions, and multivalent molecular hybrids. Within the context of those assembled scaffolds we can evaluate variants to discover new drug candidates designed for optimal target affinity and other desired characteristics. And we create optimized production cell lines.

- **Cell Line Development (CLD):** We launched our CLD applications in 2018, as our first commercial offering, and all but one of our ongoing programs are for CLD. Because we deliver a production cell line for each of our projects, we classify a program as CLD only when the production cell line alone is the goal of the partnership, or in other words, when the sequence of the lead drug candidate is locked in. Fundamentally, the process utilizing our Integrated Drug Creation Platform is the same as for our Discovery programs, except that the plasmid libraries we design include a fixed lead drug sequence, with variation limited to the assortment of the folding and expression solutions. Screening and selection steps are aimed at identifying the cell lines with highest titer expression of the drug candidate. Partners typically have come to us with late-preclinical or clinical-stage next-generation biologics for which they have not been able to develop a manufacturing process or for which an existing manufacturing process is poorly performing. As we succeed in these CLD programs, we believe we enable the advancement of next-generation biologic candidates that otherwise would not proceed in development due to manufacturability challenges.

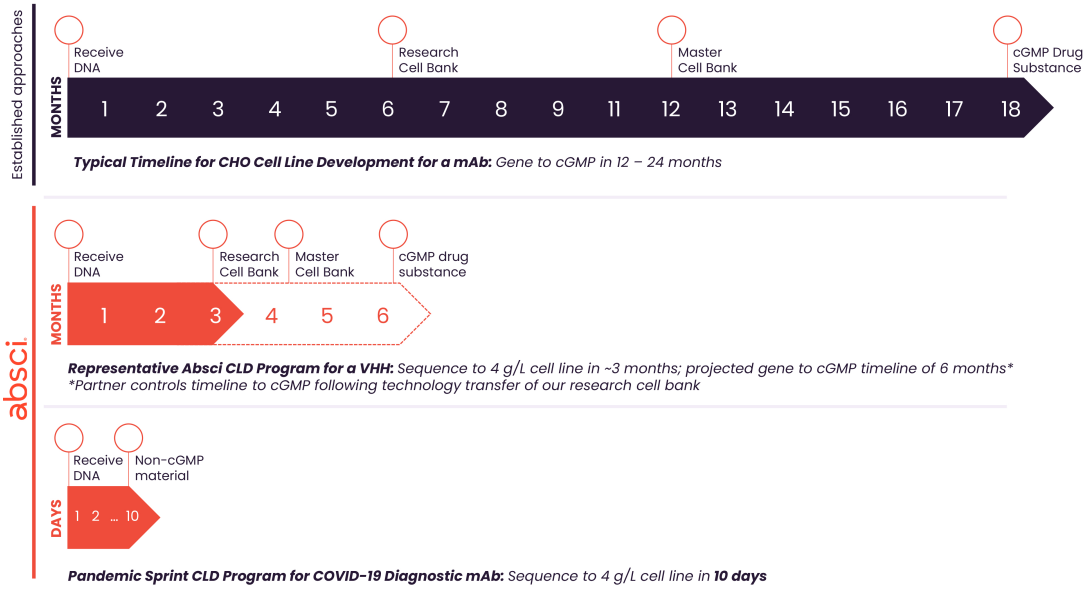
Advantages of our Integrated Drug Creation Platform

Our platform integrates biologic drug discovery and cell line development processes, accomplishing these activities in parallel rather than sequentially, as illustrated relative to established approaches in the figure below.



We have designed our Integrated Drug Creation Platform to provide the following potential benefits for our partners:

- **Accelerated timelines from idea to drug candidate:** Our platform integrates biologic drug discovery and cell line development, collapsing time-consuming fragmented activities into one concise process. Because from the start we screen for hits *in* the desired scaffold format and *in* the cell line that will scale up for manufacturing, we can bypass common failure points and avoid the need for molecular reformatting or subsequent cell line development. We optimize drug candidate properties and cell line performance in parallel from the outset of the project. We leverage our Integrated Drug Creation Platform and foundational technologies to accelerate biologic drug discovery and cell line development timelines, whether we start with a lead candidate for which a partner needs a cell line, or a target against which a partner wants an entirely novel drug candidate. Depending on the complexity of the project and the priorities specified by the partner, we can create a cell line for a defined biologic in as little as 10 days. Our timelines for CLD may enable transition from gene to production of material designed to comply with current good manufacturing practice (cGMP) requirements in six months, versus one to two years for standard CHO cell line development. Because our discovery occurs in the same process, we expect to meet similar timelines with our Discovery programs. Our timelines relative to industry standards are depicted in the figure below.



- **Creation of new biologic modalities:** Our Discovery applications are scaffold-agnostic. We use a synthetic biology approach and harness the power of nature using our SoluPro strains, which we have bioengineered to produce complex proteins rapidly and effectively. Utilizing our Integrated Drug Creation Platform, we specialize in creating new biologic modalities, discovering next-generation biologics in engineered scaffolds, and creating Bionic Proteins that incorporate nsAAs. Unlike other biologic drug discovery methods, from our initial screens we are looking for hit variants *in* the fully-constructed scaffold, not a domain fragment to be subsequently reformatted. By screening in the fully assembled molecular format and in the scalable production cell line, any leads we identify are designed to be readily manufacturable. Thus, we expect to enable entirely new biologic opportunities and reduce frustrating and costly preclinical failures that impede advancement of new-to-nature next-generation biologics. We believe there is no other commercially available solution that enables comprehensive, high-throughput, scaffold-agnostic biologic drug discovery in the desired scaffold format and cell line.

- **Efficient production of complex biologics:** We have bioengineered our SoluPro strains to excel at producing a wide variety of complex proteins. SoluPro overcomes the challenges encountered in using *E. coli* strains to synthesize complex biologics that first led the industry to turn to CHO cells. With our Integrated Drug Creation Platform, we deploy our synthetic biology toolkit and our folding and expression solutions libraries to customize the scaffold-agnostic base SoluPro strains to enable high titer production of the proteins we address. We are not restricted to making proteins that look like proteins found in nature; our SoluPro strains are readily adaptable to making biologics in new scaffolds or incorporating nsAAs. Because of the scope and throughput of our assays, we can evaluate millions or billions of potential strains to efficiently identify configurations of folding and expression solutions that confer optimal protein production performance.

- **Design of better drug candidates based on AI predictions:** We use deep learning artificial intelligence models trained on our proprietary datasets as well as functional characteristics of millions of proteins represented in public databases to design new drug candidates to have desired pharmacologic performance without constraining ourselves to what nature has already discovered. We evaluate up to billions of distinct cell lines for each

project. In addition to identifying the best performing drug sequences and cell lines, we are also generating immense datasets with the goal of substantiating and differentiating the relevant from the irrelevant, the optimal from the contraindicated, in the solution space of sequence variation and folding solutions. We harness this evidence to progressively train our deep learning Denovium Engine, which then outputs progressively more relevant and valuable predictions to direct our synthetic constructions. We believe this highly specialized deep learning approach is differentiated by both the technology that underpins the Denovium Engine and the proprietary data we feed it. Our Denovium Engine models enable multi-parameter predictions and simultaneous optimization of attributes in parallel, making predictions that solve for desired attributes such as bioavailability, stability, immunogenicity, as well as target affinity and manufacturability. We believe that insights we achieve through the integration of deep learning will ultimately help identify the new drug candidates with the best chances for clinical success.

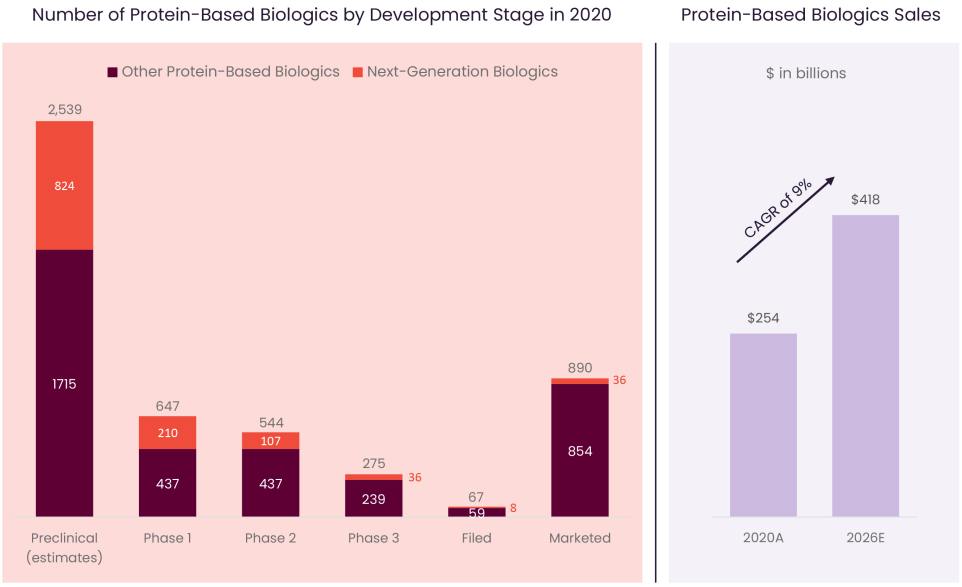
- **Increase manufacturing productivity and reduce costs:** Beyond the savings afforded by reduced failure rates and accelerated timelines, we believe our SoluPro cell lines' high productivity can translate into significant reductions in drug substance cost of goods. We estimate that biologic drug substance cost of goods saving could be on the order of 50% relative to CHO production systems, the most widely used system in the biopharmaceutical industry today. The primary driver is the rapid and high-density growth of *E. coli* SoluPro; bioreactor growth cycle time is 1-2 days (versus 10-14 days for CHO cell lines). Given cell lines that achieve comparable protein production titers in SoluPro and CHO systems, the SoluPro system's productivity would be roughly 5-10 times that of the CHO system on a grams per liter per day basis. In addition, SoluPro has other advantages associated with the use of *E. coli* as a biomanufacturing organism. In particular, its growth media ingredients are lower cost relative to the media required for mammalian cells, viral clearance studies are unnecessary, and heterogenous glycosylation patterns do not hamper drug product quality or characterization.

Our Market

Our market opportunity is driven by the number of biologic candidates we generate and the successful development and commercialization of these candidates by our partners. According to our evaluation of the April 2021 Evaluate Pharma data, there are currently 1,250 companies involved in developing and marketing over 4,950 protein-based biologics, which we define as including candidates Evaluate Pharma categorizes as monoclonal antibodies (mAbs), monoclonal antibody conjugates (ADCs), and recombinant products (comprising novel fusion proteins as well as numerous conventional recombinant proteins, peptides, and hormones), but excluding those categorized as cell therapies, DNA and RNA based therapies, gene therapies, plasma-derived therapies, and vaccines. In 2020, cumulative global sales of these protein-based biologics reached approximately $254 billion, representing 33% of the sales of all drugs. In 2020, 72 protein-based biologics reached blockbuster status with annual worldwide sales higher than $1.0 billion. Of the total protein-based biologics sales, mAbs represent approximately 63%, with average per product peak sales of $2.7 billion (median $1.3 billion). The protein-based biologics market is expected to reach $418 billion by 2026, representing a compound annual growth rate of approximately 9%. In the near term, we are focused on the next-generation biologics market, which represents approximately 32% of protein-based biologics in Phase 1 clinical development. We estimate next-generation biologics represent a similar proportion of the 2,539 preclinical protein-based biologics. While our Integrated Drug Creation Platform is suited to generation of any type of protein-based biologic, we believe our capabilities are especially differentiated in the area of next-generation biologics. We expect our future programs to be principally in this category as we seek to provide an avenue to expand the number and variety of next-generation biologics in development by our

existing and future partners, including with the addition of nsAA-containing Bionic Proteins to their pipelines.

The figures below illustrate the number of protein-based biologics in each phase of development, including our estimate of the number of next-generation biologics in preclinical development, and the projected sales of protein-based biologics.



Source: Evaluate Pharma and company estimates

Other market opportunities

Proteins are fundamental components of a wide variety of current or potential biological products. We believe our platform is applicable beyond the biopharmaceutical market, including into markets such as diagnostics, materials science, agriculture, industrial, animal health, cosmetics and synthetic food. While our initial focus is on the biopharmaceutical market, we recognize there are broad market opportunities in these additional industries, and we may pursue those opportunities in due course. For example, we currently have one program in animal health.

Our Business Model and Partnerships

Our business model differs from the traditional biotechnology company model. We partner with both large pharmaceutical companies and biotechnology companies with the goal of expanding their pipelines and driving efficiencies in biologic drug discovery and cell line development using our Integrated Drug Creation Platform.

We are invested in the clinical and commercial success of the product candidates generated for our partners using our Integrated Drug Creation Platform. We expect that our partnerships will provide us with the opportunity to participate in the future success of the biologics generated utilizing our platform, through potential clinical, regulatory and commercial milestone payments as well as royalties on net sales of approved products. We aim to achieve downstream economic participation in a diversified portfolio of next-generation biologics across multiple indications. We believe our

business model is capital efficient as our partners fund our technology development work, and we do not invest in clinical development or scaled manufacturing infrastructure.

We structure our partnerships as technology development agreements (each molecule we address for Discovery or CLD is a “program”) with options for our partners to license intellectual property rights to the biological assets we create after completion of the technology development phase. For the technology development phase, partners may (i) provide a target for discovery of a new next-generation biologic and/or Bionic Protein or novel scaffold, (ii) supply a specified lead drug candidate sequence for cell line development, or (iii) request a scope that falls somewhere in between (i) and (ii) with optimization of a lead candidate or set of candidates as the primary goal. Regardless of the scope, the biology we ultimately provide to our partners is a manufacturing-ready cell line expressing the new or partner-provided protein-of-interest. Historically, our technology development agreements contemplated the negotiation of license terms following completion of the technology development phase, reflecting our early strategy in the beginning stages of our commercialization efforts to validate our capabilities with our partners before agreeing to license terms. For most future partnerships, we expect to negotiate and agree to downstream economic terms of any license to our intellectual property rights before initiating the technology development phase. We anticipate that these technology development and license agreements may provide us with rights to receive payments upon the achievement of various clinical, regulatory and commercial milestones for the applicable product candidates, as well as royalties on net sales at least during the marketing exclusivity period of candidates approved for commercialization. We currently have drug candidates in nine Active Programs (across seven partnerships) in which we have or are positioned to negotiate license agreements with potential downstream milestone payments and royalties. Eight of the Active Programs are CLD, and one is a Discovery program; this distribution reflects the 2018 commercial launch of our CLD applications and our more recent December 2020 commercial launch of our initial Discovery applications. Five of the eight CLD programs address preclinical candidates, and we have CLD programs for one Phase 1 candidate and one Phase 3 candidate, each of which is currently in clinical development using drug substance manufactured through other technologies. In addition, we have one animal health CLD program.

We expect to enter into license agreements for each of our Active Programs and, based on proposed terms we have set forth for four CLD programs to date, we anticipate that license terms for CLD programs will generally provide that we are eligible to receive various milestone payments and specify that we are eligible to receive royalty payments in a low-single digit range as a percentage of our partner’s net product sales if the applicable product candidate is approved and commercialized. We continue to invest in our platform to bring additional value to our partners. In December 2020, we launched our initial Discovery applications, which are designed to enable discovery of next-generation biologics in the desired scaffold. Since January 2021, we have further enhanced our platform with our Bionic Protein nsAA capabilities and our Denovium AI integration. Accordingly, we expect that the financial terms of any potential license agreements for our Discovery programs will reflect the enhanced benefits that our Discovery applications provide to our partners in comparison to our CLD applications. We currently have one ongoing Discovery program, for which potential license terms are yet-to-be-negotiated.

In addition to our nine Active Programs, we have also completed CLD technology development for 22 additional molecules. These historical programs were both internal research programs and technology development programs with third parties, and they were intended to demonstrate our platform’s capabilities as we addressed successively broader ranges of biologics and next-generation modalities. We did not transfer technology or grant licenses related to these programs, and we anticipate no further revenue or other downstream payments.

The following table summarizes the biologic modalities for all of our current programs, including our Active Programs:

	# of Programs	
Biologic Modality	**Active Programs**	**All Programs**
Bispecific mAb	1	1
Bispecific T-cell engager	2	3
Cytokine	1	2
Fab*	1	4
Multivalent Fc*-fusion	2	2
Plasma protein	1	1
mAb	1	4
Fc-fusion		3
scFv*-fusion		2
VHH*-fusion		2
Enzyme		2
Hormone		5
Total	9	31

* Fab = antigen-binding fragment; Fc = crystallizable fragment; scFv = single-chain variable fragment; VHH = single variable domain on a heavy chain (nanobody)

Commercial

Our commercial strategy centers on entering into technology development partnerships with companies involved in biologic drug development, with a focus on the biopharmaceutical industry. Our goal is to secure new partners and expand our relationships with existing partners by solving challenges they face in discovery and cell line development and by enabling creation of new biologic modalities. With initial success, we aim to increase the number of molecules with each partner, as well as expand the application of our platform across each partner's discovery and cell line development activities.

Our business strategy involves forming partnerships with biopharmaceutical companies of all sizes and enabling our partners to bring their ideas to fruition. We currently have a core business development team raising awareness of our platform within the biopharmaceutical industry and establishing adoption through partnerships. We are initially focusing our business development efforts on large pharmaceutical companies with the potential to create multi-program opportunities, as well as biotechnology companies that are, or desire to be, at the forefront of next-generation biologics creation. We expect to partner with companies that are highly enabled and at the forefront of next-generation biologics but which may have had limited success due to technological challenges. We also expect to partner with companies that may have some presence in biologics but limited capabilities in novel biologic drug discovery and are looking to expand their pipelines. We also see opportunities to partner with focused biotechnology companies that are highly enabled with a biologics platform or multi-product pipeline but limited capabilities in drug discovery or cell line development. We expect these companies to seek access to our integrated platform to improve the quality of their lead drug candidates and enable development of scalable manufacturing cell lines to accelerate their development efforts and push the frontier of therapeutics.

We also have an alliance management team focused on supporting our successful partnership programs and grow our relationship with existing partners to include additional biologic candidates as well as expand to broader discovery programs. We believe that exceptional alliance management execution is critical to the success of our existing partnership programs and to transforming first-

time partners into repeat and broad scope collaborators. We emphasize mutually beneficial partnerships through alignment of performance objectives, and we foster our partners as champions of our technology. We expect to expand our business development and alliance management teams significantly as we scale our business in the near term.

We expect to establish ourselves in the biopharmaceutical industry before considering additional opportunities, but in the future we may pursue expansion into other markets such as materials science, industrial chemicals, cosmetics, synthetic foods, and agriculture.

Our Growth Strategy

Our goal is to establish our proprietary, end-to-end platform as the industry standard for biologic drug discovery and cell line development. We are laying the groundwork for integration into our partners' discovery organizations, with the goal to be the *de facto* starting point for new drug creation. Our growth strategy is to:

- **Establish new partnerships to create biologic drug candidates.** We believe that our platform has a clear and differentiated value proposition for biologic drug discovery and cell line development. We have been successful in attracting initial partners, and we are continuing to expand our capabilities and enhance our platform to offer an even more powerful integrated solution. Given the increasing level of biopharmaceutical industry interest in creating novel biologics, we believe there is a large untapped market of potential partners ranging from traditional large pharmaceutical companies to emerging biotechnology innovators who can realize benefits from our platform. We believe that we offer a way to transcend the discovery and production challenges faced by the many companies that are investing in developing innovative new protein-based medicines. As we continue to establish our platform as the go-to solution for biologic drug creation, we expect to continue to attract new partners. We employ a business development team focused on raising awareness of our capabilities and establishing new partnerships.
- **Increase the number of molecules on which we work with our existing partners.** We believe that achieving technical success with an existing partner's drug candidate is the best proof of concept, and we intend to leverage those successes to expand our existing partnerships to address additional molecules in our partners' respective pipelines. Partners may have a unique scaffold upon which they build successive drug candidates, hence pursuing additional programs based on the same scaffold is a clear opportunity for expanding existing partnerships. Regardless of modality, we expect to generate additional business from existing partners as they experience firsthand the success and efficiency of our platform. Our alliance management team is focused on supporting our partnership success and growing the number of molecules on which work with our partners.
- **Expand the scope of our partnerships across the biologic drug discovery and cell line development value chain.** We launched our Cell Line Development applications in 2018 and our initial Discovery applications in December 2020. Our goal is to expand our partnerships to apply a broader set of our platform capabilities, including both Discovery and Cell Line Development. Because we launched our Cell Line Development applications first, we have historically initiated our partnerships with CLD programs for lead drug candidates that have proven challenging to produce. CLD program partners often become interested in our Discovery applications, which include lead optimization, *de novo* discovery, nsAA incorporation, and the enablement of novel scaffold designs that could spawn new classes of molecules. We look to expand the scope of partnerships to address additional classes of molecules, thereby presenting additional milestone and royalty opportunities. We intend to continue to invest in growing our platform's capabilities and aim to expand our applications to offer even more comprehensive solutions for our partners.

- **Create new biologic modalities and novel conjugates with "Bionic Proteins" that incorporate nsAAs.** We aim to use our platform to pursue a wide range of applications and to enable the creation of new drug modalities and previously inaccessible conjugates. To achieve this, we introduce customized machinery into our Bionic SoluPro strain that empowers it to incorporate nsAAs at specified locations in proteins. We can create entirely new drug modalities and assemble previously inaccessible conjugates using straightforward chemistry in combination with the nsAA incorporation. We expect to apply this differentiated capability repeatedly across numerous programs to add substantial value to our partners' discovery and development processes.
- **Grow our platform through R&D and strategic acquisitions.** We intend to continue innovating and extending avenues for creating better new biologics and cell lines at a faster pace. Near term, we are investing in research and development activities to refine our nsAA incorporation, *de novo* discovery, and purification technologies to enable targeted chemical modifications and conjugations in a homogenous manner. We are also integrating our recently-acquired Denovium Engine deep learning artificial intelligence across our technologies, and we are driving toward a future in which the Denovium Engine understands the relevant drug and cell line determinants so comprehensively that its models can predict what we believe is the best scaffold and drug sequence as well as cell line design for any given target, without screening. This would be the realization of our vision of *de novo* drug creation *in silico*. We also intend to pursue opportunities for expanding our platform using AI as well as other technologies that we may develop or acquire. Discovery of novel potential drug targets, biological validation technologies, preclinical evaluation models, and downstream protein purification technologies are all potential areas of strategic interest that could further enhance our value proposition to partners and provide us with important insights to steer our internal efforts.
- **Create proprietary biologic assets.** We anticipate that in the future, we may selectively create our own lead drug candidates and advance them through preclinical validation and cGMP manufacturing scale-up. In such cases we may out-license IND-ready candidates for clinical advancement by a partner, with the expectation of more share in the economics relative to the milestones and royalties we may secure for our core platform technology development licenses.
- **Leverage our platform to address market opportunities outside of biopharmaceuticals.** Although we are currently focused on the biopharmaceuticals markets and we intend to maintain this focus in the near term, we believe our platform has the foundational technology and capabilities in place to capitalize on the opportunity to create proteins of value in many other industries. Such potential target applications include materials science, industrial chemicals, cosmetics, synthetic foods, and agriculture. Over the longer term, we may create new biological tools and designer enzymes that lead to applications spanning, but not limited to, bioremediation solutions, bioprocessing achievements, organic agricultural advances, and cost-effective protein-based consumables.

Competition

The market for technologies that enable biopharmaceutical research and development, 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 we face competition from many different sources. Due to the significant interest and growth in biopharmaceutical research and development more broadly, we expect the intensity of this competition to increase.

To our knowledge, we do not believe there are any other commercially available solutions that enable screening in the desired scaffold in the production cell line. There are potential competitors

addressing steps in the discovery and cell line development process or adjacent aspects of the broad process, including:

- in the field of biopharmaceutical discovery screening and protein therapeutic engineering, we face competition from companies such as AbCellera Biologics Inc., Adimab LLC, Ambrx Inc., Ligand Pharmaceuticals Inc. and Sutro Biopharma, Inc.; and
- in the field of cell line generation and single-cell screening, we face competition from service providers, such as HiFiBio Inc. and Ligand Pharmaceuticals Inc., and companies offering instrumentation, such as Berkeley Lights Inc., Menarini Silicon Biosystems, Miltenyi Biotec and Sphere Fluidics Ltd.

Our target partners may also elect to develop their own processes on legacy systems, use in house solutions, or use traditional methods, rather than implementing our platform and may decide to stop using our platform. In addition, there are many large established players in the life science technology market that we do not currently compete with but that could develop systems, tools or other products that will compete with us in the future. These large established companies have substantially greater financial and other resources than us, including larger research and development staff or more established marketing and sales forces.

For a discussion of the risks we face relating to competition, see “Risk Factors—Risks Related to our Business and Strategy—The biopharmaceutical 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 Foundational Technologies

The foundational technologies that synergize to make our Integrated Drug Creation Platform and its applications possible are:

- our bioengineered *E. coli* SoluPro and Bionic SoluPro strains as the host organisms for protein synthesis;
- our Custom Scaffold Library generation methods for designing protein-of-interest variants including Bionic Proteins;
- our Folding and Expressions Solutions toolkit for cell line customization;
- our Breakthrough Assays for high-throughput single cell assessment of protein function, quality, and titer; and
- our Denovium Engine deep learning AI technology for harnessing our data to inform *in silico* design.

These technologies are described below.

SoluPro and Bionic SoluPro

In contrast to the vast majority of the bioproduction industry which largely relies on Chinese hamster ovary (CHO) cells, we have chosen *E. coli* as our host organism. *E. coli* grows faster, at higher cell density, and at lower cost than mammalian or other eukaryotic systems. In addition, because it is not a mammalian cell, it is incapable of propagating mammalian viruses that might infect humans, thereby increasing the safety of the production process and enabling us to sidestep costly and time-consuming viral clearance and testing steps. *E. coli* was successfully used at the dawn of biotechnology for manufacturing insulin and other relatively simple proteins. Since then, *E. coli* has been largely displaced for therapeutic protein production because it was not a viable system for manufacturing complex mammalian proteins such as monoclonal antibodies; it is still used today for production of insulin, growth hormones, and a handful of other biologics. Using the tools of

synthetic biology and metabolic engineering, we have heavily modified our *E. coli* SoluPro to be able to produce complex biologic proteins in an efficient and cost-effective manner.

Strain engineering

We have engineered our SoluPro strain of *E. coli* to be more capable of synthesizing properly folded mammalian proteins. Using a synthetic biology approach, we have introduced modifications that render the cytoplasm of SoluPro more highly oxidized than the standard (wild type) *E. coli* which facilitates folding and allows formation of the disulfide bonds that typify mammalian proteins. We accomplished this through metabolic engineering of pathways involved in redox chemistry in the cell. Additional metabolic engineering was employed to ensure that protein production is accomplished in a uniform and dose-dependent manner across the population via low-cost chemical inducers.

To make our Bionic Proteins that incorporate nsAAs, we further engineered a version of SoluPro to facilitate site-specific incorporation of nsAAs into proteins it produces. We engineer a signal into the gene encoding the drug candidate that directs incorporation of a nsAA into the growing protein chain in a site-specific manner. In concert, we use our synthetic biology approach to introduce customized machinery into our SoluPro strain to enable it to mechanistically accomplish the nsAA incorporation. Ultimately, a Bionic Protein's nsAA handle is designed to enable targeted chemical modifications including glycosylation, PEGylation, ADC-payload conjugation, and novel branched proteins and chemical conjugates.

The genetic modifications we make to customize SoluPro for each program we work on are accomplished primarily through extra-genomic elements contained on a small, self-replicating circular DNA molecule called a plasmid. Plasmids can contain coding sequences and regulatory elements for a handful of proteins, and *E. coli* readily accepts the plasmid and expresses proteins encoded by it as well as replicating the plasmid itself it in the cytoplasm of the cell without incorporating it into the genomic DNA of the SoluPro strain. Thus, the SoluPro strain is the factory, but the actual instructions for what protein will come off the assembly line are contained in the plasmid. Plasmids are widely used in biologics production and are currently employed in FDA-approved *E. coli* processes like the production of insulin. We engineer the DNA sequence(s) for the desired protein into the plasmid architecture we designed, which includes inducible promoters that essentially offer independent rheostats for increasing or decreasing the amount of each protein encoded. This way we can fine-tune the optimal ratio of protein subunits to achieve high yields of complex multi-subunit proteins.

Our plasmids are designed with a modular architecture to enable rapid assembly of combinatorial plasmid libraries, where we can incorporate our libraries of genetic parts that are known to affect protein expression and folding (e.g., ribosome binding site libraries that affect protein production rates and molecular chaperone libraries composed of proteins that we co-express with the desired protein to assist with folding and solubility). This modular approach allows us to construct millions-to-billions of genetically unique plasmids in a single assembly reaction, with each plasmid encoding a discrete solution to the production of the protein-of-interest.

Considerations for protein manufacturing in E. coli

Authentic N-terminus: Our *E. coli* SoluPro and Bionic SoluPro strains are uniquely capable of producing proteins with any desired N- terminal residue. For example, partners who are interested in switching from a CHO platform to our *E. coli* platform are able to do so while maintaining the authentic N-terminal amino acid present in the CHO produced drug. Protein synthesis in other *E. coli* platforms includes incorporation of a methionine at the N-terminus of the drug sequence, which is removed in the SoluPro platform.

Cytoplasm vs. secretion. Monoclonal antibody production in CHO cells relies on secretion mechanisms; the cells synthesize the proteins into small cellular envelopes and eject the contents to

the outside of the cell. This means that the protein being made is subjected not only to the intracellular environment, but also to the external media where the molecules are susceptible to chemical modification. In addition, the production process requires a cascade of intracellular events involving secretion machinery to execute. This can prove to be a bottleneck in production and limit protein size, as well as the titers achievable when challenging the cells to synthesize so much of one particular protein. In contrast, SoluPro produces proteins entirely in its cytoplasm, where they remain until harvested. This simplifies the process, and the cells tolerate the protein well and grow to high densities with short doubling times.

Disulfide bonds: Spontaneous folding, disulfide bond formation, and quaternary structure are accomplished in the semi-oxidized cytoplasm with exquisite control of expression levels and ratios. We have demonstrated comparable disulfide bond characteristics to the reference material produced in mammalian systems by disulfide mapping via LC-MS.

Glycosylation: Our system produces aglycosylated proteins, which we believe in most cases is an advantage over mammalian systems, where glycosylation can be heterogeneous and difficult to characterize. For antibodies or next-generation biologics that do not require glycosylation for activity, the lack of glycosylation in the SoluPro platform has the potential to simplify characterization, increase quality, and decrease analytical development time. A small subset of biologics, among them monoclonal antibodies based on IgG1 scaffolds, rely on the presence of a particular glycan group for optimal effector function. We are developing our Bionic Protein technologies for nsAA incorporation to offer sites for highly uniform and targeted chemical modifications and conjugation, including glycosylation.

Phosphorylation: We have not produced any phosphorylated proteins to date, as the common therapeutic scaffolds do not require any phosphorylations. Were our partners to ask us to design phosphoprotein production strains, we could leverage our nsAA technology to incorporate phosphorylated amino acids directly during synthesis.

Fermentation methods: After isolating high-performing strains using our proprietary assays, we evaluate strains in fermentation. Our fermentation suite includes high-throughput ambr systems of 15 mL and 250 mL scale for strain evaluation. Our fed-batch fermentation processes are designed for excellent scalability to a cGMP manufacturing facility. Specifically, the oxygen uptake rate (OTR) is constrained at 250 mmol/L/hr to ensure similar fermentation performance upon scale-up to cGMP fermenters. Our fermentation group also performs initial upstream process screening, where media components, induction strategy, and other parameters are optimized for maximum titer and productivity using a Design of Experiment approach (DoE). Because the SoluPro fermentations are short (on the order of 48 hours), we are able to complete a thorough strain screening and fermentation process optimization in days, versus a much longer development time for a CHO based platform.

Protein purification: To purify proteins from SoluPro, cells must first be lysed by mechanical homogenization. Following lysis, the desired protein is typically purified by a 2 to 3-stage chromatography process. These processes are well developed, having been in use in FDA-approved processes since the early 1980s. We do not currently employ any proprietary purification technologies, thereby making technology transfer straightforward.

Endotoxin: As a gram-negative microbe, *E. coli* contains lipopolysaccharide (LPS) molecules in the membrane of the cell. These LPS molecules (endotoxin) trigger an immune response (from mild to severe depending on dosage) when introduced into the bloodstream. As a result of this, endotoxin clearance and monitoring is essential for molecules produced in *E. coli.* Mammalian systems like CHO do not produce endotoxins and therefore do not require endotoxin monitoring or clearance. Fortunately, biopharmaceuticals have been produced in *E. coli* for decades (and many, like insulin, continue to be produced in *E. coli* today), and the technologies for monitoring and clearing endotoxin are mature and routine.

Viral clearance: CHO cells are evolutionarily very similar to human cells and therefore are capable of being infected by and passaging diseases that are dangerous to humans. Because of this, drug products produced in CHO cells are subject to a time- and cost-intensive process of viral clearance. Because *E. coli* is from an entirely different domain of life compared to mammalian cells, and as a result is incapable of harboring or being infected by human diseases, this process is not required in *E. coli*.

Analytics: To generate purified material for evaluation by our partners, we use standard 2 to 3-step chromatography process to purify small batches of protein-of-interest from the selected strains. If larger batches of material are required, we have multiple 30 L fermenters onsite to support material generation. An analytics package is generated for the purified material using (if relevant) a partner's provided drug substance as a standard for comparison. Typical analytics include assessment of content by A280 absorbance, identity by peptide mapping (liquid chromatography with tandem mass spectrometry; LC-MS/MS), purity by electrophoretic methods (capillary electrophoresis sodium dodecyl sulfate (CE-SDS) and sodium dodecyl sulfate-polyacrylamide gel electrophoresis /SDS-PAGE), analytical size exclusion chromatography (SEC) and reverse phase chromatography, and characterization by intact mass (via liquid chromatography mass spectrometry; LC-MS) and peptide mapping to confirm disulfide bond formation (by LC-MS).

Scale-up: Once a fermentation process is defined, the lead producing SoluPro strain is scaled up further in our 30 L stainless steel fermenters. We consistently demonstrate that similar titers, ODs, and productivities observed at 250 mL fermentation scale are readily reproduced upon scale-up to 30 L fermentation scale. Furthermore, the fermentation media and processes we design can be seamlessly transferred to a CMO for cGMP manufacturing. For example, we have performed an internal program to demonstrate scalability of a SoluPro strain producing an antibody fragment (Fab). We developed a SoluPro strain capable of producing Fab at > 4 g/L in a 2-day process and achieved similar titers at both 250 mL and 30 L scale at our facility. We transferred the SoluPro strain, fermentation media, and fermentation processes to a CDMO for fermentation in their 30 L and 300 L single-use fermenters (SUF). At both the SUF scales, the Fab was produced at a similar high-titer (> 4 g/L), high-cell density (> 180 OD600), and high-productivity (2 g/L/day). We effected the technology transfer of the strain and fermentation process without the need for any additional development by the CDMO.

Technology transfer: During Technology Transfer, we generate and provide all necessary materials and documentation to our partners for high-titer cGMP manufacturing of their drug in SoluPro. We generate a Research Cell Bank (RCB) for the lead producing *E. coli* SoluPro strain and outsources the necessary post-bank bacteriophage, identity, and purity testing of the strain. We issue a Statement of Testing (SoT) summarizing that the RCB has satisfied all post-bank testing. We also generate a BSE/TSE Statement to certify that the RCB is manufactured completely from animal origin free raw materials. Our team generates all technology transfer protocol documentation for the upstream processes that includes information related to equipment, processes instructions, parameters, operational ranges, and media/solution preparation.

cGMP-readiness: After Technology Transfer of the RCB and upstream process documentation to our partner, their CDMO of choice, or one of our preferred CDMOs, additional development activities are initiated by the manufacturing facility and culminate in cGMP produced bulk drug substance. As described earlier, we transfer the high-titer manufacturing cell line and upstream process information, where no additional strain optimization and no to minimal additional upstream optimization is required. Once the RCB is received, the CDMO is responsible for generation of the Master Cell Bank to be used in preparation of the cGMP bulk drug substance. Prior to cGMP bulk drug substance preparation, the CDMO performs additional process development, as needed, including but not limited to further upstream process optimization, downstream process optimization, analytical method development and qualification, and formulation development. In addition to successfully transferring in upstream processes to a CDMO, we have also transferred downstream process conditions and analytical methods.

Productivity: E. coli is a microorganism that grows quickly and robustly in a laboratory context (these were the features that led to *E. coli*'s wide adoption as a model organism in the 1800s). Our *E. coli* SoluPro strain is a robust manufacturing cell line; we have routinely observed high-titer (4 g/L for full-length antibodies and next-generation biologics), high-cell density (200 OD600), and high-productivity (2 g/L/day per day for a 48-hour fermentation process). While CHO platforms may demonstrate similar absolute titers of 4 g/L, the daily productivities are much higher for SoluPro vs. CHO systems (2 g/L/day vs 0.3 g/L/day) due to the shorter run times with *E. coli* (1-2.5 days vs. 10-14 days for CHO). We believe this higher productivity reduces the plant runtimes, which has the potential to accelerate production timelines and reduce operating expense. Furthermore, *E. coli* grows robustly on simple nutrient broths versus the complex nutrient formulations and apparatus required for CHO cell growth. Cost of goods (COGSs) modeling suggests that SoluPro has the potential to reduce antibody drug substance production costs by approximately 50%.

Custom Scaffold Libraries

We can design and generate billions of drug candidate sequence variants for each Discovery program. Our platform creates libraries in any scaffold our partner specifies, whether natural, pre-existing, or newly invented. These drug candidate sequence libraries are custom because they are specifically generated for each program and scaffold. Furthermore, we anticipate that our AI predictions and ability to generate libraries in any given scaffold allow us to consider relevant variants that nature has not yet evolved. We can also specify nsAA incorporation sites as we design these libraries.

To discover novel drugs for any given target we have developed methods for generating large populations of our SoluPro cells each expressing a distinct drug sequence variant, as well as Bionic Protein technology for site-directed incorporation of nsAAs. We construct our plasmids incorporating modular parts libraries and the target gene(s) of interest using modern DNA assembly tools that allow us to rapidly and efficiently assemble up to billions of unique plasmids in a single test tube in a combinatorial fashion. The composition of “parts” and library diversity can be tailored for each project. If we are screening a library where variation is incorporated into the protein-of-interest sequence itself (e.g., for Discovery applications) diversity can be introduced using rational (i.e., constraining the diversity of CDR regions to a library with defined sequence composition) or random (e.g., mutagenic approaches like error-prone PCR) methods. If we are taking an unbiased approach, we will usually build and screen up to ten or more library designs per project, covering on the order of 100 million unique genetic solutions. As our Denovium Engine increasingly contributes predictions about optimal molecule, plasmid, or library design, synthetic DNA approaches can be used to synthesize the desired sequences.

Folding and Expression Solutions

Because each protein has distinct characteristics when it comes to manufacturability, we have curated a diverse collection of modular genetic parts that impact protein expression and folding which are incorporated as combinatorial libraries to our SoluPro populations in an effort to optimize protein production. The base SoluPro strain was good at making the initial monoclonal antibodies we worked on, but as we tested the system in evaluation studies to produce a variety of other types of proteins, we found each protein had its own distinct characteristics when it came to the preferences and conditions for optimal production. We developed an extensive library of genetic elements we call folding and expression solutions that we can mix and match to optimize SoluPro for each different protein. These modular genetic “parts” include chaperone proteins (a class of proteins that help other proteins fold), ribosomal binding sites (which alter translation rates), and codon preferences. These can be combined in various ways like building blocks in the same plasmid containing the gene(s) for the protein we are producing. Thus, the SoluPro or Bionic SoluPro chassis remains the same across all of our projects, but each cell line has a different plasmid that contains not only the gene(s) encoding the protein for production, but also the particular set and arrangement of folding and expression solutions that enable its optimal production.

Breakthrough Assays

To evaluate the billions of drug sequence and folding solutions variants we generate, we have developed revolutionary new high-throughput assays. With these methods, we are able to efficiently screen billions of discrete strains and identify those that express the protein-of-interest with the desired functional, quality, and manufacturability characteristics.

Using synthetic biology tools and approaches, we may create billions of different plasmids for each project, with the gene(s) of interest plus an assortment of folding and expression solutions in various configurations. This so-called “library” approach enables us to evaluate the population of SoluPro cells to find the sequences and solutions that work best for the given protein. With billions of plasmids introduced into a batch of SoluPro cells, we create a batch of billions of cells each with a distinct plasmid and therefore a different potential to produce the protein-of-interest. To evaluate and select the subset that are the most promising for further analysis, we have developed a breakthrough high-throughput assay we call our ACE Assay.

ACE Assay: Our screening step employs our ACE Assay. For the ACE Assay we introduce fluorescently-labeled target proteins (e.g., the antigen against which we are trying to develop a drug) and use fluorescence activated cell sorting (FACS) to evaluate and sort each cell based on how brightly it fluoresces. Using proprietary methods, we correlate the fluorescent signal with the quantity, quality, and function of the protein-of-interest, and thus we can utilize the ACE Assay to characterize billions of independent strains and collect the desired variants based on the parameters we set. In this way we are quickly able to identify what we believe is the most promising subset of cells from among millions or billions. We are also generating billions of data points describing sequence modifications and combinations of folding solutions contributing to affinity, stability, solubility, and manufacturability that we use to train our Denovium Engine deep learning model.

HiPrBind Assay: As our selection step, we grow up ACE Assay isolates as unique clones in separate wells of micro-well plates. This allows us to evaluate each strain in isolation using our High-Throughput Proximity Binding (HiPrBind) Assay. The assay is a solution phase assay that operates on similar principles to ELISA and can be used to quantify the amount of functionally desirable and properly folded full-length protein for each strain. Our proprietary techniques are designed to allow us to discriminate between full length properly folded protein and any other improperly folded or incomplete product-related impurities, in a fully quantitative manner. Thus, we select the top dozen or so highest producing cell lines for further analytics and fermentation optimization, and again collect the data for training the Denovium Engine models.

Denovium Engine Deep Learning AI

For each protein we address, we generate datasets correlating sequence variants and folding solutions with modulation of protein function, quality, and manufacturability. We are using deep learning to harness these data to train models which can optimize desired therapeutic and manufacturability attributes *in silico*.

The Denovium Engine is an artificial intelligence that understands the fundamental properties of protein function. Trained on more than 100 million proteins, the Denovium Engine includes highly comprehensive deep learning models for protein function. Using a multi-task deep learning approach, our models can predict protein function directly from DNA or amino acid sequence in one single step. Importantly, our approach does not require a crystal structure and can take advantage of other protein properties that are also important for determining protein function, including solubility, stability, ability to be expressed in a particular host, and immunogenicity among other properties (including structure). Thus, our approach is distinct from AI protein design approaches that focus solely on modeling for structural prediction. Importantly, our functional deep learning approach allows us to design and optimize for multiple traits at a time.

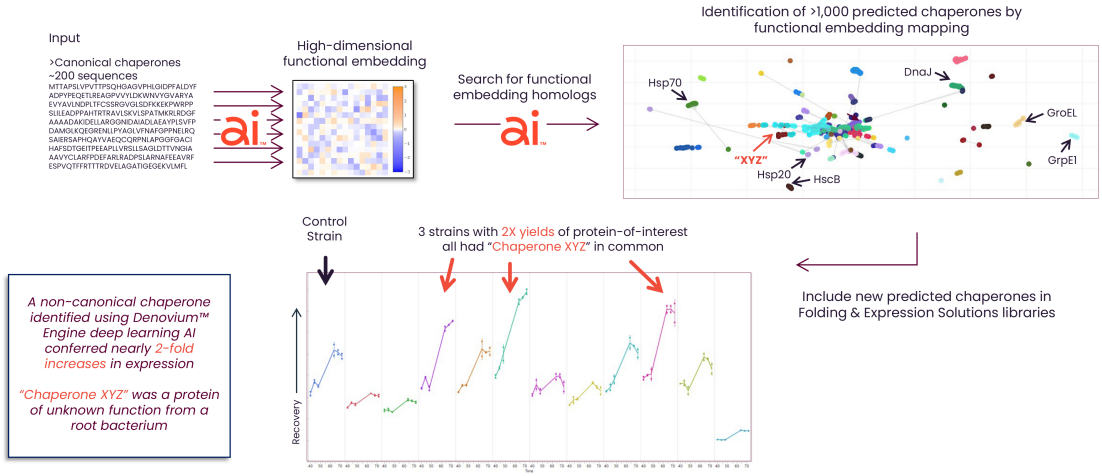
About deep learning: Deep learning is a branch of machine learning which is characterized by the use of deep neural network models. For many complex real-world problems, these models have been shown to outperform traditional modeling approaches in terms of accuracy, generalizability, and operational speed. One key to their success is the ability of deep neural networks to identify rich patterns, known as features, directly from the data and with minimal influence from human experts. Advanced model architectures and regularization techniques have also demonstrated increasing performance with larger models, contrary to the trends of most other machine learning approaches. This combination of self-improvement and scalability has proved to be transformational for many problems and modern AI can now perform at superhuman levels for tasks which have long been challenging for computers, such as image recognition and language translation.

About the Denovium Engine: The Denovium Engine is designed to simplify the process of solving deep learning challenges in biology. This includes collecting and processing data, finding optimal model architectures, training models on diverse data types, deploying them at scale, and applying them to solve problems in novel ways. The Denovium Engine was used to develop two key models, one for protein sequences and one for DNA sequences. The protein model was trained on more than 100 million protein sequences and turns primary amino-acid sequences into rich embedding vectors. The embeddings are tied directly to supervised and unsupervised tasks and allow for the rapid annotation of proteins using an ontology of over 700-thousand classes from more than 25 categories, including sequence similarity, folding structure, and function. The engine can also use embedding representations to rapidly search for novel proteins, even if they are previously unannotated. The Denovium Engine was also used to develop a DNA model which ties DNA sequences directly to function. This includes the simultaneous identification of both protein-coding and functional non-coding regions. In addition to finding these regions, the model predicts their function by tying directly into the protein model and a non-coding RNA model. This integration allows for the extremely rapid and rich analysis of genomes and metagenomes.

The rich embedding space representations produced by the protein and DNA models allow for deep transfer-learning to novel problems of interest. Laboratory data can be modeled in these spaces without the need to train a new deep learning model and with dramatically fewer examples. Such novel predictors can be combined with built-in generative tools for the engineering of sequences for desired properties. Any combination of the trained ontologies as well as any laboratory data of interest can be used to guide sequence engineering efforts. The model can also explain the importance of mutations in human terms through the mapping from embedding space to the laboratory data and ontologies.

Deep learning at Absci: Deep learning and AI can only be as useful as the data it is founded upon. Our Integrated Drug Creation Platform is designed to generate large, diverse, and high-quality data that we believe to be particularly relevant for training models and improving the pace of biologic drug discovery and production. The near-term potential of this opportunity is to inform our cell line designs. This includes identifying novel chaperones and other key elements which will be tailored to the rapid expression and quality folding of the target protein. Success in this area could take our already rapid process and reduce or even eliminate the laboratory strain selection process. This

could reliably reduce the time for developing strains for producing novel therapeutics. An example of how the Denovium Engine insights can be harnessed into practical solutions is depicted below.



To identify novel chaperones with the potential to confer protein folding and expression advantages, the Denovium Engine was fed ~200 sequences of known chaperones. With functional embedding homology clustering, it identified over 1000 novel potential chaperones. Upon including a selection of new predicted chaperones in our constructs, three strains that produced the protein-of-interest with higher yields all had "Chaperone XYZ," a protein of unknown function from a root bacterium, in common. There was no apparent sequence homology between "Chaperone XYZ" and known chaperones.

We are also investing in using the Denovium Engine for drug discovery. At first this will take advantage of sequence engineering and generative AI for improving the affinity, manufacturability, and/or immunogenicity profiles of promising candidates. As this technology develops, the quality of the starting candidate will matter less and may eventually not be needed at all. When combined with the AI-guided cell line design, we expect to be positioned to design proteins and cell lines principally *in silico*, followed by rapid construction and confirmation activities that could be accomplished in a matter of days.

Intellectual Property

We use a variety of intellectual property protection strategies, including patents, trademarks, trade secrets and other methods of protecting proprietary information. Our success depends in part on our ability to obtain and maintain intellectual property protection for the components of our Integrated Drug Creation Platform; to defend and enforce our patents, to preserve the confidentiality of our trade secrets; 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 March 31, 2021, we own 35 issued or allowed patents and 32 pending patent applications worldwide, which includes four issued U.S. patents and eight pending U.S. patent applications. We also have issued patents in the EU, Australia, Japan, Brazil, Canada, China, Hong Kong, Israel, Mexico, and Republic of Korea. Our patents and patent applications, if issued, are expected to expire between August 2033 and February 2041, in each case without taking into account any possible patent term adjustments or extensions and assuming payment of all appropriate maintenance, renewal, annuity, or other governmental fees.

Our patents and patent applications include the following:

Patent Family	General Description of Subject Matter	Issued Patents	Pending Applications
SoluPro	Host cells, Expression vectors, methods of producing products of interest	4 U.S. patents 31 foreign patents	4 U.S. applications 18 foreign applications
SoluPure	Protein purification methods		1 U.S. application 6 foreign applications
HiPrBind	High-throughput methods of detecting and analyzing analytes		1 pending application (PCT)
ACE	High-throughput methods of screening for high performing host cells and/or expression constructs		1 pending application (PCT)
Inteins	Constructs and methods for producing “human” proteins in *E. coli* by self-cleaving peptides		1 pending application (provisional)

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. In addition, 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.

As of April 9, 2021, we owned registered trademarks for Absci, SoluPro and SoluPure in the United States, as well as eight trademark registrations in other jurisdictions.

In addition to patent and trademark protection, we also utilize other forms of intellectual property protection, including copyright, internal know-how and trade secrets, when such other forms are better suited to protect a particular aspect of our intellectual property position. For example, our trade secrets encompass certain algorithms associated with our deep learning Denovium Engine, manufacturing protocols for our E. coli SoluPro strains, libraries of protein folding solutions and design of molecular libraries for drug discovery. We believe our proprietary rights are strengthened by our comprehensive approach to intellectual property protection. It is our policy to require our employees, consultants, advisors and other independent contractors to execute confidentiality and invention assignment agreements upon accepting employment, consulting or similar 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. We also take precautions through the use of security measures to prevent the release of our proprietary information to third parties.

Although we take steps to protect our proprietary information and trade secrets, including through contractual means with our employees, consultants, advisors and other independent contractors, these agreements may be breached and we may not have adequate remedies for any breach. In addition, third parties may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets or disclose our technology. As a result, we may not be able to meaningfully protect our trade secrets and other proprietary technology. For a discussion of the risks we face relating to intellectual property, see “Risk Factors—Risks Related to our Intellectual Property.”

Material Agreements

On December 5, 2019, we entered into a Joint Marketing Agreement (KBI Agreement) with KBI Biopharma, Inc. (KBI) a global biopharmaceutical contract development and manufacturing organization, pursuant to which the two companies agree to jointly market and promote their respective products and services to accelerate and optimize drug development and manufacturing. For four years from the date of the KBI Agreement, we have agreed to use KBI as our sole contract manufacturer to market our products and services worldwide related to the expression of proteins, including without limitation, certain proprietary methods of increasing or improving the quality or quantity of expression or production of proteins, or producing proteins with improved properties, including methods based on our proprietary protein expression and purification technology. The KBI Agreement does not restrict our ability to enter into other agreements with contract manufacturing organizations, so long as the agreement does not cover the marketing of our technology, with certain exceptions. During each of the four contract years, KBI is obligated to use commercially reasonable efforts to market our technology and provide us with certain designated number of qualifying leads in each year. In the event that KBI fails to present a sufficient number of qualifying leads, KBI shall be obligated to make payments to us in the range of $250,000 to $500,000 over the four years, referred to herein as Additional Exclusivity Payments. Under the KBI Agreement, each party also agrees to maintain certain personnel and produce certain marketing materials jointly for the purposes of the marketing efforts under the KBI Agreement. KBI has made a one-time upfront payment of $750,000 to us in consideration for this Agreement. Additionally, KBI paid a milestone payment of $2.25 million and is required to pay an additional $500,000 upon the achievement of certain milestones, including the ability of KBI to enter into services agreements with third parties using our technology. To date, no such contracts have been entered into by KBI. Beginning on the third anniversary of the date of the KBI Agreement and for the following year thereafter during the four-year term of the KBI Agreement, KBI will pay us royalties in the mid-single digits based on the net sales during such year from manufacturing services provided by KBI to third parties using our technology. The KBI Agreement may be terminated by either party following notice of an uncured material breach, including failure to pay under the agreement, or for insolvency of the other party. The KBI Agreement may also be terminated by us upon a change of control or if KBI fails to provide the sufficient number of qualifying leads and fails to pay the Additional Exclusivity Payments.

Government Regulation

Regulations Related to the Discovery, Development, Approval and Commercialization of Biotherapeutics

Our focus is on the use of our platform to enable our partners to improve the speed and success of their biologic product discovery and development efforts; however, we ourselves are not currently involved in biologic product discovery and development, do not manufacture any product candidates and do not conduct or sponsor any IND-enabling preclinical studies or 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 identified and created through our platform technology. 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. If we or our partners fail to comply with applicable laws or regulations at any time, we or our partners may become subject to administrative or judicial sanctions or other legal consequences, including among other things, restrictions on marketing or manufacturing, withdrawal of products, product recalls, fines, warning letters, untitled letters, clinical holds on clinical studies, refusal of the FDA to approve pending applications or supplements to approved applications, suspension or revocation of product approvals, product seizure or detention, refusal to permit the import or export of products, consent decrees, corporate integrity agreements, debarment or exclusion from federal healthcare programs, mandated modification of promotional materials, issuance of safety alerts, Dear Healthcare Provider letters, injunctions or the imposition of civil or criminal penalties.

Our partners must obtain the requisite approvals from the applicable regulatory authority prior to the commencement of clinical studies or marketing of a biological product in those countries. The requirements and process governing the conduct of clinical trials, product licensing, coverage, pricing and reimbursement vary from country to country. In the United States, biological products are subject to regulation under the Federal Food, Drug, and Cosmetic Act, the Public Health Service Act, and other federal, state, local and foreign statutes and regulations. The process required by the FDA before biologics may be marketed in the United States generally involves the following:

- completion of preclinical laboratory tests and animal studies performed in accordance with the FDA's applicable good laboratory practices regulations (GLP);
- submission to the FDA of an application for an IND, which must become effective before clinical trials may begin;
- approval of the protocol and related documentation by an independent institutional review board (IRB), or ethics committee at each clinical site before each trial may be initiated;
- performance of adequate and well-controlled human clinical trials according to the FDA's regulations commonly referred to as good clinical practices (GCPs), and any additional requirements for the protection of human research subjects and their health information, to establish the safety and efficacy of the proposed biological product for its intended use;
- preparation of and submission to the FDA of a biologics license application (BLA), for marketing approval that includes sufficient evidence of establishing the safety, purity, and potency of the proposed biological product for its intended indication, including from results of nonclinical testing and clinical trials;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities where the biological product is produced to assess compliance with current good manufacturing practices (cGMPs), to assure that the facilities, methods and controls are adequate to preserve the biological product's identity, strength, quality and purity;
- potential FDA audit of the nonclinical study and clinical trial sites that generated the data in support of the BLA;
- review of the product candidate by an FDA advisory committee, where appropriate and if applicable;
- payment of user fees for FDA review of the BLA (unless a fee waiver applies); and
- FDA review and approval of the BLA, resulting in the licensure of the biological product for commercial marketing.

Although we do not currently engage directly in the discovery of our own biologics, we anticipate that in the future, we may selectively create our own biologic product candidates and advance such candidates through preclinical validation and cGMP manufacturing scale-up. Before testing any biologic product in humans, the product candidate must undergo rigorous preclinical testing. Preclinical studies include laboratory evaluations of drug chemistry, formulation and stability, as well as *in vitro* and animal studies to assess safety and in some cases to establish the rationale for therapeutic use. The conduct of preclinical studies is subject to applicable federal/national, supranational, state and local level regulations and requirements, including GLP, requirements for safety/toxicology studies. The results of the preclinical studies, together with manufacturing information and analytical data, must be submitted to the FDA as part of an IND or the appropriate regulatory authority in foreign countries as part of a clinical trial application (CTA). An IND is a request for authorization from the FDA to administer an investigational new drug to humans. In the United States, an IND must become effective before human clinical trials may begin. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day time period, raises safety concerns or questions about the proposed clinical trial. In such a case, the IND may be placed on clinical hold and the IND sponsor and the FDA must resolve any outstanding concerns or questions before the clinical trial can begin. Submission of an IND therefore may or may not result in FDA authorization to begin a clinical trial.

Clinical trials involve the administration of the investigational product to human subjects under the supervision of qualified investigators in accordance with GCPs, which include the requirement that all research subjects provide their informed consent for their participation in any clinical study. Clinical trials are conducted under written trial protocols detailing, among other things, the objectives of the clinical trial, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated. A separate submission to the existing IND must be made for each successive clinical trial conducted during product development and for subsequent protocol amendments. Furthermore, an independent IRB for each site proposing to conduct the clinical trial must review and approve the plan for any clinical trial and its informed consent form before the clinical trial begins at that site, and must monitor the study until completed. Regulatory authorities, the IRB or the sponsor may suspend a clinical trial at any time on various grounds, including a finding that the subjects are being exposed to an unacceptable health risk or that the trial is unlikely to meet its stated objectives. Some studies also include oversight by an independent group of qualified experts organized by the clinical study sponsor, known as a data safety monitoring board, which provides authorization for whether or not a study may move forward at designated check points based on access to certain data from the study and may recommend halting the clinical trial if it determines that there is an unacceptable safety risk for subjects or other grounds, such as no demonstration of efficacy. There are also requirements governing the reporting of ongoing clinical studies and clinical study results to public registries.

For purposes of BLA approval, human clinical trials are typically conducted in three sequential phases that may overlap or be combined :

- Phase 1—The investigational product is initially introduced into healthy human subjects or patients with the target disease or condition. These studies are designed to test the safety, dosage tolerance, absorption, metabolism and distribution of the investigational product in humans, the side effects associated with increasing doses, and, if possible, to gain early evidence on effectiveness.
- Phase 2—The investigational product is administered to a limited patient population with a specified disease or condition to evaluate the preliminary efficacy, optimal dosages and dosing schedule and to identify possible adverse side effects and safety risks. Multiple Phase 2 clinical trials may be conducted to obtain information prior to beginning larger and more expensive Phase 3 clinical trials.

- Phase 3—The investigational product is administered to an expanded patient population to further evaluate dosage, clinical efficacy, potency, and safety in an expanded patient population at geographically dispersed clinical trial sites. These clinical trials are intended to establish the overall risk/benefit ratio of the investigational product and to provide an adequate basis for product approval and product labeling.

In some cases, FDA may require, or firms may voluntarily pursue, post-approval clinical trials, sometimes referred to as Phase 4 clinical trials, after initial marketing approval. These clinical trials are used to gain additional experience from the treatment of patients in the intended therapeutic indication, particularly for long-term safety follow-up. During all phases of clinical development, regulatory agencies require extensive monitoring and auditing of all clinical activities, clinical data, and clinical trial investigators.

Concurrent with clinical trials, companies usually complete additional animal studies and also must develop additional information about the chemistry and physical characteristics of the biological product and finalize a process for manufacturing the product in commercial quantities in accordance with cGMP. To help reduce the risk of the introduction of adventitious agents with use of biological products, the Public Health Service Act emphasizes the importance of manufacturing control for products whose attributes cannot be precisely defined. The manufacturing process must be capable of consistently producing quality batches of the product candidate and, among other things, the sponsor must develop methods for testing the identity, strength, quality, potency and purity of the final biological product. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the biological product candidate does not undergo unacceptable deterioration over its shelf life.

Healthcare Laws and Regulations

Biopharmaceutical companies are subject to additional healthcare regulation and enforcement by the federal government and by authorities in the states and foreign jurisdictions in which they conduct their business. These laws and regulations may constrain our relationships with our partners. Such laws include, without limitation, state and federal anti-kickback, fraud and abuse, false claims, and transparency laws and regulations related to drug pricing and payments and other transfers of value made to physicians and other healthcare providers. If our partners' operations are found to be in violation of any of such laws or any other governmental regulations that apply, by extension, we may be subject to penalties, including, without limitation, administrative, civil and criminal penalties, damages, fines, disgorgement, the curtailment or restructuring of operations, integrity oversight and reporting obligations, exclusion from participation in federal and state healthcare programs and responsible individuals may be subject to imprisonment.

Additional Regulations

In addition to the foregoing, state and federal U.S. 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.

Healthcare Reform

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

impact our ability to sell our products profitably. In particular, in 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010 (ACA) was enacted, which, among other things, subjected biologic products to potential competition by lower-cost biosimilars; addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected; increased the minimum Medicaid rebates owed by most manufacturers under the Medicaid Drug Rebate Program; extended the Medicaid Drug Rebate program to utilization of prescriptions of individuals enrolled in Medicaid managed care organizations; subjected manufacturers to new annual fees and taxes for certain branded prescription drugs; created a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% (increased to 70% pursuant to the Bipartisan Budget Act of 2018, effective as of January 1, 2019) point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D; and provided incentives to programs that increase the federal government's comparative effectiveness research.

Anti-Corruption Laws

We are subject to the U.S. Foreign Corrupt Practices Act of 1977, as amended (FCPA) the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT 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 (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 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.

Our Culture

We actively engage in creating our culture every day, throughout our organization. We invite input, consider best practices, and iterate to create the Absci culture that best reflects and projects the nature of our people.

The values we embody are:

- Believe in the impossible
- Proceed with passion and grit
- Foster collaboration and communication
- Expect integrity and excellence
- Adventure together

Collectively and individually we are defying conventions and innovating without boundaries. We are disrupting the biopharmaceutical industry with bold ideas and passionate pursuit of new possibilities. We share the mission of changing the world, one protein at a time.

Human Capital Resources

As of March 31, 2021, we have 102 full-time employees of whom 47 have advanced post-graduate degrees. None of our employees is represented by a labor union with respect to his or her

employment with us. We consider our relationship with our employees to be good. 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 and cash-based performance bonus awards.

Facilities

We lease a 14,549 square foot office and laboratory space, located at 101 E 6th Street, Suite 350, Vancouver, Washington 98660. The office lease expires in August 2024. In December 2020, we entered into an operating lease, which was subsequently amended in March 2021, for a 77,974 square foot corporate headquarters facility that will include office and laboratory space. The new lease expires in May 2028. We intend to relocate to the new facility upon completion of certain modifications. We believe that our leased facilities are sufficient to meet our current and near-term needs and that additional alternative space will be available in the future on commercially reasonable terms, if needed.

Legal Proceedings

As of the date of this prospectus, we are not currently a party to any material litigation or other legal proceedings. From time to time, we may, however, in the ordinary course of business face various claims brought by third parties, and we may, from time to time, make claims or take legal actions to assert our rights. Any such claims and associated legal proceedings could, in the opinion of our management, have a material adverse effect on our business, financial condition, results of operations or prospects. Regardless of outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors. In the future, we may become party to legal matters and claims arising in the ordinary course of business, the resolution of which we do not anticipate would have a material adverse impact on our financial position, results of operations or cash flows.

Management

Executive officers and directors

The following table sets forth certain information about our executive officers and directors as of March 31, 2021.

Name	Age	Position(s)
Executive Officers:		
Sean McClain	31	Chief Executive Officer and Director
Gregory Schiffman	63	Chief Financial Officer
Andreas Pihl	60	Chief Operating Officer and Director
Matthew Weinstock, Ph.D.	34	Chief Technology Officer
Other Non-Employee Directors:		
Eli Casdin	48	Director
Zachariah Jonasson, Ph.D.	49	Director
V. Bryan Lawlis, Ph.D.	69	Director
Ivana Magovcevic-Liebisch, Ph.D., J.D.	53	Director
Karen McGinnis, CPA	54	Director
Amrit Nagpal	46	Director

Executive Officers

Sean McClain. Mr. McClain is our Founder and has served as our Chief Executive Officer since August 2011 and a member of our board of directors since the formation of Absci Corporation in October 2020, and a managing member of its predecessor, AbSci LLC, since inception. Mr. McClain also serves as a board member for the Oregon Bioscience Association, Oregon Bioscience Incubator and Oregon Translational Research and Development Institute (OTRADI), and Life Science Washington. Mr. McClain holds a Bachelor of Science degree in Molecular and Cellular Biology in 2011 from the University of Arizona.

Gregory Schiffman. Mr. Schiffman has served as our Chief Financial Officer since April 2020. Mr. Schiffman also currently serves as a Director of AYRO, Inc., since May 2020, BioEclipse Therapeutics since October 2016, and Nanomix Inc., since November 2005. Mr. Schiffman has also served as a director of DropCar from January 2018 to May 2020, Xenogen Corporation from January 2005 to July 2006, VNUS Medical Technologies Inc. from April 2006 to July 2009 and IMPAC Medical Systems, Inc., from February 2003 to April 2005. Prior to joining Absci, Mr. Schiffman has served as the Chief Financial Officer of Vineti, Inc. from October 2017 to April 2018. He was also Chief Financial Officer and Corporate Secretary of Iovance Biotherapeutics, Inc. from October 2016 to June 2017. Prior to Iovance, Mr. Schiffman served as the Chief Financial Officer and Executive Vice President of Finance of StemCells Inc. from January 2014 until September 2016, the Chief Financial Officer of Dendreon Corporation from December 2006 to August 2013 and Executive Vice President of Dendreon Corporation from December 2006 to November 2013. Mr. Schiffman has also held several roles at Affymetrix Inc., as Chief Financial Officer from August 2001 to December 2006 and as its Executive Vice President from February 2005 to December 2006, and previously as Vice President and Controller of Applied Biosystems, Inc. (now part of Life Technologies) from October 1998 to March 2001. Before entering the healthcare field, Mr. Schiffman held roles of increasing responsibility within Hewlett Packard, where he served as controller of its European P.C. manufacturing and distribution operations in Grenoble, France and as manufacturing manager and controller of its Netmetrix Division. Mr. Schiffman is a CPA in Illinois, holds a Master's in Business Administration

from 1987 from the J.L. Kellogg School of Management, Northwestern University and a Bachelor's of Science degree in Accounting from 1985 from DePaul University.

Andreas Pihl. Mr. Pihl has served as our Chief Operating Officer and a member of our board of directors since August 2020. Prior to joining our company, he served as Vice President of Operations at Park Corporation from July 2004 until July 2020 and as Executive Vice President of Sumco Corporation between 2001 and 2004. Mr. Pihl also served in various capacities at Wacker Corporation from 1987 to 2000 including Senior Vice President of Operations between 1998 and 2000, Manager of Manufacturing Operations between 1992 and 1994, and as a Production Logistics Manager between 1987 to 1992. Between 1984 and 1987, Mr. Pihl was a Manufacturing Management Program Graduate at General Electric Company where he served in the General Electric Lighting Business Group as a Quality Unit Manager between 1986 and 1987 and Manufacturing Engineer and Supervisor between 1984 and 1985. He also served in the General Electric Aerospace Division between 1985 and 1986 as a Production Control Supervisor and Facilities Project Engineer. Mr. Pihl received a Bachelor's of Science degree in Industrial and Manufacturing Engineering from Oregon State University in 1984. We believe Mr. Pihl is qualified to serve on our board of directors due to his extensive experience in manufacturing, operations and management.

Matthew Weinstock, Ph.D. Dr. Weinstock has served as our Chief Technology Officer since September 2020. Prior to his role as CTO, Dr. Weinstock served Absci in a number of capacities, including: Chief of Staff, Group Leader of Molecular Sciences, and Senior Scientist. Between January 2014 and July 2018, Dr. Weinstock worked at Synthetic Genomics, Inc. where he led several efforts to develop next-generation host platforms for the bioproduction of therapeutics. He was the inventor and program lead of the Vmax™ platform, a novel microbial factory for the rapid and high-titer production of plasmid vectors and proteins, which was successfully commercialized. He also served as institutional PI on a multi-site DARPA program aiming to generate a consortium of synthetic organisms that could be introduced into the human gut microbiome to monitor for inflammation and respond by secreting anti-inflammatory compounds. Currently, Dr. Weinstock also serves as an instructor at the University of California, San Diego (Extension). Dr. Weinstock holds a PhD in Biochemistry from the University of Utah School of Medicine from 2014 where his dissertation centered on the use of mirror-image display technologies to discover D-peptide therapeutics against emerging infectious diseases. He obtained a Bachelor of Science degree from the University of Utah in 2007.

Non-Employee Directors

Eli Casdin. Mr. Casdin has served as a member of our board of directors since October 2020. Since January 2021, Mr. Casdin has served as the Chief Executive Officer of CM Life Sciences III Inc. For the last 17 years he has analyzed and invested in disruptive technologies and business models in life sciences and healthcare. Prior to founding Casdin Capital, Mr. Casdin was a vice president at Alliance Bernstein's "thematic" based investment group where he researched and invested in the implications of new technologies for the life sciences and healthcare sectors. The black book, "The Dawn of Molecular Medicine," co-authored by Mr. Casdin, details the early, yet already accelerating, wave of innovations in life sciences, and the next wave of investment opportunities. Mr. Casdin's prior experience includes time at Bear Stearns and Cooper Hill Partners, a healthcare focused investment firm. Mr. Casdin also serves as the Chief Executive Officer of CM Life Sciences, Inc. (Nasdaq: CMLF) and CM Life Sciences II Inc. (Nasdaq: CMII), both blank check companies sponsored by an affiliate of Casdin Capital and Corvex Management, since July 2020 and December 2020, respectively. Mr. Casdin serves on the board of directors for CM Life Sciences, Inc. and CM Life Sciences II Inc., and also serves as a director or observer on the boards of a number of privately held life sciences companies. He has previously served as a director or observer on other, now public, boards, including Exact Sciences Corporation (Nasdaq: EXAS), Invitae Corporation (NYSE: NVTA), Relay Therapeutics, Inc. (Nasdaq: RLAY), and Magenta Therapeutics (Nasdaq: MGTA). Mr. Casdin is currently a member of the New York Genome Center Board and a member of The Columbia

University School of General Studies Board of Visitors. Mr. Casdin earned a B.S. from Columbia University in 2003 and an MBA from Columbia Business School in 2003.

Zachariah Jonasson, Ph.D. Dr. Jonasson has served as a member of the Company's board of directors since April 2016. He has over 25 years of experience in venture capital and company operations. Dr. Jonasson is currently a Managing General Partner of Phoenix Venture Partners LLC (PVP), a venture capital firm he co-founded in August 2010. Dr. Jonasson leads PVP's investment strategy in biotechnology and has been involved in raising all of PVP's venture capital and seed funds. In addition to serving on the board of Absci, Dr. Jonasson serves as a director on the boards of PVP portfolio companies Green Theme Technologies, Inc., ReForm Biologics, LLC, Autonomic Materials, Inc. Sentinel Monitoring Systems, Inc., and L7 Informatics, Inc. He also serves on the board of the Oregon Translational Research and Development Institute (OTRADI) and has served on the Commercialization Council of the Oregon Nanoscience and Microtechnologies Institute (ONAMI), the Advisory Board for the Oregon Innovation Cluster (OIC), and the Advisory Board of the Life Sciences Institute at the University of British Columbia Previously, Dr. Jonasson was a co-founder and Chief Executive Officer of ReForm Biologics, LLC and a co-founder and VP of Business Development of Crop Enhancement, LLC Earlier in his career, Dr. Jonasson was a General Partner and Kauffman Fellow at Seaflower Ventures, an early-stage venture capital firm investing in the biotechnology sector, where he led, managed and held board or board observer roles at several of the firm's investments, including Serenex, Inc. and Valeritas, Inc. Dr. Jonasson earned a Bachelor of Science from Georgetown University in 1995, where he was a Rhodes Scholarship Finalist, and an AM and PhD from Harvard University in 2003, where he was a Sackler Scholar. He has co-taught a marketing course at Harvard Business School as well as served as a Teaching Fellow at Harvard University. Prior to graduate school, Dr. Jonasson was a Research Associate at the Board of Governors of the Federal Reserve System. We believe Dr. Jonasson is qualified to serve on our board of directors due to his extensive expertise in venture capital the life sciences industry as well as his experience serving on numerous other boards.

V. Bryan Lawlis, Ph.D. Dr. Lawlis has served on our board of directors since May 2016. From August 2011 to September 2017, he served as the President and Chief Executive Officer of Itero Biopharmaceuticals, LLC, a private holding company that held the assets of ltero Biopharmaceuticals, Inc., a private biotechnology company. Dr. Lawlis co-founded and served as President and Chief Executive Officer of ltero Biopharmaceuticals, Inc. from 2006 until it discontinued operations in August 2011. Dr. Lawlis served as President and Chief Executive Officer of Aradigm Corporation (Aradigm), a pharmaceutical company, from August 2004 to August 2006; continuing in both capacities until August 2006. Dr. Lawlis previously served as Aradigm's President and Chief Operating Officer from June 2003 to August 2004 and its Chief Operating Officer from June 2003 to August 2004 and its Chief Operating Officer from November 2001 to June 2003. Prior to his time at Aradigm, Dr. Lawlis co-founded Covance Biotechnology Services, a contract biopharmaceutical manufacturing operation, served as its President and Chief Executive Officer from 1996 to 1999, and served as Chairman from 1999 to 2001. It was sold to Diosynth RTP, Inc., a division of Akzo Nobel. NV. From 1981 to 1996, Dr. Lawlis was employed at Genencor, Inc., a biotechnology company and Genentech, Inc. His last position at Genentech, Inc. was Vice President of Process Sciences. Dr. Lawlis has served on the board of BioMarin Pharmaceutical, Inc., a public biotechnology company since June of 2007. He has served on the board of Geron Corporation, a public biopharmaceutical company, since March of 2012 and has served as a member of the board of Coherus BioSciences, Inc., a public biotechnology company (Coherus), since October 2014, and Aeglea Biotherapeutics, a public company since June 2018. He previously served on the board of KaloBios Pharmaceuticals, Inc., a biotechnology company, from August 2013 until September 2014, and he acted as Chairman of the scientific advisory board of Coherus from November 2012 to June 2016. Dr. Lawlis held a board position at Sutro Biopharmaceuticals from January 2004 to June of 2019. Sutro was a private company from its inception until September of 2018, when it became a public company. Dr. Lawlis has held a board position at ReForm Biologics, a private company since February 2014. Since October 2015, Dr. Lawlis has been an advisor to Phoenix Venture Partners, a

venture capital firm focusing on manufacturing technologies and material sciences technologies. He also holds a position on Allakos' manufacturing advisory board. Dr. Lawlis holds a B.A. in microbiology from the University of Texas at Austin, and a Ph.D. in Biochemistry from Washington State University. We believe Dr. Lawlis is qualified to serve on our board of directors due to his extensive executive expertise and experience in the biotechnology industry.

Ivana Magovcevic-Liebisch, Ph.D., J.D. Dr. Liebisch has served as a member of our board of directors since August 2020 and its chairperson since January 2021. She also currently serves as a board member of Applied Genetic Technologies Corporation (AGTC), and Aeglea BioTherapeutics in addition to serving as the CEO and President of Vigil Neuroscience. Dr. Liebisch was appointed Executive Vice President, Chief Business Officer of Ipsen in March 2018 and served in this capacity until April 2020. Prior to joining Ipsen, Dr. Liebisch served as the Executive Vice President, Chief Strategy and Corporate Development Officer at Axcella from May 2017 to March 2018 and was Senior Vice President and Head of Global Business Development at Teva Pharmaceutical Industries Ltd from March 2013 to May 2017. She previously worked at Dyax Corp from April 2001 to March 2013 in management roles of increasing scope and responsibility, including Executive Vice President and Chief Operating Officer. Dr. Liebisch began her biopharma career at Transkaryotic Therapies, Inc, where she was Director of Intellectual Property and Patent Counsel from 1998 to 2001. Dr. Liebisch is a Trustee of the Boston Museum of Science, and of the Boston Ballet and overseer of Beth Israel Deaconess Medical Center. Dr. Liebisch holds a Ph.D. in Genetics from Harvard University in 1994 and received her J.D. in High Technology law from Suffolk University Law School in 1999. She graduated from Wheaton College with a B.A. in Biology and Chemistry in 1989. We believe Dr. Liebisch’s over 20 years of senior management experience in biotechnology and pharmaceutical industry make her well qualified to serve on our board of directors.

Karen McGinnis, CPA. Ms. McGinnis has served as a member of our board of directors since August 2020. Ms. McGinnis also serves as an Independent Director of Alphatec Holdings, Inc. since June 2019 and of BioSplice Therapeutics, Inc. since March 2021. She was Vice President and Chief Accounting Officer of Illumina, Inc. from November 2017 until her retirement on April 2, 2021. Ms. McGinnis served as the Chief Executive Officer and President of Mad Catz Interactive Inc. from February 2016 to March 2017, the Chief Financial Officer of Mad Catz Interactive Inc. from June 2013 to February 2016 and served as the Chief Accounting Officer, Corporate Controller and Vice President of Cymer, Inc. from November 2009 to June 2013. Previously, Ms. McGinnis served as Chief Accounting Officer for Insight Enterprises, Inc., from September 2006 until March 2009, its Senior Vice President of Finance from 2001 through September 2006 and its Vice President of Finance from 2000 through 2001. From 1997 to 2000, she served as the Chief Financial Officer of Horizon. Prior to Horizon, Ms. McGinnis was employed by KPMG LLP from 1989 to 1997 and served as its Senior Assurance Manager. Ms. McGinnis is a Certified Public Accountant and received a bachelor’s degree in Accounting from the University of Oklahoma in 1989. We believe Ms. McGinnis is qualified to serve on our board of directors due to her extensive executive, accounting and financial expertise.

Amrit Nagpal. Mr. Nagpal has served as a member of our board of directors since October 2020. He is currently a Managing Director at Redmile Group, LLC, a healthcare-focused investment firm. Prior to joining Redmile in January 2013, Amrit spent 10 years at Weintraub Capital Management LP, an investment firm based in San Francisco, as both an analyst and portfolio manager. Prior to Weintraub, he was an associate and an analyst at Robertson Stephens, a San Francisco-based investment bank. Mr. Nagpal received a BA in Economics from Columbia University in 1997 and an MBA from The Anderson School at University of California, Los Angeles in 2002. We believe Mr. Nagpal is qualified to serve on our board of directors due to his extensive healthcare investment expertise.

Family Relationships

There are no family relationships among any of our executive officers or directors.

Composition of Our Board of Directors

Our board of directors consists of eight members, each of whom are members pursuant to the board composition provisions of our certificate of incorporation and agreements with our stockholders. These board composition provisions will terminate upon the completion of this offering. Upon the termination of these provisions, there will be no further contractual obligations regarding the election of our directors. Our nominating and corporate governance committee and our board of directors may consider a broad range of factors relating to the qualifications and background of nominees. Our nominating and corporate governance committee's and our board of directors' priority in selecting board members is to identify persons who will further the interests of our stockholders through his or her established record of professional accomplishments, the ability to contribute positively to the collaborative culture among board members, knowledge of our business, understanding of the competitive landscape, and professional and personal experiences and expertise relevant to our growth strategy. Our directors hold office until their successors have been elected and qualified or until the earlier of their resignation or removal. Our amended and restated certificate of incorporation and amended and restated bylaws that will become effective immediately prior to the closing of this offering also provide that our directors may be removed only for cause by the affirmative vote of the holders of at least 75% of the votes that all our stockholders would be entitled to cast in an annual election of directors, and that any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, may be filled only by vote of a majority of our directors then in office.

Director Independence

Upon the completion of this offering, we expect that our common stock will be listed on the Nasdaq Global Market. Applicable rules of Nasdaq require a majority of a listed company's board of directors to be comprised of independent directors within one year of listing. In addition, the Nasdaq rules require that, (1) on the date of the completion of the offering, at least one member of each of a listed company's audit, compensation and nominating and corporate governance committees be independent, (2) within 90 days of the date of the completion of the offering, a majority of the members of such committees be independent and (3) within one year of the date of the completion of the offering, all the members of such committees be independent. Audit committee members must also satisfy the independence criteria set forth in Rule 10A-3 under the Exchange Act. Under applicable Nasdaq rules, a director will only qualify as an "independent director" if, in the opinion of the listed company's board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

In order to be considered independent for purposes of Rule 10A-3, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors, or any other board committee, accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries or otherwise be an affiliated person of the listed company or any of its subsidiaries.

Our board of directors has determined that all members of the board of directors, except Messrs. McClain and Pihl, are independent directors, including for purposes of the rules of Nasdaq and the SEC. In making such independence determination, our board of directors considered the relationships that each non-employee director has with us and all other facts and circumstances that our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director. In considering the independence of the directors listed above, our board of directors considered the association of our directors with the holders of more than 5% of our common stock. Upon the completion of this offering, we expect that the composition and functioning of our board of directors and each of our committees will comply with all applicable requirements of Nasdaq and the rules and regulations of the SEC. There are no family relationships among any of our directors or executive officers. Messrs. McClain

and Pihl are not independent directors under these rules because each is currently employed as our chief executive officer and our chief operating officer, respectively.

Staggered Board

In accordance with the terms of our amended and restated certificate of incorporation that will become effective immediately prior to the closing of this offering and our amended and restated bylaws that will become effective on the date on which the registration statement of which this prospectus is part is declared effective by the SEC, our board of directors will be divided into three staggered classes of directors and each will be assigned to one of the three classes. At each annual meeting of the stockholders, a class of directors will be elected for a three-year term to succeed the directors of the same class whose terms are then expiring. The terms of the directors will expire upon the election and qualification of successor directors at the annual meeting of stockholders to be held during the years 2022 for Class I directors, 2023 for Class II directors and 2024 for Class III directors.

- Our Class I directors will be ; ; and .
- Our Class II directors will be ; ; and .
- Our Class III directors will be ; and .

Our amended and restated certificate of incorporation and amended and restated bylaws that will become effective immediately prior to the closing of this offering will provide that the number of directors shall be fixed from time to time by a resolution of the majority of our board of directors.

The division of our board of directors into three classes with staggered three-year terms may delay or prevent stockholder efforts to effect a change of our management or a change in control.

Board Leadership Structure and Board's Role in Risk Oversight

Dr. Magovcevic-Liebisch is our current chairperson of the board and Sean McClain is our current chief executive officer, hence the roles of chairperson of the board and the chief executive officer and president are separated. We plan to keep these roles separated following the completion of this offering. We believe that separating these positions allows our chief executive officer to focus on setting the overall strategic direction of the company, expanding the organization to deliver on our strategy and overseeing our day-to-day business, while allowing the chairperson of the board to lead the board of directors in its fundamental role of providing strategic advice. Our board of directors recognizes the time, effort and energy that the chief executive officer is required to devote to his position in the current business environment, as well as the commitment required to serve as our chairperson of the board, particularly as the board of directors' oversight responsibilities continue to grow. While our amended and restated bylaws and corporate governance guidelines do not require that our chairperson of the board and chief executive officer positions be separate, our board of directors believes that having separate positions is the appropriate leadership structure for us at this time and demonstrates our commitment to good corporate governance.

Risk is inherent with every business, and how well a business manages risk can ultimately determine its success. We face a number of risks, including risks relating to our financial condition, development and commercialization activities, operations, strategic direction and intellectual property as more fully discussed in the section entitled "Risk Factors" appearing elsewhere in this prospectus. Management is responsible for the day-to-day management of risks we face, while our board of directors, as a whole and through its committees, has responsibility for the oversight of risk management. In its risk oversight role, our board of directors has the responsibility to satisfy itself that the risk management processes designed and implemented by management are adequate and functioning as designed.

The role of the board of directors in overseeing the management of our risks is conducted primarily through committees of the board of directors, as disclosed in the descriptions of each of the committees below and in the charters of each of the committees. The full board of directors (or the appropriate board committee in the case of risks that are under the purview of a particular committee) discusses with management our major risk exposures, their potential impact on us, and the steps we take to manage them. When a board committee is responsible for evaluating and overseeing the management of a particular risk or risks, the chairperson of the relevant committee reports on the discussion to the full board of directors during the committee reports portion of the next board meeting. This enables the board of directors and its committees to coordinate the risk oversight role, particularly with respect to risk interrelationships.

Committees of Our Board of Directors

Our board of directors has established an audit committee, a compensation committee and a nominating and corporate governance committee, each of which will operate pursuant to a charter adopted by our board of directors and will be effective upon the effectiveness of the registration statement of which this prospectus is a part. Upon the effectiveness of the registration statement of which this prospectus is a part, the composition and functioning of all of our committees will comply with all applicable requirements of the Sarbanes-Oxley Act of 2002, Nasdaq and SEC rules and regulations.

Audit Committee

Effective upon the effectiveness of the registration statement of which this prospectus is a part, , and will serve on the audit committee, which will be chaired by . Our board of directors has determined that are "independent" for audit committee purposes as that term is defined in the rules of the SEC and the applicable Nasdaq rules, and each has sufficient knowledge in financial and auditing matters to serve on the audit committee. Our board of directors has designated as an "audit committee financial expert," as defined under the applicable rules of the SEC. The audit committee's responsibilities include:

- appointing, approving the compensation of, and assessing the independence of our independent registered public accounting firm;
- pre-approving auditing and permissible non-audit services, and the terms of such services, to be provided by our independent registered public accounting firm;
- reviewing the overall audit plan with our independent registered public accounting firm and members of management responsible for preparing our financial statements;
- reviewing and discussing with management and our independent registered public accounting firm our annual and quarterly financial statements and related disclosures as well as critical accounting policies and practices used by us;
- coordinating the oversight and reviewing the adequacy of our internal control over financial reporting;
- establishing policies and procedures for the receipt and retention of accounting-related complaints and concerns;
- recommending based upon the audit committee's review and discussions with management and our independent registered public accounting firm whether our audited financial statements shall be included in our Annual Report on Form 10-K;
- monitoring the integrity of our financial statements and our compliance with legal and regulatory requirements as they relate to our financial statements and accounting matters;

- preparing the audit committee report required by SEC rules to be included in our annual proxy statement;
- reviewing all related person transactions for potential conflict of interest situations and approving all such transactions; and
- reviewing quarterly earnings releases.

Compensation Committee

Effective upon the effectiveness of the registration statement of which this prospectus is a part, , and will serve on the compensation committee, which will be chaired by . Our board of directors has determined that each member of the compensation committee is "independent" as defined in the applicable Nasdaq rules. The compensation committee's responsibilities include:

- annually reviewing and recommending to the board of directors the corporate goals and objectives relevant to the compensation of our principal executive officer;
- evaluating the performance of our principal executive officer in light of such corporate goals and objectives and based on such evaluation: (i) determining cash compensation of our principal executive officer; and (ii) reviewing and approving grants and awards to our principal executive officer under equity-based plans;
- reviewing and approving or recommending to the board of directors the cash compensation of our other executive officers;
- reviewing and establishing our overall management compensation, philosophy and policy;
- overseeing and administering our compensation and similar plans;
- evaluating and assessing potential and current compensation advisors in accordance with the independence standards identified in the applicable Nasdaq rules;
- reviewing and approving our policies and procedures for the grant of equity-based awards;
- reviewing and recommending to the board of directors the compensation of our directors;
- preparing the compensation committee report required by SEC rules, if and when required, to be included in our annual proxy statement; and
- reviewing and approving the retention, termination or compensation of any consulting firm or outside advisor to assist in the evaluation of compensation matters.

Nominating and Corporate Governance Committee

Effective upon the effectiveness of the registration statement of which this prospectus is a part, , and will serve on the nominating and corporate governance committee, which will be chaired by . Our board of directors has determined that each member of the nominating and corporate governance committee is "independent" as defined in the applicable Nasdaq rules. The nominating and corporate governance committee's responsibilities include:

- developing and recommending to the board of directors criteria for board and committee membership;
- establishing procedures for identifying and evaluating board of director candidates, including nominees recommended by stockholders;
- reviewing the composition of the board of directors to ensure that it is composed of members containing the appropriate skills and expertise to advise us;

- identifying individuals qualified to become members of the board of directors;
- recommending to the board of directors the persons to be nominated for election as directors and to each of the board's committees;
- developing and recommending to the board of directors a code of business conduct and ethics and a set of corporate governance guidelines; and
- overseeing the evaluation of our board of directors and management.

Our board of directors may from time to time establish other committees.

Compensation Committee Interlocks and Insider Participation

None of the members of our compensation committee has at any time during the prior three years been one of our officers or employees. None of our executive officers currently serves, or in the past fiscal year has served, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on our board of directors or compensation committee.

Corporate Governance

We intend to adopt a written code of business conduct and ethics, effective upon the effectiveness of the registration statement of which this prospectus is a part, that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. Following the effectiveness of the registration statement of which this prospectus is a part, a current copy of the code will be posted on the investor relations section of our website, which is located at https://absci.com/. The inclusion of our website address in this prospectus does not incorporate by reference the information on or accessible through our website into this prospectus. If we make any substantive amendments to, or grant any waivers from, the code of business conduct and ethics for any officer or director, we will disclose the nature of such amendment or waiver on our website or in a current report on Form 8-K.

Limitation on Liability and Indemnification Matters

Our amended and restated certificate of incorporation, which will become effective immediately prior to the completion of this offering, will contain provisions that limit the liability of our directors for monetary damages to the fullest extent permitted by Delaware law. Consequently, our directors will not be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duties as directors, except liability for:

- any breach of the director's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporation Law; or
- any transaction from which the director derived an improper personal benefit.

Each of our amended and restated certificate of incorporation and amended and restated bylaws, which will become effective immediately prior to the completion of this offering, will provide that we are required to indemnify our directors and officers, in each case to the fullest extent permitted by Delaware law. Our amended and restated bylaws will also obligate us to advance expenses incurred by a director or officer in advance of the final disposition of any action or proceeding, and permit us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in that capacity regardless of whether we would otherwise

be permitted to indemnify him or her under Delaware law. We have entered and expect to continue to enter into agreements to indemnify our directors, executive officers and other employees as determined by our board of directors. With specified exceptions, these agreements provide for indemnification for related expenses including, among other things, attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in any action or proceeding. We believe that these bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. We also maintain directors' and officers' liability insurance.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against our directors and officers for breach of their fiduciary duty. They may also reduce the likelihood of derivative litigation against our directors and officers, even though an action, if successful, might benefit us and our stockholders. Further, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage.

Executive Compensation

The following discussion contains forward-looking statements that are based on our current plans, considerations, expectations and determinations regarding future compensation programs. The actual amount and form of compensation and the compensation policies and practices that we adopt in the future may differ materially from currently planned programs as summarized in this discussion.

As an emerging growth company, we have opted to comply with the executive compensation disclosure rules applicable to “smaller reporting companies,” as such term is defined in the rules promulgated under the Securities Act. The compensation provided to our named executive officers for the fiscal year ended December 31, 2020 is detailed in the 2020 Summary Compensation Table and accompanying footnotes and narrative that follow. Our named executive officers are:

- Sean McClain, our Founder and Chief Executive Officer;
- Gregory Schiffman, our Chief Financial Officer; and
- Andreas Pihl, our Chief Operating Officer.

To date, the compensation of our named executive officers has consisted of a combination of base salary, bonuses and long-term incentive compensation. Our named executive officers, like all full-time employees, are eligible to participate in our health and welfare benefit plans. As we transition from a private company to a publicly traded company, we intend to evaluate our compensation values and philosophy and compensation plans and arrangements as circumstances require.

2020 Summary Compensation Table

The following table presents information regarding the compensation awarded to, earned by, and paid to each individual who served as one of our named executive officers for services rendered to us in all capacities during the fiscal year ended December 31, 2020.

Name and Principal Position	Year	Salary($)	Bonus($)[1]	Stock Awards[2]	Option Awards($)[3]	All Other[4]	Total
Sean McClain	2020	260,000	125,000	743,752	26,727	25,405	1,180,884
Founder and Chief Executive Officer							
Gregory Schiffman [5]	2020	184,999	100,000	670,610	209,202	10,667	1,175,478
Chief Financial Officer							
Andreas Pihl [6]	2020	100,750	75,000	909,155	246,945	7,000	1,338,850
Chief Operating Officer							

(1) These amounts represent discretionary annual bonuses paid for company performance in 2020.

(2) The amounts reported represent the aggregate grant-date fair value of incentive unit awards granted to the named executive officers in 2020, calculated in accordance with Financial Accounting Standards Board (FASB), Accounting Standards Codification (ASC), Topic 718. Such grant-date fair value does not take into account any estimated forfeitures related to service-vesting conditions. The assumptions used in calculating the grant-date fair value are set forth in Note 8 of our notes to consolidated financial statements included elsewhere in this prospectus. In October 2020, in connection with a reorganization whereby we converted from a Delaware limited liability company to a Delaware corporation, incentive unit awards were exchanged for an equal number of shares of restricted stock or vested common stock, as applicable, under our 2020 Stock Option and Incentive Plan (2020 Stock Plan). Accordingly, these amounts also include any incremental value associated with such exchange.

(3) The amounts reported represent the aggregate grant date fair value of the stock options awarded to the named executive officers during fiscal year 2020, calculated in accordance with FASB, ASC, Topic 718. Such grant date fair value does not take into account any estimated forfeitures. The assumptions used in calculating the grant-date fair value are set forth in Note 8 of our notes to consolidated financial statements included elsewhere in this prospectus. The amounts reported in this column reflect the accounting cost for the stock options and does not correspond to the actual economic value that may be received upon exercise of the stock option or any sale of any of the underlying shares of common stock.

(4) The amounts reported in this column represent matching employer contributions under the Company’s 401(k) plan. For Mr. McClain, such amount also includes an aggregate amount equal to $19,538 to compensate Mr. McClain for self-employment taxes prior to our reorganization in October 2020.

(5) Mr. Schiffman joined us in April 2020 as our Chief Financial Officer. Mr. Schiffman's base salary was pro-rated for his partial year of service during fiscal year 2020.
(6) Mr. Pihl joined us in June 2020 as our Chief Operating Officer. Mr. Pihl's base salary was pro-rated for his partial year of service during fiscal year 2020.

Narrative Disclosure to Summary Compensation Table

Base Salaries

Base salaries for our named executive officers are reviewed periodically and adjusted from time to time based on factors including market-competitive compensation levels, job responsibilities, individual performance and experience. For 2020, the base salaries for Mr. McClain, Mr. Schiffman and Mr. Pihl were $260,000, $250,000, and $240,000, respectively.

Annual Cash Bonuses

We do not sponsor or maintain a formal annual bonus plan. However, subject to performance for 2020, the board of directors may approve discretionary bonuses, as they did for 2020 for our named executive officers.

Employment Arrangements with Our Named Executive Officers

For Mr. McClain and Mr. Pihl, we do not have formal employment agreements and each is employed at will. We have entered into an employment offer letter with Mr. Schiffman, which sets forth the terms and conditions of his employment, which is at will. In connection with this offering, we intend to enter into formal employment agreements with our named executive officers that will become effective with the closing of this offering.

Outstanding Equity Awards at 2020 Fiscal Year-End

The following table sets forth information concerning outstanding equity awards held by our named executive officers as of December 31, 2020.

Option Award[1]						Stock Awards[1]	
Name	Vesting Commencement Date	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price ($)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested(#)	Market Value of Shares or Units of Stock That Have Not Vested($)[2]
Sean McClain	4/7/2016	9,196	— [3]	3.63	10/27/2030		
	7/11/2017	964	165	3.63	10/27/2030		
	9/13/2017					2,376	
Gregory Schiffman	4/6/2020	—	76,351	3.63	10/27/2030		
	4/6/2020					168,074	
Andreas Pihl	3/1/2020	5,857	9762 [5]	3.63	10/27/2030		
	8/1/2020	—	75,077	3.63	10/27/2030		
	4/23/2020					34,381	
	8/17/2020					134,348	

(1) Unless otherwise noted below, 1/4th of the shares underlying the award will vest on the first anniversary of the vesting commencement date, and 1/48th of the shares underlying the award will vest in equal monthly installments thereafter such that the award will be fully vested on the date four years after the vesting commencement date, subject to the grantee's continued service relationship with us through each such vesting date
(2) Calculated based on $ per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus.
(3) This option is fully vested.
(4) This option vests in 48 equal monthly installments following the vesting commencement date, subject to the grantee's continued service relationship with the Company through each such vesting date.
(5) This option vests in 24 equal monthly installments following the vesting commencement date, subject to the grantee's continued service relationship with the Company through each such vesting date.

Employee Benefit and Equity Compensation Plans

2020 Stock Option and Grant Plan

Our 2020 Plan was approved by our board of directors and stockholders in October 2020, and most recently amended in March 2021. Under the 2020 Plan, we have reserved for issuance an aggregate of 3,246,905 shares of our common stock. The number of shares of common stock reserved for issuance is subject to adjustment in the event of any merger, consolidation, sale of all or substantially all of our assets, reorganization, recapitalization, reclassification, stock split, stock dividend, reverse stock split or other similar transaction.

The shares of common stock underlying awards that are forfeited, canceled, reacquired by us prior to vesting, satisfied without the issuance of stock or otherwise terminated (other than by exercise) and shares of common stock that are withheld upon exercise of an option or settlement of an award to cover the exercise price or tax withholding are currently added back to the shares of common stock available for issuance under the 2020 Plan.

Our board of directors has acted as administrator of the 2020 Plan. The administrator has full power to select, from among the individuals eligible for awards, the individuals to whom awards will be granted, and to determine the specific terms and conditions of each award, subject to the provisions of the 2020 Plan. Persons eligible to participate in the 2020 Plan are those employees, officers and directors of, and consultants and advisors to, our company as selected from time to time by the administrator in its discretion.

The 2020 Plan permits the granting of (1) options to purchase common stock intended to qualify as incentive stock options under Section 422 of the Internal Revenue Code of 1986, as amended (Code), and (2) options that do not so qualify. The per share exercise price of each option is determined by the administrator but may not be less than 100% of the fair market value of the common stock on the date of grant. The term of each option is fixed by the administrator but may not exceed 10 years from the date of grant. The administrator determines at what time or times each option may be exercised. In addition, the 2020 Plan permits the granting of restricted shares of common stock, unrestricted shares of common stock, and restricted stock units.

The 2020 Plan provides that upon the occurrence of a “sale event,” as defined in the 2020 Plan, all outstanding stock options will terminate at the effective time of such sale event, unless the parties to the sale event agree that such awards will be assumed or continued by the successor entity. In the event of a termination of the 2020 Plan and all options issued thereunder in connection with a sale event, optionees will be provided an opportunity to exercise options that are then exercisable or will become exercisable as of the effective time of the sale event within a specified period of time prior to the consummation of the sale event. In addition, we have the right to provide for cash payment to holders of options, in exchange for the cancellation thereof, in an amount per share equal to the difference between the value of the consideration payable per share of common stock in the sale event and the per share exercise price of such options. In the event of, and subject to the consummation of, a sale event, restricted stock and restricted stock units (other than those becoming vested as a result of the sale event) will be forfeited immediately prior to the effective time of a sale event unless such awards are assumed or continued by the successor entity. In the event that shares of restricted stock are forfeited in connection with a sale event, such shares of restricted stock shall be repurchased at a price per share equal to the original per share purchase price of such shares. We have the right to provide for cash payment to holders of restricted stock or restricted stock units, in exchange for the cancellation thereof, in an amount per share equal to the value of the consideration payable per share of common stock in the sale event.

Additionally, the 2020 Plan provides for certain drag along rights pursuant to which grantees may be obligated to, on the request of the Company or the accepting requisite holder, sell, transfer and deliver, or cause to be sold, transferred and delivered, to a buyer, their shares in the event the Company or the accepting requisite holder determine to enter into a sale event with a buyer.

The board of directors may amend or discontinue the 2020 Plan at any time, subject to stockholder approval where such approval is required by applicable law. The administrator of the 2020 Plan may also amend or cancel any outstanding award, provided that no amendment to an award may adversely affect a participant's rights without his or her consent. The administrator of the 2020 Plan is specifically authorized to exercise its discretion to reduce the exercise price of outstanding stock options or effect the repricing of such awards through cancellation and re-grants.

The 2020 Plan will automatically terminate upon the earlier of 10 years from the date on which the 2020 Plan was initially adopted by our board of directors or 10 years from the date the 2020 Plan was initially approved by our stockholders. As of , options to purchase shares of common stock were outstanding under the 2020 Plan. Our board of directors has determined not to make any further awards under the 2020 Plan following the closing of this offering.

401(k) Plan

We maintain a tax-qualified retirement plan that provides all regular, eligible U.S. employees with an opportunity to save for retirement on a tax-advantaged basis. Full-time employees become eligible following 30 days of service and part-time employees become eligible after one year of service.. Under our 401(k) plan, participants may elect to defer a portion of their compensation on a pre-tax basis or after tax (Roth) basis, subject to applicable annual limits under the Code. Pre-tax contributions are allocated to each participant's individual account and are then invested in selected investment alternatives according to the participants' directions. Employee elective deferrals are 100% vested at all times. As a U.S. tax-qualified retirement plan, contributions to the 401(k) plan and earnings on those contributions are not taxable to the employees until distributed from the 401(k) plan and all contributions are deductible by us when made, and earnings on Roth contributions are not taxable when distributed from the 401(k) Plan. We make safe-harbor match contributions of 100% of the first 3% and 50% of the next 2% of each participant's eligible compensation. Employer matching contributions vest under a six-year graded vesting schedule.

Nonqualified Deferred Compensation

Our named executive officers did not participate in, or earn any benefits under, a nonqualified deferred compensation plan sponsored by us during fiscal year 2020.

Other Benefits

Our named executive officers are eligible to participate in our employee benefit plans on the same basis as our other employees, including our health and welfare plans.

Director Compensation

2020 Director Compensation Table

The following table presents the total compensation paid by the Company to members of our board of directors during the fiscal year ended December 31, 2020. Other than as set forth in the table and described more fully below, we did not pay any compensation, make any equity awards or non-equity awards to, or pay any other compensation to any of the members of our board of directors in 2020 for their services as members of the board of directors. Sean McClain, our Founder and Chief Executive Officer, and Andreas Pihl, our Chief Operating Officer, do not receive any compensation from the Company for their service on our board of directors. See the section titled “Executive Compensation” for more information on the compensation paid to or earned by Mr. McClain and Mr. Pihl as employees for the year ended December 31, 2020.

Name	Fees Earned or Paid in Cash ($)[1]	Total ($)[2]
Eli Casdin	—	—
Zachariah Jonasson	—	—
V. Bryan Lawlis	30,000	30,000
Ivana Magovcevic-Liebisch	16,667	16,667
Gustavo Mahler[3]	—	—
Karen McGinnis	16,667	16,667
Amrit Nagpal	—	—
Dan Gold[4]	11,667	11,667

(1) Amounts reported reflect annual cash retainers paid to such non-employee directors in 2020, prorated to reflect partial years of service. We have entered into an independent director agreement with each of Dr. Magovcevic-Liebisch and Ms. McGinnis, pursuant to which each is entitled to receive an annual cash retainer,

(2) Each of Dr. Magovcevic-Liebisch and Ms. McGinnis were granted 44,510 phantom units in 2020. There was no accounting expense associated with such phantom units. Such phantom units were exchanged for a combination of cash payment rights and stock options to purchase 44,510 shares in January 2021. As of December 31, 2020, other than the phantom units described above, none of our non-employee directors held outstanding equity awards.

(3) Mr. Mahler resigned from his role as a member of our board of directors in April 2021.

(4) Mr. Gold resigned from his role as a member of our board of directors in July 2020.

Non-Employee Director Compensation Policy

In connection with this offering, we intend to implement a non-employee director compensation program that will become effective upon the date on which the registration statement of which this prospectus is a part is declared effective. The program will be designed to enable us to attract and retain, on a long-term basis, highly qualified non-employee directors.

Certain Relationships and Related Party Transactions

In addition to the compensation arrangements, including employment, termination of employment and change in control arrangements, with our directors and executive officers, including those discussed in the sections titled “Management” and “Executive and Director Compensation,” and the registration rights described in the section titled “Description of Capital Stock—Registration Rights,” the following is a description of each transaction to which we were or will be a party, since January 1, 2018:

- the amounts involved exceeded or will exceed $120,000 or one percent of the Company's total assets at year-end for the last two completed fiscal years; and
- any of our directors, executive officers or holders of more than 5% of our capital stock, or any member of the immediate family of the foregoing persons, or any affiliated entities, had or will have a direct or indirect material interest.

Private Placements of Securities

Redeemable convertible preferred unit and preferred stock financings

On May 25, 2018, we sold an aggregate of 1,760,252 Series C Preferred Units in AbSci, LLC at a purchase price of $6.95 per share, that were subsequently converted in October 2020 into the same number of shares of our Series C redeemable convertible preferred stock, for an aggregate purchase price of approximately $12.2 million.

From December 2019 through June 2020, we sold an aggregate of 1,058,224 Series D-1 Preferred Units, 102,146 Series D-2 Preferred Units, 341,161 Series D-3 Preferred Units and 30,645 Series D-4 Preferred Units in AbSci, LLC at a purchase price of $9.79 per share, that were subsequently converted in October 2020 into the same number of shares of our Series D-1, Series D-2, Series D-3 and Series D-4 redeemable convertible preferred stock, for an aggregate purchase price of approximately $15.0 million.

From October 2020 through February 2021, we sold an aggregate of 3,568,405 shares of Series E redeemable convertible preferred stock at a purchase price of $19.6166 per share, for an aggregate purchase price of approximately $70.0 million.

All purchasers of our redeemable convertible preferred stock described above are entitled to specified registration rights. See the section entitled “Description of Capital Stock—Registration Rights” for more information regarding these registration rights.

The following table summarizes the Series C redeemable convertible preferred stock, Series D-1 redeemable convertible preferred stock, Series D-2 redeemable convertible preferred stock, Series D-3 redeemable convertible preferred stock, Series D-4 redeemable convertible preferred stock, and Series E redeemable convertible preferred stock purchased by members of our board of directors or their affiliates and holders of more than 5% of our outstanding capital stock.

Name of stockholder	Shares of redeemable convertible preferred stock		Total purchase price
Casdin Master Fund I, L.P.	1,274,431	$	25,000,003.15
Redmile Biopharma Investments II, L.P.	1,274,431	$	25,000,003.15
Phoenix Venture Partners II LP	128,635	$	1,124,682.08
Total	**2,677,497**	**$**	**51,124,688.39**

(1) Casdin Master Fund I, L.P. (together with its affiliates, Casdin) purchased 1,274,431 shares of Series E redeemable convertible preferred stock in October 2020 for $19.6166 per share.

(2) Redmile Biopharma Investments II, L.P. (together with its affiliates, Redmile) purchased 1,274,431 shares of Series E redeemable convertible preferred stock in October 2020 for $19.6166 per share.
(3) Phoenix Venture Partners II LP (together with its affiliates, PVP) purchased 82,689 shares of Series C redeemable convertible preferred stock in May 2018 for $6.95, 25,536 shares of Series D-1 redeemable convertible preferred stock in December 2019 for $9.79 per share, 10,215 shares of Series D-2 redeemable convertible preferred stock in January 2020 for $9.79 per share and 10,195 shares of Series E redeemable convertible preferred stock in October 2020 for $19.6166 per share.

Convertible Note Financing

In March 2021, we sold Convertible Notes in an aggregate principal amount of $125.0 million. The following table summarizes the amounts of Convertible Notes purchased by affiliates of members of our board of directors and by holders of more than 5% of our outstanding capital stock.

Name of Investor	Aggregate Principal Amount of Convertible Notes Purchased
Casdin	$25,000,000
Redmile	$25,000,000

Agreements with Stockholders

Investors' rights agreement

On October 19, 2020, we entered into an Investors' Rights Agreement, as amended to date, which we refer to as our investors' rights agreement, with certain holders of our outstanding redeemable convertible preferred stock, including entities with which certain of our directors are affiliated. After the completion of this offering, the holders of shares of our common stock issuable in connection with the conversion of all outstanding shares of our redeemable convertible preferred stock into common stock, are entitled to rights with respect to the registration of their shares following this offering under the Securities Act. See the section titled "Description of Capital Stock—Registration Rights" for more information regarding these registration rights.

Right of first refusal and co-sale agreement

On October 19, 2020, we entered into a Right of First Refusal and Co-Sale Agreement, as amended to date, which we refer to as our right of first refusal and co-sale agreement, which imposes restrictions on the transfer of our capital stock. Upon the completion of this offering, the right of first refusal and co-sale agreement will terminate and the restrictions on the transfer of our capital stock set forth in this agreement will no longer apply.

Voting agreement

On October 19, 2020, we entered into a Voting Agreement, as amended to date, which we refer to as our voting agreement, under which certain holders of our capital stock, including persons who hold more than 5% of our outstanding capital stock and entities with which certain of our directors are affiliated, have agreed to vote their shares on certain matters, including with respect to the election of directors. Upon the completion of this offering, the voting agreement will terminate and none of our stockholders will have any special rights regarding the election or designation of members of our board of directors or the voting of our capital stock of the company.

Executive Officer and Director Compensation

See the sections titled ''Executive Compensation" and "Director Compensation'' for information regarding compensation of our executive officers and directors.

Indemnification Agreements

In connection with this offering, we intend to enter into new agreements to indemnify our directors and executive officers. These agreements and our amended and restated certificate of incorporation and amended and restated bylaws will, among other things, require us to indemnify these individuals for certain expenses (including attorneys' fees), judgments, fines and settlement amounts reasonably incurred by such person in any action or proceeding, including any action by or in our right, on account of any services undertaken by such person on behalf of our company or that person's status as a member of our board of directors to the maximum extent allowed under Delaware law.

Policies for Approval of Related Party Transactions

Prior to this offering, we have not had a formal policy regarding approval of transactions with related parties. Prior to the completion of this offering, we expect to adopt a written related person transaction policy that sets forth our procedures for the identification, review, consideration and approval or ratification of related person transactions. The policy will become effective immediately upon the execution of the underwriting agreement for this offering. For purposes of our policy only, a related person transaction is a transaction, arrangement or relationship, or any series of similar transactions, arrangements or relationships, in which we and any related person are, were, or will be participants and in which the amount involved exceeds $120,000 or one percent of our total assets at year-end for the last two completed fiscal years. Transactions involving compensation for services provided to us as an employee or director are not covered by this policy. A related person is any executive officer, director, or beneficial owner of more than 5% of any class of our voting securities, including any of their immediate family members and any entity owned or controlled by such persons.

Under the policy, if a transaction has been identified as a related person transaction, including any transaction that was not a related person transaction when originally consummated or any transaction that was not initially identified as a related person transaction prior to consummation, our management must present information regarding the related person transaction to our audit committee, or, if audit committee approval would be inappropriate, to another independent body of our board of directors, for review, consideration, and approval or ratification. The presentation must include a description of, among other things, the material facts, the interests, direct and indirect, of the related persons, the benefits to us of the transaction, and whether the transaction is on terms that are comparable to the terms available to or from, as the case may be, an unrelated third party or to or from employees generally. Under the policy, we will collect information that we deem reasonably necessary from each director, executive officer, and, to the extent feasible, significant stockholder to enable us to identify any existing or potential related person transactions and to effectuate the terms of the policy.

In addition, under our Code of Conduct, which we intend to adopt in connection with this offering, our employees and directors have an affirmative responsibility to disclose any transaction or relationship that reasonably could be expected to give rise to a conflict of interest.

In considering related person transactions, our audit committee, or other independent body of our board of directors, will take into account the relevant available facts and circumstances including, but not limited to:

- the risks, costs, and benefits to us;
- the impact on a director's independence in the event that the related person is a director, immediate family member of a director, or an entity with which a director is affiliated;
- the availability of other sources for comparable services or products; and

- the terms available to or from, as the case may be, unrelated third parties or to or from employees generally.

The policy requires that, in determining whether to approve, ratify, or reject a related person transaction, our audit committee, or other independent body of our board of directors, must consider, in light of known circumstances, whether the transaction is in, or is not inconsistent with, our best interests and those of our stockholders, as our audit committee, or other independent body of our board of directors, determines in the good faith exercise of its discretion. All of the transactions described above were entered into prior to the adoption of the written policy, but all were approved by our board of directors considering similar factors to those described above.

Principal Stockholders

The following table presents information concerning the beneficial ownership of the shares of our common stock as of March 31, 2021 by:

- each person we know to be the beneficial owner of 5% or more of our outstanding shares of our capital stock;
- each of our directors;
- each of our named executive officers; and
- all of our current executive officers and directors as a group.

We have determined beneficial ownership in accordance with SEC rules. The information does not necessarily indicate beneficial ownership for any other purpose. Under these rules, a person is deemed to be a beneficial owner of our common stock if that person has a right to acquire ownership within 60 days by the exercise of options or the conversion of our redeemable convertible preferred stock. A person is also deemed to be a beneficial owner of our common stock if that person has or shares voting power, which includes the power to vote or direct the voting of our common stock, or investment power, which includes the power to dispose of or to direct the disposition of such capital stock. Except in cases where community property laws apply or as indicated in the footnotes to this table, we believe that each stockholder identified in the table possesses sole voting and investment power over all shares of common stock shown as beneficially owned by the stockholder.

Percentage of beneficial ownership in the table below is based on shares of common stock deemed to be outstanding as of March 31, 2021, assuming the conversion of all outstanding shares of our redeemable convertible preferred stock into common stock, immediately prior to the completion of this offering. The table below assumes that the underwriters do not exercise their option to purchase additional shares. Shares of common stock subject to options that are currently exercisable or exercisable within 60 days of March 31, 2021 are considered outstanding and beneficially owned by the person holding the options for the purpose of computing the percentage ownership of that person but are not treated as outstanding for the purpose of computing the percentage ownership of any other person. Unless otherwise indicated below, the address of each individual listed below is c/o Absci Corporation, 101 E 6th Street, Suite 350, Vancouver, WA 98660.

Name and address of beneficial owner	Number of shares beneficially owned	Percentage of shares beneficially owned before offering	Percentage of shares beneficially owned after offering
5% or Greater Stockholders:			
PVP		%	%
Casdin		%	%
Entities affiliated with Redmile Group, LLC		%	%
Mark Valasek		%	%
Entities and persons affiliated with Souther Investments		%	%
Named Executive Officers and Directors:			
Sean McClain		%	%
Gregory Schiffman		%	%
Andreas Pihl		%	%
Eli Casdin		%	%
Zachariah Jonasson, Ph.D.		%	%
V. Bryan Lawlis, Ph.D.		%	%
Ivana Magovcevic-Liebisch, Ph.D.		%	%
Karen McGinnis, CPA		%	%
Amrit Nagpal		%	%
All executive officers and directors as a group (10 persons)		%	%

* Represents beneficial ownership of less than one percent.

Description of Capital Stock

Upon the completion of this offering, our authorized capital stock will consist of shares of common stock, par value $0.0001 per share, and shares of preferred stock, par value $0.0001 per share, all of which will be undesignated, and there will be shares of common stock outstanding and no shares of preferred stock outstanding. As of March 31, 2021, we had approximately 82 record holders of our capital stock. All of our outstanding shares of redeemable convertible preferred stock will convert into shares of our common stock immediately prior to the completion of this offering. In addition, upon the completion of this offering, options to purchase shares of our common stock will be outstanding and shares of our common stock will be reserved for future grants under our equity incentive plans.

The following description of our capital stock and provisions of our amended and restated certificate of incorporation and bylaws are summaries of material terms and provisions and are qualified by reference to our amended and restated certificate of incorporation and bylaws, copies of which have been filed with the SEC as exhibits to the registration statement of which this prospectus is a part. The descriptions of our common stock and preferred stock reflect amendments to our amended and restated certificate of incorporation and bylaws that will become effective immediately prior to the completion of this offering.

Common stock

Upon the completion of this offering, we will be authorized to issue one class of common stock. Holders of our common stock are entitled to one vote for each share of common stock held of record for the election of directors and on all matters submitted to a vote of stockholders. Except as described under “Anti-takeover Effects of Delaware Law and Provisions of our Amended and Restated Certificate of Incorporation and Bylaws” below, a majority vote of the holders of common stock is generally required to take action under our amended and restated certificate of incorporation and bylaws. Holders of our common stock are entitled to receive dividends ratably, if any, as may be declared by our board of directors out of legally available funds, subject to any preferential dividend rights of any preferred stock then outstanding. Upon our dissolution, liquidation or winding up, holders of our common stock are entitled to share ratably in our net assets legally available after the payment of all our debts and other liabilities, subject to the preferential rights of any preferred stock then outstanding. Holders of our common stock have no preemptive, subscription, redemption or conversion rights and no sinking fund provisions are applicable to our common stock. The rights, preferences and privileges of holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

Redeemable Convertible Preferred stock

Immediately prior to completion of this offering, all outstanding shares of our redeemable convertible preferred stock will be converted into shares of our common stock. Upon the completion of this offering, our board of directors will be authorized, without action by the stockholders, to designate and issue up to an aggregate of shares of preferred stock in one or more series. Our board of directors can designate the rights, preferences and privileges of the shares of each series and any of its qualifications, limitations or restrictions. Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of common stock. The issuance of preferred stock, while providing flexibility in connection with possible future financings and acquisitions and other corporate purposes could, under certain circumstances, have the effect of restricting dividends on our common stock, diluting the voting power of our common stock, impairing the liquidation rights of our common stock, or delaying, deferring or preventing a change in control of our company, which might harm the market price of our common stock. See also “—Anti-takeover

effects of Delaware Law and provisions of our amended and restated certificate of incorporation and bylaws—Provisions of our amended and restated certificate of incorporation and bylaws—Undesignated preferred stock" below.

Our board of directors will make any determination to issue such shares based on its judgment as to our company's best interests and the best interests of our stockholders. Upon the completion of this offering, we will have no shares of preferred stock outstanding and we have no current plans to issue any shares of preferred stock following completion of this offering.

Options and Restricted Stock

As of March 31, 2021, we had outstanding options to purchase 1,619,210 shares of our common stock, with a per share weighted-average exercise price of $3.36 under our 2020 Plan and 954,908 shares of our restricted common stock outstanding.

Registration rights

Upon the completion of this offering, the holders of shares of our common stock, including shares issuable upon the conversion of our redeemable convertible preferred stock, or their permitted transferees, which we refer to as our registrable securities, are entitled to rights with respect to the registration of these securities under the Securities Act. These rights are provided under the terms of the investor rights agreement. The investor rights agreement includes demand registration rights, short-form registration rights and piggyback registration rights. All fees, costs and expenses incurred in connection with registrations under the investor rights agreement will be borne by us, and all selling expenses, including underwriting discounts and selling commissions, will be borne by the holders of the shares being registered.

Demand registration rights

Beginning 180 days after the effective date of this registration statement, the holders of our registrable securities are entitled to demand registration rights. Under the terms of our investor rights agreement, we will be required, upon the request of holders of at least a majority of our outstanding registrable securities, to file a registration statement and use commercially reasonable efforts to effect the registration of these shares for public resale. We are required to effect up to two registrations pursuant to this provision of the investor rights agreement.

Short form registration rights

Upon the completion of this offering, the holders of our registrable securities are also entitled to short form registration rights. Pursuant to our investor rights agreement, if we are eligible to file a registration statement on Form S-3, upon the request of holders of at least 20% of our outstanding registrable securities to sell registrable securities with an anticipated aggregate offering amount of at least $5.0 million net of certain expenses related to the offering, we will be required to use our commercially reasonable efforts to effect a registration of such shares. We are required to effect up to two registrations in any twelve month period pursuant to this provision of the investor rights agreement.

Piggyback registration rights

The holders of our registrable securities are entitled to piggyback registration rights. If we register any of our securities either for our own account or for the account of other security holders, the holders of our outstanding registrable securities are entitled to include their shares in the registration. Subject to certain exceptions contained in the investor rights agreement, we and the underwriters may limit the number of shares included in the underwritten offering if the underwriters determine that marketing factors require a limitation of the number of shares to be underwritten.

Indemnification

Our investor 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.

Expenses of registration

We will pay the registration expenses, subject to certain limited exceptions contained in the investor rights agreement, of the holders of the shares registered pursuant to the demand, short form and piggyback registration rights described above, including the expenses of one counsel for the selling holders.

Expiration of registration rights

The registration rights granted under the investor rights agreement will terminate upon the earlier of (i) a deemed liquidation event, as defined in our amended and restated certificate of incorporation (as in effect prior to the completion of this offering) or certain other events constituting a sale of the company, (ii) at such time after our initial public offering when all registrable securities could be sold under Rule 144 of the Securities Act or a similar exemption without limitation during a three-month period without registration or (iii) the fifth anniversary of our initial public offering.

Anti-takeover effects of Delaware Law and provisions of our amended and restated certificate of incorporation and bylaws

Certain provisions of the Delaware General Corporation Law and of our amended and restated certificate of incorporation and bylaws that will become effective immediately prior to the completion of this offering could have the effect of delaying, deferring or discouraging another party from acquiring control of us. These provisions, which are summarized below, are expected to discourage certain types of coercive takeover practices and inadequate takeover bids and, as a consequence, they might also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions are also designed in part to encourage anyone seeking to acquire control of us to first negotiate with our board of directors. These provisions might also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders might otherwise deem to be in their best interests. However, we believe that the advantages gained by protecting our ability to negotiate with any unsolicited and potentially unfriendly acquirer outweigh the disadvantages of discouraging such proposals, including those priced above the then-current market value of our common stock, because, among other reasons, the negotiation of such proposals could improve their terms.

Delaware takeover statute

Upon completion of this offering, we will be subject to the provisions of Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a “business combination” with an “interested stockholder” for a three-year period following the time that this stockholder becomes an interested stockholder, unless the business combination is approved in a prescribed manner. Under Section 203, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions:

- before the stockholder became interested, our board of directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;

- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, shares owned by persons who are directors and also officers, and employee stock plans, in some instances, but not the outstanding voting stock owned by the interested stockholder; or
- at or after the time the stockholder became interested, the business combination was approved by our board of directors and authorized at an annual or special meeting of the stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

Section 203 defines a business combination to include:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, lease, pledge, exchange, mortgage or other disposition involving the interested stockholder of 10% or more of the assets of the corporation;
- subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- subject to exceptions, any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by the entity or person.

Provisions of our amended and restated certificate of incorporation and bylaws

Our amended and restated certificate of incorporation and bylaws to be in effect immediately prior to completion of this offering will 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 rather than pursue non-negotiated takeover attempts. These provisions include the items described below.

Board composition and filling vacancies. In accordance with our amended and restated certificate of incorporation, our board is divided into three classes serving staggered three-year terms, with one class being elected each year. Our amended and restated certificate of incorporation also provides that directors may be removed only for cause and then only by the affirmative vote of the holders of at least 75% of the shares then entitled to vote at an election of directors. Furthermore, any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of our board, may only be filled by the affirmative vote of a majority of our directors then in office even if less than a quorum.

No written consent of stockholders. Our amended and restated certificate of incorporation provides that all stockholder actions are required to be taken by a vote of the stockholders at an annual or special meeting, and that stockholders may not take any action by written consent in lieu of a meeting. This limit may lengthen the amount of time required to take stockholder actions and would prevent the amendment of our bylaws or removal of directors by our stockholder without holding a meeting of stockholders.

Meetings of stockholders. Our bylaws provide that only a majority of the members of our board of directors then in office may call special meetings of stockholders and only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders. Our bylaws limit the business that may be conducted at an annual meeting of stockholders to those matters properly brought before the meeting.

Advance notice requirements. Our bylaws establish advance notice procedures with regard to stockholder proposals relating to the nomination of candidates for election as directors or new business to be brought before meetings of our stockholders. These procedures provide that notice of stockholder proposals must be timely given in writing to our corporate secretary prior to the meeting at which the action is to be taken. Generally, to be timely, notice must be received at our principal executive offices not less than 90 days or more than 120 days prior to the first anniversary date of the annual meeting for the preceding year. The notice must contain certain information specified in our bylaws.

Amendment to certificate of incorporation and bylaws. As required by the Delaware General Corporation Law, any amendment of our amended and restated certificate of incorporation must first be approved by a majority of our board of directors, and if required by law or our amended and restated certificate of incorporation, must thereafter be approved by a majority of the outstanding shares entitled to vote on the amendment, and a majority of the outstanding shares of each class entitled to vote thereon as a class, except that the amendment of the provisions relating to stockholder action, directors, limitation of liability and the amendment of our amended and restated certificate of incorporation must be approved by not less than 75% of the outstanding shares entitled to vote on the amendment, and not less than 75% of the outstanding shares of each class entitled to vote thereon as a class. Our bylaws may be amended by the affirmative vote of a majority vote of the directors then in office, subject to any limitations set forth in the bylaws; and may also be amended by the affirmative vote of at least 75% of the outstanding shares entitled to vote on the amendment, or, if the board of directors recommends that the stockholders approve the amendment, by the affirmative vote of the majority of the outstanding shares entitled to vote on the amendment, in each case voting together as a single class.

Undesignated preferred stock. Our amended and restated certificate of incorporation provides for authorized shares of preferred stock. The existence of authorized but unissued shares of preferred stock may enable our board of directors to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise. For example, if in the due exercise of its fiduciary obligations, our board of directors were to determine that a takeover proposal is not in the best interests of us or our stockholders, our board of directors could cause shares of preferred stock to be issued without stockholder approval in one or more private offerings or other transactions that might dilute the voting or other rights of the proposed acquirer or insurgent stockholder or stockholder group. In this regard, our amended and restated certificate of incorporation grants our board of directors' broad power to establish the rights and preferences of authorized and unissued shares of preferred stock. The issuance of shares of preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of common stock. The issuance may also adversely affect the rights and powers, including voting rights, of these holders and may have the effect of delaying, deterring or preventing a change in control of us.

Exclusive forum. Our amended and restated bylaws provide that the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for any state law claims for: (i) any derivative action or proceeding brought on behalf of our company, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors or officers to the company or our stockholders, (iii) any action asserting a claim against our company arising pursuant to any provision of the Delaware General Corporation Law or our certificate of incorporation or bylaws, (iv) any action to interpret, apply, enforce, or determine the validity of our certificate of incorporation or bylaws, or (v) any action asserting a claim against our company governed by the internal affairs doctrine. This

exclusive forum provision will not apply to any causes of action arising under the Securities Act or the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. In addition, unless we consent in writing to the selection of an alternate forum, the U.S. federal district courts shall be the sole and exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act. Although our amended and restated bylaws contain the choice of forum provision described above, it is possible that a court could rule that such provisions are inapplicable for a particular claim or action or that such provisions are unenforceable.

Transfer agent and registrar

The transfer agent and registrar for our common stock is . The transfer agent and registrar's address is .

Listing

We intend to apply to list our common stock on the Nasdaq Global Market under the symbol "ABSI."

Limitations of liability and indemnification matters

For a discussion of liability and indemnification, see "Management—Limitation on liability and indemnification matters."

Shares Eligible for Future Sale

Prior to this offering, there has been no public market for our common stock. Future sales of our common stock in the public market, or the availability of such shares for sale in the public market, could adversely affect market prices prevailing from time to time. As described below, only a limited number of shares will be available for sale shortly after this offering due to contractual and legal restrictions on resale. Nevertheless, sales of our common stock in the public market after such restrictions lapse, or the perception that those sales may occur, could adversely affect the prevailing market price at such time and our ability to raise equity capital in the future.

Sale of restricted shares

Based on the number of shares of common stock outstanding as of December 31, 2020, upon completion of this offering, shares of common stock will be outstanding, assuming no exercise by the underwriters of their option to purchase additional shares and no exercise of options. All of the shares sold in this offering will be freely tradable. The remaining shares of common stock outstanding after this offering will be restricted as a result of securities laws or lock-up agreements as described below. Following the expiration of the lock-up period, all shares will be eligible for resale in compliance with Rule 144 or Rule 701 under the Securities Act. “Restricted securities” as defined under Rule 144 of the Securities Act were issued and sold by us in reliance on exemptions from the registration requirements of the Securities Act. These shares may be sold in the public market only if registered or qualified for an exemption from registration, such as under Rule 144 or Rule 701 under the Securities Act.

Rule 144

In general, a person who has beneficially owned restricted stock for at least six months would be entitled to sell their securities provided that (i) such person is not deemed to have been one of our affiliates at the time of, or at any time during the 90 days preceding, a sale and (ii) we are subject to the Exchange Act periodic reporting requirements for at least 90 days before the sale. Persons who have beneficially owned restricted shares for at least six months but who are our affiliates at the time of, or any time during the 90 days preceding, a sale, would be subject to additional restrictions, by which such person would be entitled to sell within any three-month period only a number of securities that does not exceed the greater of either of the following:

- 1% of the number of shares then outstanding, which will equal approximately shares immediately after this offering assuming no exercise of the underwriters’ option to purchase additional shares, based on the number of shares outstanding as of December 31, 2020; or
- the average weekly trading volume of our common stock on The Nasdaq Global Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale;

provided, in each case, that we have been subject to the Exchange Act periodic reporting requirements for at least 90 days before the sale. Such sales both by affiliates and by non-affiliates must also comply with the manner of sale, current public information and notice provisions of Rule 144.

Rule 701

Rule 701 under the Securities Act (Rule 701), as in effect on the date of this prospectus, permits resales of shares in reliance upon Rule 144 but without compliance with certain restrictions of Rule 144, including the holding period requirement. Most of our employees, executive officers or directors who purchased shares under a written compensatory plan or contract may be entitled to rely on the resale provisions of Rule 701, but all holders of Rule 701 shares are required to wait until

90 days after the date of this prospectus before selling their shares. However, substantially all Rule 701 shares are subject to lock-up agreements as described below and under “Underwriting” included elsewhere in this prospectus and will become eligible for sale upon the expiration of the restrictions set forth in those agreements.

Lock-up agreements

In connection with this offering, we, each of our directors and executive officers, and holders of substantially all of our securities have agreed with the underwriters that for a period of 180 days following the date of this prospectus, subject to certain exceptions, we and they will not offer, sell, assign, transfer, pledge, contract to sell or otherwise dispose of or hedge any shares of our common stock or any securities convertible into or exchangeable for shares of our common stock. The representatives of the underwriters may, in their sole discretion, at any time, release all or any portion of the shares from the restrictions in this agreement.

Rule 10b5-1 trading plans

Following the completion of this offering, certain of our officers, directors and significant stockholders may adopt written plans, known as Rule 10b5-1 trading plans, in which they will contract with a broker to buy or sell shares of our common stock on a periodic basis to diversify their assets and investments. Under these 10b5-1 trading plans, a broker may execute trades pursuant to parameters established by the officer, director or stockholder when entering into the plan, without further direction from such officer, director or stockholder. Such sales would not commence until the expiration of the applicable lock-up agreements entered into by such officer, director or stockholder in connection with this offering.

Registration rights

We are party to an investor rights agreement which provides that holders holding shares of our common stock, including shares issuable upon the conversion of our redeemable convertible preferred stock, have the right to demand that we file a registration statement or request that their shares of our common stock be covered by a registration statement that we are otherwise filing. See “Description of Capital Stock—Registration rights” in this prospectus. Except for shares purchased by affiliates, registration of their shares under the Securities Act would result in these shares becoming freely tradable without restriction under the Securities Act immediately upon effectiveness of the registration, subject to the expiration of the lock-up period described above and under “Underwriting” in this prospectus, and to the extent such shares have been released from any repurchase option that we may hold.

Equity incentive plans

As soon as practicable after the completion of this offering, we intend to file a Form S-8 registration statement under the Securities Act to register shares of our common stock subject to options and other equity awards outstanding or reserved for issuance under our equity incentive plans. This registration statement will become effective immediately upon filing, and shares covered by this registration statement will thereupon be eligible for sale in the public markets, subject to Rule 144 limitations applicable to affiliates and any lock-up agreements. For a more complete discussion of our equity incentive plans, see “Executive and Director Compensation—Employee Benefits and Stock Plans.”

Material U.S. Federal Income Tax Considerations to Non-U.S. Holders

The following discussion is a summary of the material U.S. federal income tax considerations applicable to non-U.S. holders (as defined below) with respect to their ownership and disposition of shares of our common stock issued pursuant to this offering. For purposes of this discussion, a non-U.S. holder means a beneficial owner of our common stock that is for U.S. federal income tax purposes:

- a non-resident alien individual;
- a foreign corporation or any other foreign organization taxable as a corporation for U.S. federal income tax purposes; or
- a foreign estate or trust, the income of which is not subject to U.S. federal income tax on a net income basis.

This discussion does not address the tax treatment of partnerships or other entities that are pass-through entities for U.S. federal income tax purposes or persons that hold their common stock through partnerships or other pass-through entities. A partner in a partnership or an investor in any other pass-through entity that will hold our common stock should consult his, her or its tax advisor regarding the tax consequences of purchasing, owning and disposing of our common stock through a partnership or other pass-through entity, as applicable.

This discussion is based on current provisions of the Internal Revenue Code of 1986 as amended (the Code), U.S. Treasury Regulations promulgated thereunder, current administrative rulings and judicial decisions, all as in effect as of the date of this prospectus and, all of which are subject to change or to differing interpretation, possibly with retroactive effect. Any such change or differing interpretation could alter the tax consequences to non-U.S. holders described in this prospectus. There can be no assurance that the Internal Revenue Service, which we refer to as the IRS, will not challenge one or more of the tax consequences described herein. We assume in this discussion that a non-U.S. holder holds shares of our common stock as a capital asset within the meaning of Section 1221 of the Code, generally property held for investment.

This discussion does not address all aspects of U.S. federal income taxation that may be relevant to a particular non-U.S. holder in light of that non-U.S. holder’s individual circumstances including the alternative minimum tax, or the Medicare tax on net investment income, the rules regarding qualified small business stock within the meaning of Section 1202 of the Code and any election to apply Section 1400Z-2 of the Code to gains recognized with respect to shares of our common stock. This discussion also does not address any U.S. state, local or non-U.S. taxes or any other aspect of any U.S. federal tax other than the income tax. This discussion also does not consider any specific facts or circumstances that may apply to a non-U.S. holder and does not address the special tax rules applicable to particular non-U.S. holders, such as:

- insurance companies;
- tax-exempt or governmental organizations;
- financial institutions;
- broker-dealers and traders in securities;
- regulated investment companies;
- pension plans;

- “controlled foreign corporations,” “passive foreign investment companies,” and corporations that accumulate earnings to avoid U.S. federal income tax;
- “qualified foreign pension funds,” or entities wholly owned by a “qualified foreign pension fund”;
- persons deemed to sell our common stock under the constructive sale provisions of the Code;
- persons that hold our common stock as part of a straddle, hedge, conversion transaction, synthetic security or other integrated investment;
- persons who have elected to mark securities to market;
- persons who have a functional currency other than the U.S. dollar;
- persons who hold or receive our common stock pursuant to the exercise of any employee stock option or otherwise as compensation;
- certain U.S. expatriates; and
- persons subject to special tax accounting rules as a result of any item of gross income with respect to the common stock being taken into account in an applicable financial statement under Section 451(b) of the Code.

This discussion is for general information only and is not tax advice. Accordingly, all prospective non-U.S. holders of our common stock should consult their tax advisors with respect to the U.S. federal, state, local and non-U.S. tax consequences of the purchase, ownership and disposition of our common stock.

Distributions on our common stock

Distributions, if any, on our common stock will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. If a distribution exceeds our current and accumulated earnings and profits, the excess will be treated as a tax-free return of the non-U.S. holder’s investment, up to such holder’s tax basis in the common stock. Any remaining excess will be treated as capital gain, subject to the tax treatment described below in “Gain on sale or other taxable disposition of our common stock.” Any such distributions will also be subject to the discussions below under the sections titled “Backup withholding and information reporting” and “Withholding and information reporting requirements—FATCA.”

Subject to the discussion in the following two paragraphs in this section, dividends paid to a non-U.S. holder generally will be subject to withholding of U.S. federal income tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder’s country of residence. If we or another withholding agent apply over-withholding or if a non-U.S. holder does not timely provide us with the required certification, the non-U.S. holder may be entitled to a refund or credit of any excess tax withheld by timely filing an appropriate claim with the IRS.

Dividends that are treated as effectively connected with a trade or business conducted by a non-U.S. holder within the United States and, if an applicable income tax treaty so provides, that are attributable to a permanent establishment or a fixed base maintained by the non-U.S. holder within the United States, are generally exempt from the 30% withholding tax if the non-U.S. holder satisfies applicable certification and disclosure requirements. However, such U.S. effectively connected income, net of specified deductions and credits, is taxed at the regular U.S. federal income tax rates applicable to United States persons (as defined in the Code). Any U.S. effectively connected income received by a non-U.S. holder that is a corporation may also, under certain

circumstances, be subject to an additional “branch profits tax” at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder’s country of residence.

A non-U.S. holder of our common stock who claims the benefit of an applicable income tax treaty between the United States and such holder’s country of residence generally will be required to provide a properly executed IRS Form W-8BEN or W-8BEN-E (or successor form) to the applicable withholding agent and satisfy applicable certification and other requirements. Non-U.S. holders are urged to consult their tax advisors regarding their entitlement to benefits under a relevant income tax treaty. A non-U.S. holder that is eligible for a reduced rate of U.S. withholding tax under an income tax treaty may obtain a refund or credit of any excess amounts withheld by timely filing a U.S. tax return with the IRS.

Gain on sale or other taxable disposition of our common stock

Subject to the discussions below under “Backup withholding and information reporting” and “Withholding and information reporting requirements—FATCA,” a non-U.S. holder generally will not be subject to any U.S. federal income tax on any gain realized upon such holder’s sale or other taxable disposition of shares of our common stock unless:

- the gain is effectively connected with the non-U.S. holder’s conduct of a U.S. trade or business and, if an applicable income tax treaty so provides, is attributable to a permanent establishment or a fixed-base maintained by such non-U.S. holder in the United States, in which case the non-U.S. holder generally will be taxed on a net income basis at the regular U.S. federal income tax rates applicable to United States persons (as defined in the Code) and, if the non-U.S. holder is a foreign corporation, the branch profits tax described above in “Distributions on our common stock” also may apply;
- the non-U.S. holder is a nonresident alien individual who is present in the United States for 183 days or more in the taxable year of the disposition and certain other conditions are met, in which case the non-U.S. holder will be subject to a 30% tax (or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder’s country of residence) on the net gain derived from the disposition, which may be offset by certain U.S. source capital losses of the non-U.S. holder, if any (even though the individual is not considered a resident of the United States), provided that the non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses; or
- we are, or have been, at any time during the five-year period preceding such sale of other taxable disposition (or the non-U.S. holder’s holding period, if shorter) a “United States real property holding corporation,” unless our common stock is regularly traded on an established securities market and the non-U.S. holder holds no more than 5% of our outstanding common stock, directly and indirectly, actually and constructively, during the shorter of the 5-year period ending on the date of the disposition or the period that the non-U.S. holder held our common stock. Generally, a corporation is a U.S. real property holding corporation only if the fair market value of its U.S. real property interests equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus its other assets used or held for use in a trade or business. Although there can be no assurance, we do not believe that we are, or have been, a U.S. real property holding corporation, or that we are likely to become one in the future. No assurance can be provided that our common stock will be regularly traded on an established securities market for purposes of the rules described above.

Backup withholding and information reporting

We must report annually to the IRS and to each non-U.S. holder the gross amount of the distributions on our common stock paid to such holder and the tax withheld, if any, with respect to

such distributions. Non-U.S. holders may have to comply with specific certification procedures to establish that the holder is not a U.S. person (as defined in the Code) in order to avoid backup withholding at the applicable rate with respect to dividends on our common stock. Dividends paid to non-U.S. holders subject to withholding of U.S. federal income tax, as described above in “Distributions on Our Common Stock,” generally will be exempt from U.S. backup withholding.

Information reporting and backup withholding will generally apply to the proceeds of a disposition of our common stock by a non-U.S. holder effected by or through the U.S. office of any broker, U.S. or foreign, unless the holder certifies its status as a non-U.S. holder and satisfies certain other requirements, or otherwise establishes an exemption. Generally, information reporting and backup withholding will not apply to a payment of disposition proceeds to a non-U.S. holder where the transaction is effected outside the United States through a non-U.S. office of a broker. However, for information reporting purposes, dispositions effected through a non-U.S. office of a broker with substantial U.S. ownership or operations generally will be treated in a manner similar to dispositions effected through a U.S. office of a broker. Non-U.S. holders should consult their tax advisors regarding the application of the information reporting and backup withholding rules to them. Copies of information returns may be made available to the tax authorities of the country in which the non-U.S. holder resides or is incorporated under the provisions of a specific treaty or agreement. Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules from a payment to a non-U.S. holder can be refunded or credited against the non-U.S. holder’s U.S. federal income tax liability, if any, provided that an appropriate claim is filed with the IRS in a timely manner.

Withholding and information reporting requirements — FATCA

Provisions of the Code commonly referred to as the Foreign Account Tax Compliance Act (FATCA), generally imposes a U.S. federal withholding tax at a rate of 30% on payments of dividends on our common stock paid to a foreign entity unless (i) if the foreign entity is a “foreign financial institution,” such foreign entity undertakes certain due diligence, reporting, withholding, and certification obligations, (ii) if the foreign entity is not a “foreign financial institution,” such foreign entity identifies certain of its U.S. investors, if any, or (iii) the foreign entity is otherwise exempt under FATCA. Under applicable U.S. Treasury regulations, withholding under FATCA currently applies to payments of dividends on our common stock. While withholding under FATCA would have applied also to payments of gross proceeds from the sale or other disposition of stock on or after January 1, 2019, proposed U.S. Treasury Regulations eliminate FATCA withholding on payments of gross proceeds entirely. Taxpayers (including withholding agents) can currently rely on the proposed U.S. Treasury Regulations. Under certain circumstances, a non-U.S. holder may be eligible for refunds or credits of this withholding tax. An intergovernmental agreement between the United States and an applicable foreign country may modify the requirements described in this paragraph. Non-U.S. holders should consult their tax advisors regarding the possible implications of this legislation on their investment in our common stock and the entities through which they hold our common stock, including, without limitation, the process and deadlines for meeting the applicable requirements to prevent the imposition of the 30% withholding tax under FATCA.

Underwriting

We are offering the shares of common stock described in this prospectus through a number of underwriters. J.P. Morgan Securities LLC, Credit Suisse Securities (USA) LLC, BofA Securities, Inc. and Cowen and Company, LLC are acting as joint book running managers of the offering and as representatives of the underwriters. We have entered into an underwriting agreement with the underwriters. Subject to the terms and conditions of the underwriting agreement, we have agreed to sell to the underwriters, and each underwriter has severally agreed to purchase, at the public offering price less the underwriting discounts and commissions set forth on the cover page of this prospectus, the number of shares of common stock listed next to its name in the following table:

NAME	NUMBER OF SHARES
J.P. Morgan Securities LLC	
Credit Suisse Securities (USA) LLC	
BofA Securities, Inc.	
Cowen and Company, LLC	
Stifel, Nicolaus & Company, Incorporated	
Total	

The underwriters are committed to purchase all the shares of common stock offered by us if they purchase any shares.

The underwriting agreement also provides that if an underwriter defaults, the purchase commitments of non-defaulting underwriters may also be increased or the offering may be terminated.

The underwriters propose to offer the shares of common stock directly to the public at the initial public offering price set forth on the cover page of this prospectus and to certain dealers at that price less a concession not in excess of $ per share. After the initial offering of the shares to the public, if all of the shares of common stock are not sold at the initial public offering price, the underwriters may change the offering price and the other selling terms. Sales of any shares made outside of the United States may be made by affiliates of the underwriters.

The underwriters have an option to buy up to additional shares of common stock from us to cover sales of shares by the underwriters which exceed the number of shares specified in the table above. The underwriters have 30 days from the date of this prospectus to exercise this option to purchase additional shares. If any shares are purchased with this option to purchase additional shares, the underwriters will purchase shares in approximately the same proportion as shown in the table above. If any additional shares of common stock are purchased, the underwriters will offer the additional shares on the same terms as those on which the shares are being offered.

The underwriting fee is equal to the public offering price per share of common stock less the amount paid by the underwriters to us per share of common stock. The underwriting fee is $ per share. The following table shows the per share and total underwriting discounts and

commissions to be paid to the underwriters assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	WITHOUT OPTION TO PURCHASE ADDITIONAL SHARES EXERCISE	WITH FULL OPTION TO PURCHASE ADDITIONAL SHARES EXERCISE
Per Share	$	$
Total	$	$

We estimate that the total expenses of this offering, including registration, filing and listing fees, printing fees and legal and accounting expenses, but excluding the underwriting discounts and commissions, will be approximately $. We have also agreed to reimburse the underwriters for certain of their expenses incurred in connection with, among others, the review and clearance by the Financial Industry Regulatory Authority, Inc. in an amount not to exceed $.

A prospectus in electronic format may be made available on the web sites maintained by one or more underwriters, or selling group members, if any, participating in the offering. The underwriters may agree to allocate a number of shares to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the representatives to underwriters and selling group members that may make Internet distributions on the same basis as other allocations.

We have agreed that we will not (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend or otherwise transfer or dispose of, directly or indirectly, or submit to, or file with, the Securities and Exchange Commission a registration statement under the Securities Act of 1933, or the Securities Act, relating to, any shares of our common stock or securities convertible into or exercisable or exchangeable for any shares of our common stock, or publicly disclose the intention to make any offer, sale, pledge, loan, disposition or filing, or (ii) enter into any swap or other arrangement that transfers all or a portion of the economic consequences associated with the ownership of any shares of common stock or any such other securities (regardless of whether any of these transactions are to be settled by the delivery of shares of common stock or such other securities, in cash or otherwise), in each case without the prior written consent of J.P. Morgan Securities LLC, Credit Suisse Securities (USA) LLC, BofA Securities, Inc. and Cowen and Company, LLC for a period of 180 days after the date of this prospectus, other than the shares of our common stock to be sold in this offering.

Our directors and executive officers, and certain of our significant stockholders (such persons, the lock-up parties) have entered into lock-up agreements with the underwriters prior to the commencement of this offering pursuant to which each lock-up party, with limited exceptions, for a period of 180 days after the date of this prospectus (such period, the restricted period), may not (and may not cause any of their direct or indirect affiliates to), without the prior written consent of J.P. Morgan Securities LLC, Credit Suisse Securities (USA) LLC, BofA Securities, Inc. and Cowen and Company, LLC, (1) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into or exercisable or exchangeable for our common stock (including, without limitation, common stock or such other securities which may be deemed to be beneficially owned by such lock-up parties in accordance with the rules and regulations of the SEC and securities which may be issued upon exercise of a stock option or warrant (collectively with the common stock, the lock-up securities)), (2) enter into any hedging, swap or other agreement or transaction that transfers, in whole or in part, any of the economic consequences of ownership of the lock-up securities, whether any such transaction described in clause (1) or (2) above is to be settled by

delivery of lock-up securities, in cash or otherwise, (3) make any demand for, or exercise any right with respect to, the registration of any lock-up securities, or (4) publicly disclose the intention to do any of the foregoing. Such persons or entities have further acknowledged that these undertakings preclude them from engaging in any hedging or other transactions or arrangements (including, without limitation, any short sale or the purchase or sale of, or entry into, any put or call option, or combination thereof, forward, swap or any other derivative transaction or instrument, however described or defined) designed or intended, or which could reasonably be expected to lead to or result in, a sale or disposition or transfer (by any person or entity, whether or not a signatory to such agreement) of any economic consequences of ownership, in whole or in part, directly or indirectly, of any lock-up securities, whether any such transaction or arrangement (or instrument provided for thereunder) would be settled by delivery of lock-up securities, in cash or otherwise. The lock-up party further confirms that it has furnished J.P. Morgan Securities LLC, Credit Suisse Securities (USA) LLC, BofA Securities, Inc. and Cowen and Company, LLC with the details of any transaction that the lock-up party, or any of its affiliates, is a party to as of the date of this prospectus, which transaction would have been restricted by the lock-up agreement if it had been entered into by the lock-up party during the restricted period.

The restrictions described in the immediately preceding paragraph and contained in the lock-up agreements between the underwriters and the lock-up parties do not apply, subject in certain cases to various conditions, to certain transactions, including (a) transfers of lock-up securities: (i) as bona fide gifts, or for bona fide estate planning purposes, (ii) by will, other testamentary document or intestacy, (iii) to any trust or other entity for the direct or indirect benefit of the lock-up party or any immediate family member, or if the lock-up party is a trust, to a trustor or beneficiary of the trust or to the estate of a beneficiary of such trust, (iv) to a corporation, partnership, limited liability company, trust or other entity of which the lock-up party and its immediate family members are the legal and beneficial owner of all of the outstanding equity securities or similar interests or are under common control with the undersigned, (v) to a nominee or custodian of a person or entity to whom a disposition or transfer would be permissible under clauses (i) through (iv), (vi) in the case of a corporation, partnership, limited liability company, trust or other business entity, (A) to another corporation, partnership, limited liability company, trust or other business entity that is an affiliate of the lock-up party, or to any investment fund or other entity controlling, controlled by, managing or managed by or under common control with the lock-up party or its affiliates (including, for the avoidance of doubt, where the lock-up party is a partnership, to its general partner or a successor partnership or fund, or any other funds managed by such partnership) or (B) as part of a distribution to members, partners or equity holders of the lock-up party, (vii) by operation of law, (viii) to us from an employee, independent contractor or other service provider upon death, disability or termination of employment or cessation of services, in each case, of such employee, independent contractor or service provider, (ix) as part of a sale of lock-up securities acquired from the underwriters in this offering or in open market transactions after the date of this prospectus, (x) to us in connection with the vesting, settlement or exercise of restricted stock units, options, warrants or other rights to purchase shares of our common stock (including, in each case, by way of “net” or “cashless” exercise), including for the payment of exercise price and tax and remittance payments due as a result of the vesting, settlement, or exercise of such restricted stock units, options, warrants or rights, provided that any such shares of our common stock received upon such exercise, vesting or settlement shall be subject to the terms of the lock-up agreement, and provided further that any such restricted stock units, options, warrants or rights are held by the lock-up party pursuant to an agreement or equity awards granted under a stock incentive plan or other equity award plan, each such agreement or plan which is described in this prospectus, or (xi) pursuant to a bona fide third party tender offer, merger, consolidation or other similar transaction approved by our board of directors and made to all stockholders involving a change in control, provided that if such transaction is not completed, all such lock-up securities would remain subject to the restrictions in the immediately preceding paragraph; (b) exercise of the options, settlement of RSUs or other equity awards, or the exercise of warrants granted pursuant to plans or arrangements described in this prospectus, provided that any lock-up securities received upon such exercise, vesting or

settlement would be subject to restrictions similar to those in the immediately preceding paragraph; (c) the conversion of outstanding preferred stock, warrants to acquire preferred stock or convertible securities into shares of our common stock or warrants to acquire shares of our common stock, provided that any common stock or warrant received upon such conversion would be subject to restrictions similar to those in the immediately preceding paragraph; and (d) the establishment by lock-up parties of trading plans pursuant to Rule 10b5-1 under the Exchange Act for the transfer of lock-up securities, provided that such plan does not provide for the transfer of lock-up securities during the restricted period and no filing by any person under the Exchange Act or other public announcement shall be required or made voluntarily in connection with the establishment of the trading plan during the restricted period in contravention of the lock-up agreement.

J.P. Morgan Securities LLC, Credit Suisse Securities (USA) LLC, BofA Securities, Inc. and Cowen and Company, LLC, in their sole discretion, may release the securities subject to any of the lock-up agreements with the underwriters described above, in whole or in part at any time.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act.

We intend to apply to list our common stock on the Nasdaq Global Market under the symbol “ABSI.”

In connection with this offering, the underwriters may engage in stabilizing transactions, which involves making bids for, purchasing and selling shares of common stock in the open market for the purpose of preventing or retarding a decline in the market price of the common stock while this offering is in progress. These stabilizing transactions may include making short sales of common stock, which involves the sale by the underwriters of a greater number of shares of common stock than they are required to purchase in this offering, and purchasing shares of common stock on the open market to cover positions created by short sales. Short sales may be “covered” shorts, which are short positions in an amount not greater than the underwriters’ option to purchase additional shares referred to above, or may be “naked” shorts, which are short positions in excess of that amount. The underwriters may close out any covered short position either by exercising their option to purchase additional shares, in whole or in part, or by purchasing shares in the open market. In making this determination, the underwriters will consider, among other things, the price of shares available for purchase in the open market compared to the price at which the underwriters may purchase shares through the option to purchase additional shares. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market that could adversely affect investors who purchase in this offering. To the extent that the underwriters create a naked short position, they will purchase shares in the open market to cover the position.

The underwriters have advised us that, pursuant to Regulation M of the Securities Act, they may also engage in other activities that stabilize, maintain or otherwise affect the price of the common stock, including the imposition of penalty bids. This means that if the representatives of the underwriters purchase common stock in the open market in stabilizing transactions or to cover short sales, the representatives can require the underwriters that sold those shares as part of this offering to repay the underwriting discount received by them.

These activities may have the effect of raising or maintaining the market price of the common stock or preventing or retarding a decline in the market price of the common stock, and, as a result, the price of the common stock may be higher than the price that otherwise might exist in the open market. If the underwriters commence these activities, they may discontinue them at any time. The underwriters may carry out these transactions on The Nasdaq Global Market, in the over the counter market or otherwise.

Prior to this offering, there has been no public market for our common stock. The initial public offering price will be determined by negotiations between us and the representatives of the

underwriters. In determining the initial public offering price, we and the representatives of the underwriters expect to consider a number of factors including:

- the information set forth in this prospectus and otherwise available to the representatives;
- our prospects and the history and prospects for the industry in which we compete;
- an assessment of our management;
- our prospects for future earnings;
- the general condition of the securities markets at the time of this offering;
- the recent market prices of, and demand for, publicly-traded common stock of generally comparable companies; and
- other factors deemed relevant by the underwriters and us.

Neither we nor the underwriters can assure investors that an active trading market will develop for our shares of common stock, or that the shares will trade in the public market at or above the initial public offering price.

Other relationships

Certain of the underwriters and their affiliates have provided in the past to us and our affiliates and may provide from time to time in the future certain commercial banking, financial advisory, investment banking and other services for us and such affiliates in the ordinary course of their business, for which they have received and may continue to receive customary fees and commissions. In addition, from time to time, certain of the underwriters and their affiliates may effect transactions for their own account or the account of customers, and hold on behalf of themselves or their customers, long or short positions in our debt or equity securities or loans, and may do so in the future.

Selling restrictions

General

Other than in the United States, no action has been taken by us or the underwriters that would permit a public offering of the securities offered by this prospectus in any jurisdiction where action for that purpose is required. The securities offered by this prospectus may not be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus comes are advised to inform themselves about and to observe any restrictions relating to the offering and the distribution of this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus in any jurisdiction in which such an offer or a solicitation is unlawful.

Notice to prospective investors in Canada

The shares may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the shares must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

Notice to prospective investors in the European Economic Area

In relation to each Member State of the European Economic Area (each an "EEA State"), no shares have been offered or will be offered pursuant to the offering to the public in that EEA State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that EEA State or, where appropriate, approved in another EEA State and notified to the competent authority in that EEA State, all in accordance with the EU Prospectus Regulation, except that it may make an offer to the public in that EEA State of any shares at any time under the following exemptions under the EU Prospectus Regulation:

(a) to any legal entity which is a qualified investor as defined under the EU Prospectus Regulation;

(b) to fewer than 150 natural or legal persons (other than qualified investors as defined under the EU Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or

(c) in any other circumstances falling within Article 1(4) of the EU Prospectus Regulation, provided that no such offer of the shares shall require the Issuer or any Manager to publish a prospectus pursuant to Article 3 of the EU Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the EU Prospectus Regulation.

For the purposes of this provision, the expression an "offer to the public" in relation to the shares in any EEA State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares, and the expression "EU Prospectus Regulation" means Regulation (EU) 2017/1129.

Notice to prospective investors in the United Kingdom

In relation to the United Kingdom, no shares have been offered or will be offered pursuant to the offering to the public in the United Kingdom prior to the publication of a prospectus in relation to the shares which has been approved by the Financial Conduct Authority in accordance with the UK Prospectus Regulation, except that it may make an offer to the public in the United Kingdom of any shares at any time under the following exemptions under the UK Prospectus Regulation:

(d) to any legal entity which is a qualified investor as defined under the UK Prospectus Regulation;

(e) to fewer than 150 natural or legal persons (other than qualified investors as defined under the UK Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or

(f) in any other circumstances falling within Article 1(4) of the UK Prospectus Regulation.

provided that no such offer of the shares shall require the Issuer or any Manager to publish a prospectus pursuant to Article 3 of the UK Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation.

In the United Kingdom, the offering is only addressed to, and is directed only at, “qualified investors” within the meaning of Article 2(e) of the UK Prospectus Regulation, who are also (i) persons having professional experience in matters relating to investments who fall within the definition of "investment professionals" in Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order"); (ii) high net worth bodies corporate, unincorporated associations and partnerships and trustees of high value trusts as described in Article 49(2) of the Order; or (iii) persons to whom it may otherwise lawfully be communicated (all such persons being referred to as “relevant persons”). This document must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this document relates is available only to relevant persons and will be engaged in only with relevant persons.

For the purposes of this provision, the expression an “offer to the public” in relation to the shares in the United Kingdom means the communication in any form and by any means of sufficient information on the terms of the offering and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares, and the expression “UK Prospectus Regulation” means the UK version of Regulation (EU) No 2017/1129 as amended by The Prospectus (Amendment etc.) (EU Exit) Regulations 2019, which is part of UK law by virtue of the European Union (Withdrawal) Act 2018.

Notice to prospective investors in Switzerland

The shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange (SIX) or on any other stock exchange or regulated trading facility in Switzerland. This document does not constitute a prospectus within the meaning of, and has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the shares or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering us the shares have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of shares will not be supervised by, the Swiss Financial Market Supervisory Authority (FINMA), and the offer of shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes (CISA). The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of shares.

Notice to prospective investors in Australia

This prospectus:

- does not constitute a disclosure document or a prospectus under Chapter 6D.2 of the Corporations Act 2001 (Cth) (Corporations Act);
- has not been, and will not be, lodged with the Australian Securities and Investments Commission (ASIC), as a disclosure document for the purposes of the Corporations Act and does not purport to include the information required of a disclosure document for the purposes of the Corporations Act; and
- may only be provided in Australia to select investors who are able to demonstrate that they fall within one or more of the categories of investors, available under section 708 of the Corporations Act (Exempt Investors).

The shares may not be directly or indirectly offered for subscription or purchased or sold, and no invitations to subscribe for or buy the shares may be issued, and no draft or definitive offering memorandum, advertisement or other offering material relating to any shares may be distributed in Australia, except where disclosure to investors is not required under Chapter 6D of the Corporations Act or is otherwise in compliance with all applicable Australian laws and regulations. By submitting an application for the shares, you represent and warrant to us that you are an Exempt Investor.

As any offer of shares under this document will be made without disclosure in Australia under Chapter 6D.2 of the Corporations Act, the offer of those securities for resale in Australia within 12 months may, under section 707 of the Corporations Act, require disclosure to investors under Chapter 6D.2 if none of the exemptions in section 708 applies to that resale. By applying for the shares you undertake to us that you will not, for a period of 12 months from the date of issue of the shares, offer, transfer, assign or otherwise alienate those shares to investors in Australia except in circumstances where disclosure to investors is not required under Chapter 6D.2 of the Corporations Act or where a compliant disclosure document is prepared and lodged with ASIC.

Notice to prospective investors in Japan

The shares have not been and will not be registered pursuant to Article 4, Paragraph 1 of the Financial Instruments and Exchange Act. Accordingly, none of the shares nor any interest therein may be offered or sold, directly or indirectly, in Japan or to, or for the benefit of, any “resident” of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to or for the benefit of a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Act and any other applicable laws, regulations and ministerial guidelines of Japan in effect at the relevant time.

Notice to prospective investors in Hong Kong

The shares have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, other than (a) to “professional investors” as defined in the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong) (SFO) of Hong Kong and any rules made thereunder; or (b) in other circumstances which do not result in the document being a “prospectus” as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32) of Hong Kong (the CO) or which do not constitute an offer to the public within the meaning of the CO. No advertisement, invitation or document relating to the shares has been or may be issued or has been or may be in the possession of any person for the purposes of issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to “professional investors” as defined in the SFO and any rules made thereunder.

Notice to prospective investors in Singapore

Singapore SFA Product Classification — In connection with Section 309B of the SFA and the CMP Regulations 2018, unless otherwise specified before an offer of shares, we have determined, and hereby notify all relevant persons (as defined in Section 309A(1) of the SFA), that the shares are “prescribed capital markets products” (as defined in the CMP Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA).

04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products.

Each underwriter has acknowledged that this prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, each underwriter has represented and

agreed that it has not offered or sold any shares or caused the shares to be made the subject of an invitation for subscription or purchase and will not offer or sell any shares or cause the shares to be made the subject of an invitation for subscription or purchase, and has not circulated or distributed, nor will it circulate or distribute, this prospectus or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares, whether directly or indirectly, to any person in Singapore other than:

(a) to an institutional investor (as defined in Section 4A of the Securities and Futures Act (Chapter 289) of Singapore, as modified or amended from time to time (the "SFA")) pursuant to Section 274 of the SFA;

(b) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA and in accordance with the conditions specified in Section 275 of the SFA; or

(c) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

(a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

(b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor, securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the shares pursuant to an offer made under Section 275 of the SFA except

(i) to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 276(4)(i)(B) of the SFA;

(ii) where no consideration is or will be given for the transfer;

(iii) where the transfer is by operation of law;

(iv) as specified in Section 276(7) of the SFA; or

(v) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018.

Notice to prospective investors in China

This prospectus will not be circulated or distributed in the PRC and the shares will not be offered or sold, and will not be offered or sold to any person for re-offering or resale directly or indirectly to any residents of the PRC except pursuant to any applicable laws and regulations of the PRC. Neither this prospectus nor any advertisement or other offering material may be distributed or published in the PRC, except under circumstances that will result in compliance with applicable laws and regulations.

Notice to prospective investors in Korea

The shares have not been and will not be registered under the Financial Investments Services and Capital Markets Act of Korea and the decrees and regulations thereunder (FSCMA), and the shares have been and will be offered in Korea as a private placement under the FSCMA. None of the shares may be offered, sold or delivered directly or indirectly, or offered or sold to any person for re-offering or resale, directly or indirectly, in Korea or to any resident of Korea except pursuant to

the applicable laws and regulations of Korea, including the FSCMA and the Foreign Exchange Transaction Law of Korea and the decrees and regulations thereunder (FETL). The shares have not been listed on any of securities exchanges in the world including, without limitation, the Korea Exchange in Korea. Furthermore, the purchaser of the shares shall comply with all applicable regulatory requirements (including but not limited to requirements under the FETL) in connection with the purchase of the shares. By the purchase of the shares, the relevant holder thereof will be deemed to represent and warrant that if it is in Korea or is a resident of Korea, it purchased the shares pursuant to the applicable laws and regulations of Korea.

Notice to prospective investors in Taiwan

The shares have not been and will not be registered with the Financial Supervisory Commission of Taiwan pursuant to relevant securities laws and regulations and may not be sold, issued or offered within Taiwan through a public offering or in circumstances which constitutes an offer within the meaning of the Securities and Exchange Act of Taiwan that requires a registration or approval of the Financial Supervisory Commission of Taiwan. No person or entity in Taiwan has been authorized to offer, sell, give advice regarding or otherwise intermediate the offering and sale of the shares in Taiwan.

Notice to prospective investors in Saudi Arabia

This document may not be distributed in the Kingdom of Saudi Arabia except to such persons as are permitted under the Offers of Securities Regulations as issued by the board of the Saudi Arabian Capital Market Authority (CMA) pursuant to resolution number 2-11-2004 dated 4 October 2004 as amended by resolution number 1-28-2008, as amended. The CMA does not make any representation as to the accuracy or completeness of this document and expressly disclaims any liability whatsoever for any loss arising from, or incurred in reliance upon, any part of this document. Prospective purchasers of the securities offered hereby should conduct their own due diligence on the accuracy of the information relating to the securities. If you do not understand the contents of this document, you should consult an authorized financial advisor.

Notice to prospective investors in the Dubai International Financial Centre (DIFC)

This document relates to an Exempt Offer in accordance with the Markets Rules 2012 of the Dubai Financial Services Authority (DFSA). This document is intended for distribution only to persons of a type specified in the Markets Rules 2012 of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus supplement nor taken steps to verify the information set forth herein and has no responsibility for this document. The securities to which this document relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the securities offered should conduct their own due diligence on the securities. If you do not understand the contents of this document you should consult an authorized financial advisor.

In relation to its use in the DIFC, this document is strictly private and confidential and is being distributed to a limited number of investors and must not be provided to any person other than the original recipient, and may not be reproduced or used for any other purpose. The interests in the securities may not be offered or sold directly or indirectly to the public in the DIFC.

Notice to prospective investors in the United Arab Emirates

The shares have not been, and are not being, publicly offered, sold, promoted or advertised in the United Arab Emirates (including the DIFC) other than in compliance with the laws of the United Arab Emirates (and the DIFC) governing the issue, offering and sale of securities. Further, this prospectus does not constitute a public offer of securities in the United Arab Emirates (including the DIFC) and is not intended to be a public offer. This prospectus has not been approved by or filed

with the Central Bank of the United Arab Emirates, the Securities and Commodities Authority or the DFSA.

Notice to prospective investors in Bermuda

Shares may be offered or sold in Bermuda only in compliance with the provisions of the Investment Business Act of 2003 of Bermuda which regulates the sale of securities in Bermuda. Additionally, non-Bermudian persons (including companies) may not carry on or engage in any trade or business in Bermuda unless such persons are permitted to do so under applicable Bermuda legislation.

Notice to prospective investors in the British Virgin Islands

The shares are not being, and may not be offered to the public or to any person in the British Virgin Islands for purchase or subscription by or on behalf of us. The shares may be offered to companies incorporated under the BVI Business Companies Act, 2004 (British Virgin Islands), but only where the offer will be made to, and received by, the relevant BVI Company entirely outside of the British Virgin Islands.

Notice to prospective investors in South Africa

Due to restrictions under the securities laws of South Africa, no “offer to the public” (as such term is defined in the South African Companies Act, No. 71 of 2008 (as amended or re-enacted) (South African Companies Act)) is being made in connection with the issue of the shares in South Africa. Accordingly, this document does not, nor is it intended to, constitute a “registered prospectus” (as that term is defined in the South African Companies Act) prepared and registered under the South African Companies Act and has not been approved by, and/or filed with, the South African Companies and Intellectual Property Commission or any other regulatory authority in South Africa. The shares are not offered, and the offer shall not be transferred, sold, renounced or delivered, in South Africa or to a person with an address in South Africa, unless one or other of the following exemptions stipulated in section 96(1) applies:

Section 96(1)(a)	The offer, transfer, sale renunciation or delivery is to: (i) persons whose ordinary business, or part of whose ordinary business, is to deal in securities, as principal or agent; (ii) the South African Public Investment Corporation; (iii) persons or entities regulated by the Reserve Bank of South Africa; (iv) authorized financial service providers under South African law; (v) financial institutions recognized as such under South African law; (vi) a wholly-owned subsidiary of any person or entity contemplated in (c), (d) or (e), acting as agent in the capacity of an authorized portfolio manager for a pension fund, or as manager for a collective investment scheme (in each case duly registered as such under South African law); or (vii) any combination of the person in (i) to (vi); or
Section 96(1)(b)	the total contemplated acquisition cost of the securities, for any single addressee acting as principal is equal to or greater than ZAR1,000,000 or such higher amount as may be promulgated by notice in the Government Gazette of South Africa pursuant to section 96(2)(a) of the South African Companies Act.

Information made available in this prospectus should not be considered as “advice” as defined in the South African Financial Advisory and Intermediary Services Act, 2002.

Notice to prospective investors in Israel

This document does not constitute a prospectus under the Israeli Securities Law, 5728-1968, (the Israeli Securities Law), and has not been filed with or approved by the Israel Securities Authority. In Israel, this prospectus is being distributed only to, and is directed only at, and any offer of the shares of common stock is directed only at, (i) a limited number of persons in accordance with the Israeli Securities Law and (ii) investors listed in the first addendum (the Addendum), to the Israeli Securities Law, consisting primarily of joint investment in trust funds, provident funds, insurance companies, banks, portfolio managers, investment advisors, members of the Tel Aviv Stock Exchange, underwriters, venture capital funds, entities with equity in excess of NIS 50 million and "qualified individuals," each as defined in the Addendum (as it may be amended from time to time), collectively referred to as qualified investors (in each case, purchasing for their own account or, where permitted under the Addendum, for the accounts of their clients who are investors listed in the Addendum). Qualified investors are required to submit written confirmation that they fall within the scope of the Addendum, are aware of the meaning of same and agree to it.

Legal Matters

The validity of the common stock offered hereby will be passed upon for us by Goodwin Procter LLP, San Francisco, California. Legal matters in connection with the offering will be passed upon for the underwriters by Latham & Watkins LLP, Menlo Park, California.

Experts

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements at December 31, 2020 and 2019 and for each of the two years in the period ended December 31, 2020, as set forth in their report. We've included our financial statements in the prospectus and elsewhere in the registration statement in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

Changes in Independent Registered Public Accounting Firm

On November 12, 2020, we dismissed Delap LLP, or Delap, as our independent auditor. This dismissal was approved by our board of directors.

Delap audited our financial statements for the fiscal years ended December 31, 2018 and 2019, which were issued under auditing standards generally accepted in the United States. The audit report issued by Delap on March 19, 2020 did not contain an adverse opinion or a disclaimer of opinion and was not qualified or modified as to audit scope or accounting principles. Delap did not provide an audit opinion on our financial statements for any period subsequent to the fiscal year ended December 31, 2019.

During the years ended December 31, 2018 and 2019 and the subsequent interim period through November 12, 2020, (i) there were no "disagreements" between us and Delap (as that term is defined in Item 304(a)(1)(iv) of Regulation S-K) on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of Delap, would have caused them to make reference to the subject matter of the disagreements in connection with their report on the financial statements for such period, and (ii) there were no "reportable events" as such term is defined in Item 304(a)(1)(v) of Regulation S-K.

We provided Delap with a copy of the foregoing disclosures and requested Delap to furnish us with a letter addressed to the SEC stating whether or not Delap agrees with the above disclosures. A copy of Delap's letter is filed as an exhibit to the registration statement of which this prospectus is a part.

On March 4, 2021, we engaged Ernst & Young LLP, or E&Y, as our independent registered public accounting firm, which engagement has been approved by our board of directors. During the fiscal years ended December 31, 2018 and 2019 and the subsequent interim period through November 12, 2020, we (or any person on our behalf) did not consult with E&Y regarding any of the matters described in Items 304(a)(2)(i) or 304(a)(2)(ii) of Regulation S-K.

Where You Can Find More Information

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of common stock being offered by this prospectus, which constitutes a part of the registration statement. This prospectus does not contain all of the information in the registration statement and its exhibits. For further information with respect to us and the common stock offered by this prospectus, we refer you to the registration statement and its exhibits. Statements contained in this prospectus as to the contents of any contract or any other document referred to are not necessarily complete, and in each instance, we refer you to the copy of the contract or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference.

You can read our SEC filings, including the registration statement, over the Internet at the SEC's website at www.sec.gov. Upon completion of this offering, we will be subject to the information reporting requirements of the Exchange Act, and we will file reports, proxy statements and other information with the SEC. These reports, proxy statements and other information will be available via the SEC's website at www.sec.gov. We also maintain a website at www.absci.com, at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. **However, the information contained in or accessible through our website is not part of this prospectus or the registration statement of which this prospectus forms a part.**

Absci Corporation

Index to Financial Statements

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Absci Corporation

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Absci Corporation (the Company) as of December 31, 2019 and 2020, the related consolidated statements of operations and comprehensive loss, changes in redeemable convertible preferred stock and units and other stockholders' and members' deficit and cash flows for the years then ended, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2019 and 2020, and the results of its operations and its cash flows for the years then ended in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

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

We conducted our audits in accordance with the standards of the PCAOB and in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

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

Seattle, Washington

May 6, 2021

ABSCI CORPORATION
CONSOLIDATED BALANCE SHEETS

(In thousands, except for share and units, and per share and per units data)	December 31, 2020	December 31, 2019
ASSETS		
Current assets:		
Cash and cash equivalents	$ 69,867	$ 13,086
Receivables under development arrangements	1,594	222
Prepaid expenses and other current assets	1,773	339
Total current assets	73,234	13,647
Operating lease right-of-use assets	4,476	1,712
Property and equipment - net	8,909	3,298
Restricted cash	1,841	790
Other assets	109	24
TOTAL ASSETS	$ 88,569	$ 19,471
LIABILITIES, REDEEMABLE CONVERTIBLE PREFERRED STOCK AND UNITS AND OTHER STOCKHOLDERS' AND MEMBERS' DEFICIT		
Current liabilities:		
Accounts payable	$ 2,116	$ 268
Accrued expenses	1,570	532
Loans payable	632	—
Current portion of long-term debt	903	1,200
Current portion of operating lease obligations	770	295
Current portion of financing lease obligations	1,475	391
Deferred revenue	2,630	780
Total current liabilities	10,096	3,466
Long-term debt - net of current portion	4,141	1,746
Operating lease obligations - net of current portion	3,813	1,431
Finance lease obligations - net of current portion	2,766	953
Other long-term liabilities	749	271
TOTAL LIABILITIES	21,565	7,867
Commitments (See Note 6)		
Redeemable convertible preferred units, no par value, zero and 10,531,531 units authorized as of December 31, 2020 and 2019, respectively; zero and 9,964,572 units issued and outstanding as of December 31, 2020 and 2019, respectively; liquidation preference of zero and $32,945 as of December 31, 2020 and 2019, respectively	—	52,763
Redeemable convertible preferred stock, $0.0001 par value; 13,845,050 and zero shares authorized as of December 31, 2020 and 2019, respectively; 13,752,043 and zero shares issued and outstanding as of December 31, 2020 and 2019, respectively; liquidation preference of $202,861 and zero as of December 31, 2020 and 2019, respectively	156,433	—
OTHER STOCKHOLDERS' AND MEMBERS' DEFICIT		
Common units, no par value, zero and 15,851,391 units authorized as of December 31, 2020 and 2019, respectively; zero and 4,606,505 shares units issued and outstanding as of December 31, 2020 and 2019, respectively	—	—
Common stock, $0.0001 par value; 22,000,000 and zero shares authorized as of December 31, 2020 and 2019, respectively; 5,415,414 and zero shares issued and outstanding as of December 31, 2020 and 2019, respectively		—
Additional paid-in capital	637	217
Accumulated deficit	(90,066)	(41,376)
TOTAL OTHER STOCKHOLDERS' AND MEMBERS' DEFICIT	(89,429)	(41,159)
TOTAL LIABILITIES, REDEEMABLE CONVERTIBLE PREFERRED STOCK AND UNITS AND OTHER STOCKHOLDERS' AND MEMBERS' DEFICIT	$ 88,569	$ 19,471

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

ABSCI CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS

(In thousands, except for share and per share data)	For the Years Ended December 31, 2020	2019
Revenues		
Technology development revenue[1]	$ 4,117	$ 2,044
Collaboration revenue	663	16
Total revenues	4,780	2,060
Operating expenses		
Research and development	11,448	4,311
Selling, general and administrative	5,502	3,523
Depreciation and amortization	1,131	491
Total operating expenses	18,081	8,325
Operating loss	(13,301)	(6,265)
Other income (expense)		
Interest expense	(634)	(268)
Other expense, net	(418)	(51)
Total other expense, net	(1,052)	(319)
Net loss and other comprehensive loss	(14,353)	(6,584)
Adjustment of redeemable preferred units and stock	(34,336)	(17,286)
Cumulative undeclared preferred stock dividends	(780)	—
Net loss applicable to common stockholders and unitholders	$ (49,469)	$ (23,870)
Net loss per share attributable to common stockholders and unitholders: Basic and diluted	$ (10.55)	$ (5.18)
Weighted-average common shares and units outstanding: Basic and diluted	4,691,020	4,606,505

(1) See Note 10: Related party transactions, for discussion of related party revenue of $0.2 million and $0.9 million for the years ended December 31, 2020 and 2019, respectively.

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

ABSCI CORPORATION
STATEMENTS OF CHANGES IN REDEEMABLE CONVERTIBLE PREFERRED STOCK AND UNITS AND OTHER STOCKHOLDERS' AND MEMBERS' DEFICIT

(In thousands, except for share and per share data)	Redeemable Convertible Preferred Units		Redeemable Convertible Preferred Stock		Common Units		Common Stock		Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' and Members' Deficit
	Units	Amount	Shares	Amount	Units	Amount	Shares	Amount			
Balances - December 31, 2018	8,906,328	$ 25,151	—	$ —	4,606,505	$ —	—	$ —	$ 175	$ (17,506)	$ (17,331)
Issuance of Class D preferred units, net of issuance costs	1,058,244	10,326	—	—	—	—	—	—	—	—	—
Increase in preferred unit redemption value	—	17,286	—	—	—	—	—	—	—	(17,286)	(17,286)
Stock-based compensation	—	—	—	—	—	—	—	—	42		42
Net loss	—	—	—	—	—	—	—	—	—	(6,584)	(6,584)
Balances - December 31, 2019	9,964,572	52,763	—	—	4,606,505	—	—	—	217	(41,376)	(41,159)
Issuance of Class D preferred units, net of issuance costs	473,952	4,625	—	—	—	—	—	—	—	—	—
Increase in preferred unit redemption value	—	34,336	—	—	—	—	—	—	—	(34,336)	(34,336)
Conversion of preferred and common units to shares	(10,438,524)	(91,724)	10,438,524	91,724	(4,606,505)	—	4,606,505	—	—	—	—
Issuance of Class E preferred stock, net of issuance costs	—	—	3,313,519	64,709	—	—	—	—	—	—	—
Issuance of restricted stock	—	—	—	—	—	—	808,909	—	—	—	—
Stock-based compensation	—	—	—	—	—	—	—	—	420	—	420
Net loss	—	—	—	—	—	—	—	—	—	(14,353)	(14,353)
Balances - December 31, 2020	—	$ —	13,752,043	$ 156,433	—	$ —	5,415,414	$ —	$ 637	$ (90,065)	$ (89,428)

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

ABSCI CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)	For the Years Ended December 31, 2020	2019
Cash Flows From Operating Activities		
Net loss	$ (14,353)	$ (6,584)
Adjustments to reconcile net loss to net cash used in operating activities		
Depreciation and amortization	1,131	491
Loss on disposal of assets	363	22
Share-based compensation	420	42
Preferred stock warrant liability expense	461	86
Changes in operating assets and liabilities:		
Receivables under development arrangements	(1,372)	(102)
Prepaid expenses and other current assets	(1,434)	(263)
Operating lease right-of-use assets and liabilities	93	14
Other long-term assets	(85)	(6)
Accounts payable	903	82
Accrued expenses and other liabilities	1,053	166
Deferred revenue	1,850	20
Net cash used in operating activities	(10,970)	(6,032)
Cash Flows From Investing Activities		
Purchases of property and equipment	(2,181)	(1,098)
Proceeds from sales of property and equipment	10	9
Net cash used in investing activities	(2,171)	(1,089)
Cash Flows From Financing Activities		
Proceeds from issuance of redeemable convertible preferred units and stock, net of issuance costs	69,334	10,326
Proceeds from issuance of long-term debt	2,598	2,757
Proceeds from notes payable	632	—
Principal payments on long-term debt	(500)	(100)
Principal payments on finance lease obligations	(1,091)	(277)
Net cash provided by financing activities	70,973	12,706
Net increase in cash, cash equivalents, and restricted cash	57,832	5,585
Cash, cash equivalents and restricted cash - beginning of year	13,876	8,291
Cash, cash equivalents, and restricted cash - End of Year	$ 71,708	$ 13,876
Supplemental Disclosure of Cash Flow Information		
Cash paid during the year for interest	$ 508	$ 202
Supplemental Disclosure of Non-Cash Investing and Financing Activities		
Property and equipment purchased under finance lease	$ 3,988	$ 668
Right -of-use assets obtained in exchange for operating lease obligation	3,114	1,291
Cash paid for amounts included in the measurement of operating lease liabilities	422	274
Property and equipment purchases included in accounts payable	945	2
Increase in redemption value of redeemable convertible preferred stock	34,336	17,286

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

1. Organization and nature of operations

Absci Corporation (Company) has developed an integrated drug creation platform that enables the creation of biologics by unifying the drug discovery and cell line development processes into one process. The Company was organized in the State of Oregon in August 2011 as a limited liability company and converted to a limited liability company (LLC) in Delaware in April 2016. In October 2020, the Company converted from a Delaware LLC to a Delaware corporation (LLC Conversion). Its operations are located in Vancouver, Washington.

LLC Conversion

In conjunction with the LLC Conversion, (i) all of the Company's outstanding common units converted on a 1-for-1 basis into shares of common stock, par value $0.0001; and (ii) all of the Company's outstanding redeemable preferred units converted on a 1-for-1 basis into shares of redeemable convertible preferred stock, par value $0.0001. Prior to the LLC Conversion, the Company had issued incentive units to certain employees, directors, and consultants. The outstanding vested incentive units converted on a net issuance basis into shares of common stock and the outstanding unvested incentive units converted on a net issuance basis into restricted common stock. All vesting provisions remained the same following the LLC Conversion. See Note 8: *Stock based compensation* for further discussion of the LLC Conversion's impact on the Company's stock-based compensation plans.

2. Summary of significant accounting policies

Basis of presentation

The consolidated financial statements are prepared in accordance with generally accepted accounting principles in the United States (GAAP) as defined by the Financial Accounting Standards Board (FASB). The consolidated financial statements include the Company's wholly-owned subsidiaries and entities under its control. The Company has eliminated all intercompany transactions and accounts.

Emerging growth company

The Company is an "emerging growth company," as defined in Section 2(a) of the Securities Act, as modified by the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"), and it may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies including, but not limited to, not being required to comply with the independent registered public accounting firm attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, reduced disclosure obligations regarding executive compensation in its periodic reports and proxy statements, 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.

Use of estimates

The preparation of financial statements in accordance with GAAP requires management to make estimates and assumptions that affect certain reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Such estimates include, but are not limited to, revenue recognition including estimated timing of the satisfaction of performance obligations and the fair value of stock-based compensation awards. The Company bases its estimates on historical experiences, and other relevant factors that it believes to be reasonable under the circumstances. Actual results could differ from those estimates.

Segment information

The Company operates as a single operating segment. The Company's chief operating decision maker, its Chief Executive Officer, manages the Company's operations on a consolidated basis for the purposes of allocating resources, making operating decisions and evaluating performance.

Cash, cash equivalents and restricted cash

The Company considers all highly liquid investments with an original maturity of three months or less to be cash equivalents.

Restricted cash represents amounts pledged as collateral for future property lease payments via standby letters of credit (see Note 6).

Accounts receivable

Accounts receivable consists of amounts due from partners for services performed. The Company reviews accounts receivable for credit impairment and regularly analyzes the status of significant past due receivables to determine if any will potentially be uncollectible to estimate the amount of allowance necessary to reduce accounts receivable to its estimated net realizable value. To date, no allowance has been necessary. See contract asset discussion below regarding unbilled receivables.

Fair value of financial instruments

The Company's financial instruments include cash and cash equivalents, restricted cash, receivables, accounts payable, accrued liabilities, loans payable, preferred stock warrant liability, fee in lieu of warrant liability, and long-term debt. The Company's financial instruments' carrying amounts approximate fair value due to their relatively short maturities or as a result of fair value adjustments that are recorded each period.

The Company utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible. The Company determines the fair value of financial instruments based on assumptions that market participants would use in pricing an asset or liability in the principal or most advantageous market. When considering market participant assumptions in fair value measurements, the following fair value hierarchy distinguishes between observable and unobservable inputs, which are categorized in one of the following levels:

Level 1 - Inputs are unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date;

Level 2 - Inputs are observable, unadjusted quoted prices in active markets for similar assets or liabilities, unadjusted quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the related assets or liabilities; and

Level 3 - Unobservable inputs that are significant to the measurement of the fair value of the assets or liabilities that are supported by little or no market data.

Concentration risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of cash and cash equivalents, restricted cash, and receivables under development arrangements.The Company maintains its cash and cash equivalents and restricted cash in bank accounts, which at times may exceed federally insured limits. The Company has not experienced any losses on these accounts. For the year ended December 31, 2020, two partners represented approximately 39% and 38% of technology development revenue. For the year ended December 31, 2019, three partners each represented approximately 46%, 20%, and 21% of technology development revenue.

As of December 31, 2020, one partner represented approximately 93% of total receivables under technology development arrangements. As of December 31, 2019, one partner represented 95% of the total receivables under technology development arrangements.

The Company purchases from and relies on two vendors for specific equipment and consumables which are critical to its operations. While there are alternative types of equipment that could be used as an alternative, switching vendors would require significant capital investment, long lead times and significant training and validation.

Property and equipment, net

Property and equipment are stated at cost less accumulated depreciation and amortization. Additions and betterments to property and equipment are capitalized. The costs of maintenance and repairs are expensed as incurred. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the underlying assets, which vary from 3 to 7 years. Leasehold improvements are amortized over the shorter of the term of the lease or the estimated useful lives of the assets. When assets are sold or otherwise disposed of, the cost and related accumulated depreciation or amortization are removed from their respective accounts, and the resulting gain or loss is reported as income or expense in the statements of operations and comprehensive loss.

Impairment of long-lived assets

Management reviews long-lived assets for possible impairment whenever events or circumstances indicate that the carrying amount of such assets may not be recoverable. Recoverability is measured by comparison of the carrying amount to the future undiscounted net cash flows expected to result from the use of the asset and its eventual disposition. If these estimated cash flows were less than the carrying amount of the asset, an impairment loss would be recognized in order to write down the asset to its estimated fair value. There have been no such impairments of long-lived assets during the years ended December 31, 2020 and 2019.

Redeemable convertible preferred unit and stock warrant liability

Outstanding warrants that are related to the Company's redeemable convertible preferred units and redeemable convertible preferred stock are classified as liabilities on the balance sheets. As the warrants are exercisable for redeemable convertible preferred units and redeemable convertible preferred stock, the Company has recognized a liability for the fair value of its warrants on the balance sheets upon issuance and subsequently remeasures the liability to fair value at the end of each reporting period until the earlier of the expiration or exercise of the warrants.

Revenue recognition

The Company recognizes revenue when control of its products and services are transferred to its customers in an amount that reflects the consideration expected to be received in exchange for those products and services. This process involves identifying the contract with a customer, determining the performance obligations in the contract, determining the contract price, allocating the contract price to the distinct performance obligations in the contract, and recognizing revenue when or as the performance obligations are satisfied. A performance obligation is considered distinct from other obligations in a contract when it provides a benefit to the customer either on its own or together with other resources that are readily available to the customer and is separately identified in the contract. The Company considers a performance obligation satisfied once control of a good or service has been transferred to the customer, meaning the customer has the ability to use and obtain the benefit of the good or service. Technology development revenue includes revenue associated to the development and technology readiness phases of technology development agreements. The Company refers to its customers as "partners" when describing their relationship in an agreement.

Technology development revenue

The Company's Technology Development Agreements (TDAs) generally include multiple phases of Cell Line Development (CLD) such as library design, assay development, strain screening, fermentation optimization, purification, and analytics that all represent a single performance obligation. These agreements may include options for additional goods and services such as readying the technology to transfer to the partner and licensing terms. The transaction prices for these arrangements include fixed and variable consideration for the single performance obligation as well as variable consideration for success-based achievements. Any variable consideration is constrained to the extent that it is probable that a significant reversal of cumulative revenue will not occur. Depending on the specific terms of the arrangement, the Company either recognizes revenue over time or at a point in time. While there is no alternative use to the Company for the asset created, the agreement's terms vary as to whether an enforceable right to payment exists for performance completed as of that date. Primarily all of the Company's contracts with its partners include an enforceable right to payment.

The Company measures progress toward the completion of the performance obligations satisfied over time using an input method based on an overall estimation of the effort incurred to date at each reporting period to satisfy a performance obligation. This method provides an appropriate depiction of completed progress toward fulfilling its performance obligations for each respective arrangement. In certain technology development agreements that require a portion of the contract consideration to be received in advance at the commencement of the contract, such advance payment is initially recorded as a contract liability.

KBI BioPharma, Inc. Collaboration agreement

In December 2019, the Company executed a four-year Joint Marketing Agreement (JMA) with KBI BioPharma, Inc. (KBI) to co-promote technologies through joint marketing efforts. The JMA provides for a non-refundable upfront payment of $0.75 million and milestone payments of $2.75 million in the aggregate, of which $2.25 million had been received as of December 31, 2020, upon the achievement of specific milestones. Upfront payments that relate to ongoing collaboration efforts required throughout the contract term such as joint marketing are recognized ratably throughout the contract term. The Company fully constrains revenue associated with the milestone payments until the specified milestones are probable of achievement. Additionally, KBI is obligated to make royalty payments to the Company during the fourth year of the JMA representing a percentage of its sales generated through the arrangement. Any costs incurred to KBI through the duration of the JMA are recognized as a reduction to collaboration revenue in the period in which they are incurred. As of December 31, 2020 and 2019, deferred revenue related to this JMA was $1.8 million and $0.7 million, respectively.

Contract balances

Contract assets are generated when contractual billing schedules differ from revenue recognition timing and the Company records a contract receivable when it has an unconditional right to consideration. As of December 31, 2020 and 2019, contract assets were $0.1 million and $0.2 million, respectively.

Contract liabilities are recorded in deferred revenue when cash payments are received or due in advance of the satisfaction of performance obligations. As of December 31, 2020 and 2019, contract liabilities were $2.6 million and $0.8 million, respectively. During the years ended December 31, 2020 and 2019, the Company recognized $0.2 million and $0.8 million, respectively, as revenue that had been included in deferred revenue at the beginning of each period.

Income taxes

Prior to the LLC Conversion, all income tax effects of the Company's operations were passed through to its members individually. Accordingly, the accompanying financial statements do not

include any income tax effects for the Company prior to the LLC Conversion date, and the Company had no unrecognized income tax benefits, nor any interest or penalties associated with unrecognized income tax benefits, accrued or expensed as of and for the years ended December 31, 2019 and the period from January 1, 2020 through October 5, 2020.

Following the LLC Conversion, the Company accounts for income taxes using the asset and liability method whereby deferred tax asset and liability accounts are determined based on differences between financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that are currently in effect. Valuation allowances are established where necessary to reduce deferred tax assets to the amounts expected to be realized.

The Company files income tax returns in the federal and various state tax jurisdictions.

The Company recognizes interest and penalties related to income tax matters as a component of tax expense. The Company did not record any interest or penalties related to income tax during the years ended December 31, 2020 and 2019.

Leases

At the inception of a contractual arrangement, the Company determines whether the contract contains a lease by assessing whether there is an identified asset and whether the contract conveys the right to control the use of the identified asset in exchange for consideration over a period of time. If both criteria are met, the Company records the associated lease liability and corresponding right-of-use asset upon commencement of the lease using the implicit rate or a discount rate based on a credit adjusted secured borrowing rate commensurate with the term of the lease.

The Company additionally evaluates leases at their inception to determine if they are to be accounted for as an operating lease or a finance lease. Operating lease assets represent a right to use an underlying asset for the lease term and operating lease liabilities represent an obligation to make lease payments arising from the lease. Operating lease obligations with a term greater than one year and their corresponding right-of-use assets are recognized on the balance sheet at the commencement date of the lease based on the present value of lease payments over the expected lease term. Certain adjustments to the right-of-use asset may be required for items such as initial direct costs paid or incentives received.

As the Company's operating leases do not typically provide an implicit rate, the Company utilizes the appropriate incremental borrowing rate, determined as the rate of interest that the Company would have to pay to borrow on a collateralized basis over a similar term and in a similar economic environment. The lease cost is recognized on a straight-line basis over the lease term and variable lease payments are recognized as operating expenses in the period in which the obligation for those payments is incurred. Variable lease payments primarily include common area maintenance, utilities, real estate taxes, insurance and other operating costs that are passed on from the lessor in proportion to the space leased by the Company.

The Company accounts for its finance leases by calculating an implied interest rate in the lease contract and recognizing a finance lease right of use asset and lease liability. The right of use asset is recognized in property and equipment, net, in the asset category in which the underlying asset relates. The lease liability is recognized in the consolidated balance sheet as a finance lease obligation.

Research and development expenses

Research and development expenses includes the cost of materials, personnel-related costs (comprised of salaries, benefits and share-based compensation), consulting fees and allocated facility costs associated with both our execution of technology development agreements and collaboration agreements, as well as ongoing development of our Integrated Drug Creation Platform and other technologies. Allocated facility costs include facility occupancy and information

technology costs. The Company derives improvements to its platform from both types of activities. The Company has not historically tracked its research and development expenses on a partner-by-partner basis or on a program-by-program basis.

Stock-based compensation

Stock-based compensation includes compensation expense for incentive units, restricted stock, and stock option grants to employees and is measured on the grant date based on the fair value of the award and recognized on a straight-line basis over the requisite service period. The fair value of options to purchase common stock are measured using the Black-Scholes option-pricing model. The Company accounts for forfeitures as they occur. Prior to the LLC Conversion, the Company also granted phantom units which due to the presence of an exercise condition contingent upon a liquidity event, the Company determined that it was not probable that the phantom units would become exercisable.

Net Loss Per Share Attributable to Common Stockholders and Unitholders

The Company calculates basic and diluted net loss per share attributable to common stockholders and unitholders in conformity with the two-class method required for companies with participating securities. The Company considers its redeemable convertible preferred stock and units to be participating securities. In the event a dividend is declared or paid on common stock and units, holders of redeemable convertible preferred stock and units are entitled to a share of such dividend in proportion to the holders of common stock and units on an as-if converted basis. Under the two-class method, basic net loss per share attributable to common stockholder and unitholder is calculated by dividing the net loss attributable to common stockholder and unitholder by the weighted-average number of shares of common stock and units outstanding for the period. Net loss attributable to common stockholders and unitholders is determined by allocating undistributed earnings between common and preferred stockholders and unitholders. The diluted net loss per share attributable to common stockholders and unitholders is computed by giving effect to all potential dilutive common stock and unit equivalents outstanding for the period determined using the treasury stock method. The net loss attributable to common stockholders and unitholders was not allocated to the redeemable convertible preferred stock and units under the two-class method as the redeemable convertible preferred stock and units do not have a contractual obligation to share in the Company's losses. For purposes of this calculation, redeemable convertible preferred stock and units, redeemable convertible preferred stock and unit warrants, incentive (formerly incentive units) and non-qualified stock options are considered common stock equivalents but have been excluded from the calculation of diluted net loss per share attributable to common stockholders and unitholders as their effect is anti-dilutive.

Recently Adopted Accounting Pronouncements

In May 2014, the FASB issued Accounting Standards Update (ASU) 2014-09, *Revenue from Contracts with Customers*, which created FASB Accounting Standards Codification (ASC) Topic 606 (ASC 606). This ASU replaced most existing revenue recognition guidance in GAAP when it became effective and requires the Company to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. ASC 606 also requires additional disclosures to help users of financial statements better understand the nature, amount, timing and uncertainty of revenue that is recognized. The Company adopted ASC 606 effective January 1, 2019 using the modified retrospective method of application to contracts not completed as of January 1, 2019. Management has determined the cumulative effect of ASC 606 on uncompleted contracts existing as of January 1, 2019 to be immaterial, and, accordingly, there were no adjustments to opening members' equity.

In February 2016, the FASB issued ASU 2016-02, *Leases* (ASC 842). This ASU issues guidance that supersedes existing guidance on accounting for leases and is intended to increase transparency and comparability of accounting for lease transactions. ASC 842 requires most leases to be recognized

on the balance sheet by recording a right-of-use (ROU) asset and a lease liability. The liability is equal to the present value of lease payments while the asset is based on the liability, subject to adjustment for initial direct costs. For income statement purposes, the FASB retained a dual model requiring leases to be classified as either operating or finance. The Company elected to early adopt this ASU effective January 1, 2019 using the optional transition method and applied the standard only to leases that existed at that date. The Company elected the "package of practical expedients" which allowed it to not reassess prior conclusions about lease identification, classification and initial direct costs. Additionally, the Company elected the short-term lease recognition exemption for all leases that qualify, which means it will not recognize ROU assets or lease liabilities for leases with lease terms of less than twelve months. As a result of adoption, the Company recognized operating lease ROU assets and lease liabilities of $0.5 million and $0.6 million, respectively, as of January 1, 2019. Each of the Company's equipment leases previously accounted for as a capital lease are now similarly accounted for as finance leases under ASC 842.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments – Credit Losses (ASC 326),* which sets forth a "current expected credit loss" model which requires the Company to measure all expected credit losses for financial instruments held at the reporting date based on historical experience, current conditions, and reasonable supportable forecasts. This replaces the existing incurred loss model and is applicable to the measurement of credit losses on financial assets measured at amortized cost. The Company adopted this standard as of January 1, 2020, and the adoption of this standard did not have a material impact to its consolidated financial statements.

Recently issued accounting pronouncements, not yet adopted

In December 2019, the FASB issued amended guidance on the accounting and reporting of income taxes. The guidance is intended to simplify the accounting for income taxes by removing exceptions related to certain intraperiod tax allocations and deferred tax liabilities; clarifying guidance primarily related to evaluating the step-up tax basis for goodwill in a business combination; and reflecting enacted changes in tax laws or rates in the annual effective tax rate. The amended guidance is effective for fiscal years beginning after December 15, 2021, and interim periods within fiscal years beginning after December 15, 2022. Early adoption is permitted. The application of the amendments in the new guidance are to be applied on a retrospective basis, on a modified retrospective basis through a cumulative-effect adjustment to retained earnings or prospectively, depending on the amendment. The Company is currently evaluating the impact of adoption on its consolidated financial statements.

In August 2020, the FASB issued ASU No. 2020-06, Debt — Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging — Contracts in Entity's Own Equity (Subtopic 815-40) ("ASU No. 2020-06"). The new guidance eliminates two of the three models in ASC 470-20 that require separating embedded conversion features from convertible instruments. As a result, only conversion features accounted for under the substantial premium model in ASC 470-20 and those that require bifurcation in accordance with ASC 815-15 will be accounted for separately. For contracts in an entity's own equity, the new guidance eliminates some of the requirements in ASC 815-40 for equity classification. The guidance also addresses how convertible instruments are accounted for in the diluted earnings per share calculation and requires enhanced disclosures about the terms of convertible instruments and contracts in an entity's own equity. ASU 2020-06 is effective for the Company after December 15, 2023. Early adoption is permitted for fiscal periods beginning after December 15, 2020. The Company is currently evaluating the effect of adopting ASU 2020-06 on its consolidated financial statements.

3. Property and equipment

Property and equipment as of December 31 consists of the following (in thousands):

	2020	2019
Lab Equipment	$ 8,578	$ 3,277
Software	188	283
Furniture, Fixtures and Other	472	260
Leasehold Improvements	2016	742
Total Cost	11,254	4,562
Less accumulated depreciation and amortization	(2,345)	(1,264)
Net Property and Equipment	$ 8,909	$ 3,298

Depreciation expense was $1.1 million and 0.5 million for the year ended December 31, 2020 and 2019, respectively.

4. Long-term debt and other borrowings

In June 2018, the Company signed a Loan and Security Agreement (LSA) with Bridge Bank (Bank), a division of Western Alliance Bank. The purpose of the LSA was to provide long-term financing to the Company through term loans available for borrowing in three tranches up to a maximum of $3.0 million through December 2019 upon the attainment of certain milestones as delineated in the LSA. The first tranche of $0.3 million was borrowed in June 2018. The Company was obligated to make interest-only payments until the amortization date of June 28, 2019 and after that date to make principal and interest payments. Interest on outstanding borrowings under the LSA is charged at a rate of 6% per annum. This loan matures in May 2022, at which time all outstanding principal and accrued and unpaid interest is due and payable. This loan is secured by substantially all tangible assets of the Company; intellectual property is excluded from the secured collateral, but is subject to a negative pledge in favor of the Bank.

In March 2019, the Company entered into a First Amendment to the LSA that increased total borrowings to $3.0 million and to add a financial liquidity covenant. The amendment was accounted for as a debt modification and no gain or loss was recognized in the Company's financial statements.

In May 2020, the Company entered into a Second Amendment to the LSA that increased total borrowings to $5.0 million. The amortization date was extended to May 1, 2021 except, if a certain revenue and new contract bookings milestone is achieved, the amortization date is extended to November 1, 2021. The maturity date of the loan was extended to May 11, 2024. The amendment was accounted for as a debt modification and no gain or loss was recognized in the Company's financial statements.

In August 2020, the Company entered into a Third Amendment to the LSA that waived an event of default due to failure to meet a financial covenant. The Amendment also expanded the definition of permitted indebtedness to include Payroll Protection Plan (PPP) loans, and modified financial and restrictive covenants.

In February 2021, the Company entered into a Fourth Amendment to the LSA – refer to subsequent events note for further details.

The Company may prepay all, but not less than all, of the term loans at any time upon 10 days written notice, with a prepayment premium beginning at 1.0% initially and declining to 0% after May 11, 2022. The Company is also required to pay a final payment equal to 3% of the principal amount funded, which is payable upon the earliest to occur of (i) the maturity date, (ii) acceleration and (iii) the prepayment of the loan. As part of the Second Amendment, the Company paid a one-

time amendment fee and a pro-rated final payment in connection with the amendment. The final payment represents an additional principal payment and is accounted for as a debt discount that will be accreted through the maturity date of the loan based on the effective interest method.

In connection with entering into the LSA Agreement in June 2018, the Company entered into an agreement whereby the Company is required to pay a fee of 3.5% of the aggregate amount of term loans funded by Bridge Bank under the LSA within three business days of a sale or other disposition of substantially all of the Company's assets, a merger or consolidation, a change in control or an initial public offering (Liquidity Event). Concurrent with the Second Amendment, the Company and Bridge Bank entered into an amended agreement which extended the term of the fee to May 11, 2030. This agreement has been accounted for as a freestanding derivative under ASC 815, *Derivatives* and is remeasured to its fair value at the end of each reporting period in Other long-term liabilities in the Consolidated Balance Sheets with changes in fair value recognized in Other expense in the Consolidated Statements of Operations and Comprehensive loss.

Under the LSA (as amended) the Company is subject to a financial covenant. The covenant, as amended, requires that the Company maintain at all times either (a) unrestricted cash and cash equivalents in an amount equal to or greater than the Company's monthly cash burn or (b) trailing 6-month revenue of at least 80% of the Company's revenue projections (over the same 6-month period) determined using the lender's measurement method. As of December 31, 2020, the Company was in compliance with this financial covenant.

As of December 31, 2020, and 2019, the outstanding principal balance under the LSA was $5.0 million and $2.9 million, respectively.

Future maturities of the amounts outstanding under the LSA as of December 31, 2020 are as follows (in thousands):

Years Ending December 31:		
2021		903
2022		1,624
2023		1,724
2024 (inclusive of $150 Final Fee)		899
Total Principal, including final fee	$	5,150
Less: amount representing debt discount and issuance costs		106
Total Long-Term Debt	$	5,044

In May 2020, the Company received a PPP loan pursuant to the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) in the amount of $0.6 million. The loan had a two-year term and bore a fixed interest rate of 1%. Under the terms of the CARES Act, the loan was eligible to be forgiven, in part or whole, if the proceeds were used to retain and pay employees and for other qualifying expenditures. In February 2021, the Company received notification from the Small Business Administration that they approved the forgiveness of the full $0.6 million PPP loan.

The carrying amount of the long-term debt and loan payable approximate fair value.

5. Leases

The Company leases its current office and laboratory facilities under multiple operating lease agreements that are scheduled to expire in August 2024. In February 2019, the Company signed another lease agreement for additional office space in its current building. This agreement commenced in September 2019 and is also scheduled to expire in August 2024.

In December 2020, the Company entered into a lease agreement for a new 61,607 square foot facility in Vancouver, Washington. The lease term commenced in December 2020 and ends in April

2026, with the Company's option to renew through April 2031. The lease agreement provides for annual base rent of approximately $1.2 million in the first year of the lease term which increases on an annual basis to approximately $1.5 million in the final year of the initial lease term. The Company entered into an agreement with a construction company for purposes of building out the facility and customizations for a total estimated cost of approximately $14.6 million. As part of the lease agreement, the lessor provided tenant incentives in the amount of $2.5 million.

For each of the Company's facility lease agreements, the Company is responsible for taxes, insurance and maintenance costs.

The Company leases certain laboratory equipment under finance leases. Property and equipment includes approximately $4.3 million and $1.3 million of assets under finance leases as of December 31, 2020 and 2019, respectively. Accumulated depreciation related to assets under finance leases was approximately $0.9 million and $0.4 million as of December 31, 2020 and 2019, respectively.

The components of lease expense were as follows (in thousands):

	2020	2019
Operating lease cost	$ 526	$ 260
Variable lease cost	166	120
Short-term lease cost	18	3
Total	$ 710	$ 383

Future undiscounted lease payments for the Company's lease liabilities as of December 31, 2020 are as follows (in thousands):

	Operating leases	Finance leases
2021	$ 1,318	$ 1,784
2022	1,802	1,648
2023	1,856	958
2024	1,753	409
2025	1,480	86
Thereafter	501	—
Total future lease payments	8,710	4,885
Less: Imputed interest	(1,663)	(644)
Less: Lease incentive	(2,464)	—
Present value of lease liabilities	$ 4,583	$ 4,241

Additional information related to the Company's leases as of December 31, 2020 and 2019 are as follows:

	2020	2019
Weighted average remaining lease term (in years)		
Operating leases	4.9	4.7
Finance leases	3.0	3.8
Weighted average discount rate		
Operating leases	8 %	8 %
Finance leases	7 %	9 %

6. Commitments and contingencies

As of December 31, 2020 and 2019, future lease payments are secured by irrevocable standby letters of credit totaling $1.8 million and $0.8 million, respectively. The irrevocable standby letters of credit are expected to be pledged for the full lease terms which extend through 2024 and 2026 for each of the Company's facility leases.

In the ordinary course of business, the Company is a party to claims and legal proceedings. The Company records a provision for contingent losses when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Based on currently available information, management does not believe that the ultimate outcome of these unresolved matters is probable or estimable and not likely, individually and in the aggregate, to have a material adverse effect on our financial position, results of operations or cash flows. However, litigation is subject to inherent uncertainties and management's view of these matters may change in the future. Were an unfavorable outcome to occur, there exists the possibility of a material adverse impact on the Company's financial position, results of operations or cash flows for the period in which the unfavorable outcome occurs, and potentially in future periods.

7. Redeemable convertible preferred stock and redeemable convertible preferred units

Redeemable Convertible Preferred Stock

The following table summarizes the authorized, issued, and outstanding redeemable convertible preferred stock of the Company as of December 31, 2020 (in thousands, except share and per share data):

	December 31, 2020				
	Shares Authorized	Shares Issued and Outstanding	Issuance Price per Share	Net Proceeds	Liquidation preference
Convertible Preferred Stock:					
Junior	1,573,547	1,573,547	$ 1.00	$ 1,462	$ 1,989
Class A-1	2,793,007	2,700,000	1.00	2,700	3,453
Class A-2	1,500,000	1,500,000	1.00	1,500	1,885
Class B	1,372,549	1,372,549	1.53	2,065	2,526
Class C	1,760,252	1,760,252	6.95	11,979	13,876
Class D	1,532,176	1,532,176	9.79	14,951	15,852
Class E	3,313,519	3,313,519	19.62	64,709	163,280
Total convertible preferred stock	13,845,050	13,752,043		$ 99,366	$ 202,861

The Company issued 3,313,519 shares of Class E redeemable preferred stock in October 2020 at an issuance price of $19.62 per share.

The Company recorded its redeemable convertible preferred stock at the issuance price on the dates of issuance, net of issuance costs. Mandatory conversion of preferred stock to common stock is triggered by either (a) a closing of a public offering with net proceeds of at least $50 million at a price of at least $19.62 per share (Qualified Public Offering) or (b) the vote or written consent of the holders of a preferred majority electing conversion of all preferred stock and junior preferred stock. The preferred stock is redeemable at the greater of a) the unpaid liquidation preference or b) fair value, both determined as of the date of redemption request, contingent upon certain deemed liquidation events outside the control of the Company, none of which are considered probable of occurring as of December 31, 2020. As such, the Company classifies the redeemable convertible preferred stock as temporary equity in the Consolidated Balance Sheets.

In the event of any liquidation event, either voluntary or involuntary, holders of Class E Preferred Stock are entitled to receive out of proceeds or assets of the Company, prior and in preference to the distribution of proceeds to holders of Class D Preferred Stock, Class C Preferred Stock, Class B Preferred Stock, Class A Preferred Stock, Junior Preferred Stock, or Common Stock. Holders of Class D Preferred Stock, Class C Preferred Stock, Class B Preferred Stock and Class A Preferred Stock are entitled to receive proceeds prior and in preference to distribution of proceeds to Junior Preferred Stock. The amount of distributions preferred stockholders are entitled to is equal to the original issue price for each series of issuance, plus declared but unpaid dividends on each such share. The holders of Junior, Class A-1, Class A-2, Class B, Class C, and Class D Preferred Stock shall receive $1.00, $1.00, $1.00, $1.53, $6.95, and $9.79 per share, respectively, plus declared but unpaid dividends on such shares. Class E Preferred Stock has, at the option of the holder, an alternative liquidation preference equal to 1.5 times the original issuance price of $19.62 for any redemption within 12 months of the original issuance date of October 2020. After this 12-month period, the Class E liquidation preference is equal to $19.62 plus accrued but unpaid dividends on such shares. Upon completion of the distribution to the preferred stockholders, the remaining proceeds of the

Company shall be distributed among the holders of Common Stock pro rata based on the number of shares held by each. Preferred stockholders have preemptive voting rights for significant capital transactions including liquidation, merger or sale of the Company, amendments to the operating agreement, issuance of additional equity interests, issuance of debt instruments, and pledging of Company assets. The preferred stock accrues dividends at a rate of 6% per annum, cumulative. The Company has not declared or paid dividends to the holders.

Each share of redeemable convertible preferred stock has a number of votes equal to the number of shares of common stock into which it is convertible. The holders of record of the Series A and Series B redeemable convertible preferred stock vote together on an as-converted basis exclusively and as a separate class and are entitled to elect two directors of the Company. The holders of record of the Series C redeemable convertible preferred stock vote exclusively and as a separate class and is entitled to elect one director of the Company. The holders of record of the Series E redeemable convertible preferred stock vote exclusively and as a separate class and is entitled to elect one director of the Company.

Redeemable convertible Preferred Units

The following table summarizes the authorized, issued, and outstanding redeemable convertible preferred units of the Company as of December 31, 2019:

	December 31, 2019				
	Units Authorized	Units Issued and Outstanding	Issuance Price per Unit	Net Proceeds	Liquidation preference
Redeemable Convertible Preferred Units:					
Junior	1,573,547	1,573,547	$ 1.00	$ 1,462	$ 1,901
Class A-1	2,793,007	2,700,000	1.00	2,700	3,291
Class A-2	1,500,000	1,500,000	1.00	1,500	1,795
Class B	1,372,549	1,372,549	1.53	2,065	2,400
Class C	1,760,252	1,760,252	6.95	11,979	13,154
Class D	1,532,176	1,058,224	9.79	10,326	10,404
Total redeemable convertible preferred stock	10,531,531	9,964,572		$ 30,032	$ 32,945

The Company issued 102,146 Class D units in January 2020 at an issuance price of $9.79 per unit, 371,806 Class D units in June 2020 at an issuance price of $9.79 per unit.

The Company recorded its redeemable convertible preferred units at the issuance price on the dates of issuance, net of issuance costs. Mandatory conversion of preferred units to common units is triggered by either (a) a closing of a qualified public offering or (b) the vote or written consent of the holders of a preferred majority holding at least 65% of the outstanding Preferred Units electing conversion of all preferred stock and junior preferred units. The preferred units are redeemable at the option of the holder on or after April 6, 2024 at the greater of (a) the unpaid liquidation preference or (b) fair value, both determined as of the date of redemption request or upon certain deemed liquidation events outside the control of the Company. As such, the Company classified the redeemable convertible preferred units as temporary equity in the Consolidated Balance Sheet at December 31, 2019 at its current redemption value. The adjustment to redeemable convertible preferred units recorded during the years ended December 31, 2020 and 2019 reflects the adjustment from the carrying value to their respective redemption value.

In the event of any liquidation event, either voluntary or involuntary, holders of Class D Preferred Units, Class C Preferred Units, Class B Preferred Units, and Class A Preferred Units are entitled to receive proceeds prior and in preference to distribution of proceeds to Junior Preferred Units. Holders of Junior Preferred Units are entitled to receive proceeds prior and in preference to distribution of proceeds to Common Units. The amount of distributions preferred unit holders are entitled to is equal to the original issue price for each series of issuance, plus declared but unpaid returns on each such share. The holders of Junior, Class A-1, Class A-2, Class B, Class C, and Class D Preferred Units shall receive $1.00, $1.00, $1.00, $1.53, $6.95, and $9.79 per unit, respectively, plus declared but unpaid returns on such units. Preferred unit holders have preemptive rights for significant capital transactions including liquidation, merger or sale of the Company, amendments to the operating agreement, issuance of additional equity interests, issuance of debt instruments, and pledging of Company assets. The Preferred Units accrue returns at a rate of 6% per annum, cumulative. The Company has not declared or paid returns to the holders.

Each share of redeemable convertible preferred unit has a number of votes equal to the number of common units. Certain voting matters require the Preferred Majority, as a single class. The holders of record of the Series A and Series B redeemable convertible preferred units are entitled to elect two directors of the Company. The holders of record of the Series C redeemable convertible preferred units are entitled to elect one director of the Company.

Preferred stock warrants

As part of the Class A-1 funding in 2016, a warrant for the purchase of 93,007 Class A-1 Preferred Units at an exercise price of $1 per unit and exercisable at any time before April 2026 was granted to an investor. This warrant was exchanged for a warrant to purchase Class A-1 preferred stock at equivalent terms in October 2020. Because the underlying shares are redeemable for conditions outside of the Company's control, the warrant is classified within other long-term liabilities on the consolidated balance sheets and recognized at fair value at each reporting period with the change in fair value recorded in other expense on the consolidated statement of operations and comprehensive loss. The balance is included in Other long-term liabilities on the consolidated balance sheet. The fair value of warrants issued was calculated using the Black-Scholes option-pricing model (Level 3) with the following assumptions:

	2020	2019
Risk-free interest rate	0.13 %	1.56 %
Expected dividend yield	0 %	0 %
Expected term (years)	2	3
Volatility	85.00 %	63 %

The following table provides a reconciliation of the beginning and ending balances for the preferred stock warrant derivative liability measured at fair value using significant unobservable inputs (Level 3) (in thousands):

Balance at January 1, 2019	$	151
Change in fair value		86
Balance at December 31, 2019		237
Change in fair value		461
Balance at December 31, 2020	$	698

8. Stock-Based compensation

Prior to the LLC Conversion, the Company granted incentive units and phantom units under its 2015 Equity-Based Incentive Plan ("2015 Plan") to employees and non-employee service providers. In

October 2020, in conjunction with the LLC Conversion, the Company adopted the 2020 Stock Option and Grant Plan ("2020 Plan") under which it granted stock options, restricted shares, and stock appreciation rights (SARs) as replacements awards for outstanding awards under the 2015 Plan and as new awards to incentivize employee service.

Incentive Units and Restricted Stock

The incentive units had a threshold amount and were economically similar to a common unit with a subordinated liquidation preference. In the event of a distribution upon a liquidation event by the Company, the holder of an incentive unit would receive proceeds only to the extent that common unit holder received proceeds greater than the threshold amount of the award.

Incentive units generally vested 25% after one-year with the remainder vesting monthly over the following three-year period. Certain incentive units had alternative vesting schedules including ratably over two-years and immediate vesting. Upon the occurrence of a liquidation event, 100% of incentive units would vest. Incentive unit holders had voting rights and were entitled to distributions on their vested units.

Activity for the incentive units is shown below:

	Number of Units	Weighted Average Grant Date Fair Value per Unit
Unvested as of December 31, 2018	174,684	0.41
Granted	—	—
Vested	(102,298)	0.42
Cancelled/forfeited	(18,445)	0.37
Unvested as of December 31, 2019	53,941	
Granted	570,989	3.05
Vested	(63,166)	1.03
Cancelled/forfeited	(67,139)	2.56
Unvested as of LLC Conversion	494,625	
Vested as of LLC Conversion	513,430	
Outstanding (vested and unvested) of Exchange date	1,008,055	
Exchange of incentive units for restricted shares or units upon the LLC Conversion	(1,008,055)	
Unvested as of December 31, 2020	—	—

Upon the LLC Conversion, the outstanding 1,008,055 incentive units were exchanged for 808,909 restricted shares granted under the 2020 Plan based on a ratio determined by their threshold amount and the fair value of the restricted stock. The exchange was accounted for as a probable-to-probable modification (Type I modification), and the fair value of the restricted shares did not exceed the fair value of the incentive units on the date of exchange. Accordingly, the restricted shares are measured at the grant date fair value of the incentive units. Shares of restricted stock that do not vest are subject to our right of repurchase or forfeiture.

Activity for the restricted shares or units is shown below:

	Number of shares
Restricted shares issued in exchange for incentive units at LLC Conversion at October 16, 2020	808,909
Previously vested	(465,240)
Vested	(7,124)
Unvested as of December 31, 2020	336,545

As of December 31, 2020, there was $1.6 million of unrecognized compensation expense related to the restricted shares expected to be recognized over a remaining weighted-average period of 3.0 years.

Phantom Units

Phantom units generally vested at 25% after one-year with the remainder vesting quarterly over the following three-year period. Upon the occurrence of a liquidity event, 100% of phantom units would vest. A liquidity event for purposes of the phantom units meant either of the following events: (i) a person or persons acting as a group (other than a person or group that currently owns more than 50% of the voting power of the Company) acquires ownership of Common Units that, together with the Common Units held by such person or group, constitutes more than 50% of the voting power of all Common Units of the Company or (ii) a person or persons acting as a group acquires (or has acquired during the 12-month period ending on the date of the most recent acquisition by such person or persons) assets from the Company that have a total gross fair market value of more than 60% of the total gross fair market value of all of the assets of the Company immediately before such acquisition or acquisitions. Upon a liquidity event, the phantom unit holders were entitled to a payment equal to the fair value of common units less a strike price. The payment was to be made in the same form of consideration as received by other unitholders as a result of the liquidity event. Other than this payment upon a liquidity event, Phantom units provided no economic value and they provided no voting rights. Due to the presence of an exercise condition that was contingent upon a liquidity event, the Company determined that it was not probable that the phantom units would become exercisable and no compensation expense has been recognized.

Activity for the phantom units is shown below:

	Number of Units	Weighted Average Strike Price
Unvested as of December 31, 2018	238,346	0.68
Granted	59,230	1.26
Vested	(77,975)	0.66
Cancelled/forfeited	(68,340)	0.45
Unvested as of December 31, 2019	151,261	
Granted	430,246	1.58
Vested	(79,557)	1.01
Cancelled/forfeited	(137,918)	1.38
Unvested as of December 31, 2020	364,032	1.55

Following the LLC Conversion, the holders of phantom units were offered to exchange their awards for a combination of cash payment rights, SARs and/or stock options granted under the 2020 Plan.

The exchange was accounted for as short-term inducement, with no accounting recognition prior to offer expiration in January 2021 as the exchange offer participants were able to modify their election through the expiration date. In January 2021, all participants accepted the offer. The exercisability of cash payment rights and SARs are contingent upon a liquidity event. The stock options vest based on a service condition, generally over a 4-year term.

The aggregate intrinsic value of 660,846 phantom units outstanding as of December 31, 2020 is $2.7 million based on the estimated fair value of common stock of $5.14.

Stock Options

Stock options generally vest 25% after one-year from the date of the grant with the remainder vesting monthly over the following three-year period. Certain options have alternative vesting schedules including ratably over 2-4 years and immediate vesting. The Company recognizes forfeitures as they occur, and uses the straight-line expense recognition method. Activity for stock options is shown below:

	Number of Options	Weighted Average Exercise Price per Share	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands $)
Outstanding as of December 31, 2019	—			
Granted	522,258	$ 3.63		
Cancelled/forfeited	(5,671)	3.63		
Outstanding as of December 31, 2020	516,587	3.63	5.9	$780
Exercisable as of December 31, 2020	18,498	3.63	5.9	$28
Vested and expected to vest as of December 31, 2020	516,587	$ 3.63	5.9	$780

The weighted-average grant date fair value of stock options granted during 2020 was $2.73. The fair value of options vested during the year ended December 31, 2020 was $0.1 million. As of December 31, 2020, total unrecognized stock-based compensation related to unvested stock options was $0.7 million, which the Company expects to recognize over a remaining weighted average period of 3.8 years. The aggregate intrinsic value was calculated based on the estimated fair value of common stock of $5.14 per share.

Determination of Fair Value

The estimated grant-date fair value of all the Company's incentive units and stock options was calculated using the Black-Scholes option pricing model, based on the following assumptions:

	2020	2019
Expected term (in years)	2.0-6.0	—%
Volatility	45%-85%	—%
Risk-free interest rate	0.1%-1.6%	—%
Dividend Yield	—%	—%

The fair value of each incentive unit and stock option was determined by the Company using the methods and assumptions discussed below. Each of these inputs is subjective and generally requires significant judgment and estimation by management.

Expected Term—The expected term represents the period that stock-based awards are expected to be outstanding. The Company's incentive units do not have a contractual term. However, there is a

constructive maturity of the incentive units based on the expected exit or liquidity scenarios for the Company. The Company's historical option exercise data is limited and did not provide a reasonable basis upon which to estimate an expected term. The expected term for options was derived by using the simplified method which uses the midpoint between the average vesting term and the contractual expiration period of the stock-based award.

Expected Volatility—The expected volatility was derived from the historical stock volatilities of comparable peer public companies within the Company's industry. These companies are considered to be comparable to the Company's business over a period equivalent to the expected term of the stock-based awards.

Risk-Free Interest Rate—The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the date of grant for zero-coupon U.S. Treasury notes with maturities approximately equal to the profit interest units' and stock options' expected term.

Expected Dividend Rate—The expected dividend is zero as the Company has not paid nor does it anticipate paying any dividends on its common stock underlying its stock options in the foreseeable future.

The Company estimated the fair value of its common stock underlying the stock-based awards when performing fair value calculations using the Black-Scholes option pricing model. Because the Company's common stock is not currently publicly traded, the fair value of its common stock underlying the stock-based awards has been determined on each grant date by management and approved by the Company's board of directors, considering the most recently available third-party valuation of common shares. All options to purchase shares of the Company's common stock are intended to be granted with an exercise price per share no less than the fair value per share of the common stock underlying those options on the date of grant, based on the information known to the Company on the date of grant. In connection with the preparation of the Company's consolidated financial statements for the years ended December 31, 2020 and 2019, the Company reassessed its estimate of fair value of our common stock for financial reporting purposes. Following this reassessment, it was determined that for financial reporting purposes the fair value of its common stock was higher than the fair value determined by the board of directors at the time of grant on October 28, 2020. The fair value for financial reporting purposes was determined to be $5.14 per share, compared to a value of $3.63 per share approved by the board of directors.

The Company's determination of the value of its common stock was performed using methodologies, approaches and assumptions consistent with the American Institute of Certified Public Accountants (AICPA), Audit and Accounting Practice Aid Series: Valuation of Privately Held Company Equity Securities Issued as Compensation (AICPA Practice Aid). In addition, the Company's board of directors considered various objective and subjective factors to determine the fair value of the common stock, including:

- valuations of the Company's common stock performed by third-party valuation specialists;
- the anticipated capital structure that will directly impact the value of the currently outstanding securities;
- the Company's results of operations and financial position;
- the composition of, and changes to, the management team and board of directors;
- the lack of liquidity of the Company's common stock as a private company;
- the Company's stage of development and business strategy and the material risks related to its business and industry;
- external market conditions affecting the life sciences and biotechnology industry sectors;

- U.S. and global economic conditions;
- the likelihood of achieving a liquidity event for the holders of the Company's common stock, such as an IPO or a sale of the company, given prevailing market conditions; and
- the market value and volatility of comparable companies.

The AICPA Practice Aid prescribes several valuation approaches for setting the value of an enterprise, such as the cost, income and market approaches, and various methodologies for allocating the value of an enterprise to its common stock. The cost approach establishes the value of an enterprise based on the cost of reproducing or replacing the property less depreciation and functional or economic obsolescence, if present. The income approach establishes the value of an enterprise based on the present value of future cash flows that are reasonably reflective of our future operations, discounting to the present value with an appropriate risk adjusted discount rate or capitalization rate. The market approach is based on the assumption that the value of an asset is equal to the value of a substitute asset with the same characteristics.

In accordance with the AICPA Practice Aid, the Company considered the various methods for allocating the enterprise value to determine the fair value of its common stock at the valuation date. Under the option pricing method (OPM), shares are valued by creating a series of call options with exercise prices based on the liquidation preferences and conversion terms of each equity class. The value of the common stock is inferred by analyzing these options. The probability weighted expected return method (PWERM) is a scenario-based analysis that estimates the value per share based on the probability-weighted present value of expected future investment returns, considering each of the possible outcomes available to us, as well as the economic and control rights of each share class.

Starting in 2020, the Company used a hybrid method to determine the estimated fair value of its common stock, which included both the OPM and PWERM models.

As of December 31, 2020, the Company had reserved 2,703,997 shares of common stock for issuance under the 2020 Plan, of which, 1,445,460 were available for issuance.

9. Employee benefit plan

The Company sponsors a 401(k) tax-deferred savings plan for all employees who meet certain eligibility requirements. Participants may contribute, on a pre-tax or post-tax basis, a percentage of their annual compensation, not to exceed a maximum contribution amount pursuant to Section 401(k) of the Internal Revenue Code. The Company match is 100% of the employees' first contribution of 3%, plus 50% of the next 2% of eligible compensation contributed by the employee, up to a maximum Company match of 4% of compensation for each employee. The Company contributed $0.2 million and $0.1 million for the years ended December 31, 2020 and 2019, respectively.

10. Related party transactions

The Company entered into a joint development agreement with AGC, Inc., the parent company of the employer of one of the Company's directors. Revenue recognized under the agreement for the years ended December 31, 2020 and 2019 was $0.2 million and $0.9 million, respectively. The Company has the opportunity to earn additional revenues under the agreement in future years if pre-determined milestones are achieved. There were no amounts due or payable as of December 31, 2020 and 2019.

11. Net loss per share attributable to common stockholders and unitholders

The following table sets forth the computation of the Company's basic and diluted net loss per share attributable to common stockholder and unitholders (in thousands, except share and per share amounts):

	2020	2019
Numerator:		
Net loss	$ (14,353)	$ (6,584)
Adjustment of redeemable convertible preferred stock and units	(34,336)	(17,286)
Cumulative undeclared preferred stock dividends	(780)	—
Net loss available to common stockholder and unitholders	$ (49,469)	$ (23,870)
Denominator:		
Weighted-average common shares and units outstanding	4,691,020	4,606,505
Net loss per share, basic and diluted	$ (10.55)	$ (5.18)

Potentially dilutive securities not included in the calculation of diluted net loss per share because to do so would be anti-dilutive are as follows (in common stock equivalent shares):

	2020	2019
Redeemable convertible preferred stock and units outstanding	13,752,043	9,964,572
Redeemable convertible preferred stock and unit warrants	93,007	93,007
Stock options	498,089	—
Unvested restricted stock	336,545	—

Refer to Note 8: *Share-based compensation* and Note 13: *Subsequent Events* for descriptions of transactions occurring subsequent to December 31, 2020 that could impact the number of common shares outstanding had the transaction occurred prior to December 31, 2020.

12. Income taxes

The Company was classified as a partnership, and was therefore a pass-through entity, for U.S. income tax purposes through the LLC Conversion on October 15, 2020. The Company incurred net losses for the year ended December 31, 2020. The Company has not reflected any benefit of such net operating loss carryforwards in the accompanying consolidated financial statements. The

significant components of income tax for the years ended December 31 are as follows (in thousands):

	2020
Current	
Federal	$ —
State	2
Total current	2
Deferred expense/(benefit)	
Federal	—
State	—
Total deferred	—
Total	$ 2

The provision for income taxes results in effective tax rates which are different than the federal income tax statutory rate. The nature of the differences for the year ended December 31, 2020 were as follows:

	2020
Expected federal income tax	21.00 %
State income taxes after credits	4.24
Tax-effect of change in entity status	(3.69)
Change in valuation allowance	(3.32)
Research and development credits	0.05
Stock-based compensation	(0.35)
Revaluation of warrant liability	(0.22)
Loss allocable to pre-incorporation period	(17.72)
Other	—
Effective tax rate	— %

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of the assets and liabilities for financial reporting purposes and amounts used for income

tax purposes. Significant components of the Company's deferred income tax assets and liabilities are as follows at December 31, 2020 (in thousands):

	2020
Deferred tax assets:	
Net operating losses	$ 941
Research and development credits	7
Stock-based compensation	19
Lease liability	1,157
Accrued expenses	3
Gross deferred tax assets	2,127
Less valuation allowance	(477)
Total deferred tax assets	1,650
Deferred tax liabilities:	
Depreciation	(520)
Right-of-Use Lease	(1,130)
Gross deferred tax liabilities	(1,650)
Deferred tax liabilities, net	$ —

As of December 31, 2020, the Company has remaining federal net operating losses of $3.7 million and has state net operating loss carryforwards of approximately $3.0 million to offset against future taxable income for state tax purposes. Under the Tax Cuts and Jobs Act of 2017 (TCJA), federal net operating losses can now be carried forward indefinitely. State net operating losses can be carried forward for 5 to 20 years depending on the jurisdiction and will begin to expire in years 2025 to 2040. The company also had an immaterial amount of Federal research credit carryforwards that will begin to expire in 2040.

In assessing the realization of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred assets will be realized. The ultimate realization of the deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Evaluating the need for a valuation allowance for deferred tax assets often requires judgment and analysis of all the positive and negative evidence available, including cumulative losses in recent years and projected future taxable income, to determine whether all or some portion of the deferred tax assets will not be realized. As of December 31, 2020, the Company has recorded a full valuation allowance to offset the net deferred tax assets as the Company believes it is not more likely than not that the net deferred tax assets will be fully realizable. The valuation allowance increased $0.5 million during the year ended December 31, 2020.

Under the provisions of the Internal Revenue Code, certain substantial changes in the company's ownership may result in a limitation on the amount of net operating loss carryforwards and research and development credit carryforwards which could be utilized annually to offset future taxable income and taxes payable. A formal Section 382 study was not performed through December 31, 2020.

13. Subsequent events

Management has evaluated, for potential recognition or disclosure in the financial statements, subsequent events that have occurred through May 6, 2021, which is the date that the financial statements were available to be issued.

Denovium acquisition

In January 2021, the Company completed its acquisition of the common stock of Denovium, Inc., an artificial intelligence deep learning company in exchange for a combination of cash and equity consideration. The cash consideration totaled $5.2 million and the equity consideration included the issuance of 305,864 shares of its common stock. The cash and equity consideration include certain continued employment and service requirements that are earned and vest over a period of four years.

Long-term debt and other borrowings

In February 2021, the Company entered into a Fourth Amendment to the LSA. This amendment gave effect to the Company's conversion to a corporation and its purchase of Denovium, including permitting certain cash and equity consideration linked to continued employment and service requirements.

Merck strategic investment

In February 2021, Merck Global Health Innovation Fund purchased 254,886 shares of the Company's Series E Preferred Stock for an aggregate price of $5.0 million. The price per share of $19.62 was consistent with the closing of the Series E Preferred round that closed in October 2020.

Lease amendment

In March 2021, the Company entered into an amendment to its lease agreement with respect to its new facility currently under construction. The amendment makes certain changes to the original lease, including (i) the addition of 16,367 square feet of office and laboratory space at the same site (Expansion Premises) and (ii) an extension of the expiration date of the original lease by 24 months following the rent commencement date, which is estimated to be April 1, 2021.

The amendment provides for annual base rent for the Expansion Premises of approximately $0.3 million in the first year of the lease term, which increases on an annual basis to approximately $0.4 million in the final year of the lease term. The amendment also provides for additional tenant incentives in the amount of $0.7 million. Additionally, with the execution of this amendment, the Company maintains a one-time option to terminate the lease for the Original premise and Expansion premise after five years. All other terms of the lease amendment for the Expansion Premises are consistent with the existing new facility lease agreement. Under the amendment, the Company retains its original option to renew the lease for an additional five-year term, at then-current market rates.

Convertible notes

In March 2021, the Company issued $125.0 million aggregate principal amount of Convertible Notes to certain existing and new investors. The Convertible Notes are convertible into the Company's preferred shares or common shares under certain circumstances or qualified financings. The Convertible Notes will convert at a price per share equal to the lower of (a) 82% of the initial public offering price or (b) a price determined based on the pre-money valuation of the Company at $1.5 billion divided by the total outstanding shares of the common stock immediately prior to this offering, as calculated on an as converted and fully diluted basis as set forth in the Convertible Notes.

Stock options

Subsequent to December 31, 2020 the Company granted 1,250,753 stock options, with a weighted average exercise price of $4.43 and of which 531,942 were as a result of the phantom unit exchange discussed in Note 8: Stock-based compensation.

shares

Common stock

Prospectus

J.P. Morgan	**Credit Suisse**	**BofA Merrill Lynch**	**Cowen**	**Stifel**

Until , 2021 (25 days after the date of this prospectus), all dealers that buy, sell or trade shares of our common stock, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

Part II

Information Not Required in Prospectus

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth the fees and expenses, other than underwriting discounts and commissions, payable in connection with the registration of the common stock hereunder. All amounts are estimates except the SEC registration fee, the FINRA filing fee and the Nasdaq Global Market listing fee.

	Amount to be Paid
SEC registration fee	$ *
FINRA filing fee	*
Nasdaq Global Market listing fee	*
Printing and mailing	*
Legal fees and expenses	*
Accounting fees and expenses	*
Transfer agent and registrar fees and expenses	*
Miscellaneous	*
Total	$ *

* To be completed by amendment.

Item 14. Indemnification of Directors and Officers.

Section 145 of the Delaware General Corporation Law (DGCL) authorizes a corporation to indemnify its directors and officers against liabilities arising out of actions, suits and proceedings to which they are made or threatened to be made a party by reason of the fact that they have served or are currently serving as a director or officer to a corporation. The indemnity may cover expenses (including attorneys' fees) judgments, fines and amounts paid in settlement actually and reasonably incurred by the director or officer in connection with any such action, suit or proceeding. Section 145 permits corporations to pay expenses (including attorneys' fees) incurred by directors and officers in advance of the final disposition of such action, suit or proceeding. In addition, Section 145 provides that a corporation has the power to purchase and maintain insurance on behalf of its directors and officers against any liability asserted against them and incurred by them in their capacity as a director or officer, or arising out of their status as such, whether or not the corporation would have the power to indemnify the director or officer against such liability under Section 145.

We have adopted provisions in our amended and restated certificate of incorporation and amended and restated bylaws to be in effect immediately prior to the completion of this offering that limit or eliminate the personal liability of our directors to the fullest extent permitted by the DGCL, as it now exists or may in the future be amended. Consequently, a director will not be personally liable to us or our stockholders for monetary damages or breach of fiduciary duty as a director, except for liability for:

- any breach of the director's duty of loyalty to us or our stockholders; any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law; any unlawful payments related to dividends or unlawful stock purchases, redemptions or other distributions; or any transaction from which the director derived an improper personal benefit.

These limitations of liability do not alter director liability under the federal securities laws and do not affect the availability of equitable remedies such as an injunction or rescission.

In addition, our bylaws provide that:

- we will indemnify our directors, officers and, in the discretion of our board of directors, certain employees to the fullest extent permitted by the DGCL, as it now exists or may in the future be amended; and
- we will advance reasonable expenses, including attorneys' fees, to our directors and, in the discretion of our board of directors, to our officers and certain employees, in connection with legal proceedings relating to their service for or on behalf of us, subject to limited exceptions.

We intend to enter into indemnification agreements with each of our directors and executive officers. These agreements will provide that we will indemnify each of our directors, certain of our executive officers and, at times, their affiliates to the fullest extent permitted by Delaware law. We will advance expenses, including attorneys' fees (but excluding judgments, fines and settlement amounts), to each indemnified director, executive officer or affiliate in connection with any proceeding in which indemnification is available and we will indemnify our directors and officers for any action or proceeding arising out of that person's services as a director or officer brought on behalf of us or in furtherance of our rights. Additionally, certain of our directors or officers may have certain rights to indemnification, advancement of expenses or insurance provided by their affiliates or other third parties, which indemnification relates to and might apply to the same proceedings arising out of such director's or officer's services as a director referenced herein. Nonetheless, we will agree in the indemnification agreements that our obligations to those same directors or officers are primary and any obligation of such affiliates or other third parties to advance expenses or to provide indemnification for the expenses or liabilities incurred by those directors are secondary.

We will maintain general liability insurance which covers certain liabilities of our directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers, including liabilities under the Securities Act of 1933, as amended (Securities Act).

The underwriting agreement filed as Exhibit 1.1 to this registration statement provides for indemnification of us and our directors and officers by the underwriters against certain liabilities under the Securities Act and the Securities Exchange Act of 1934.

Item 15. Recent Sales of Unregistered Securities.

In the three years preceding the filing of this registration statement, we have issued the following securities that were not registered under the Securities Act. No underwriters were involved in the sales and the certificates representing the securities sold and issued contain legends restricting transfer of the securities without registration under the Securities Act or an applicable exemption from registration.

(a) Issuances of Capital Stock and Convertible Promissory Notes

On May 25, 2018, we sold an aggregate of 1,760,252 Series C redeemable convertible preferred units at a purchase price of $6.95 per unit, for an aggregate purchase price of approximately $12.2 million.

From December 2019 through June 2020, we sold an aggregate of 1,058,224 Series D-1 redeemable convertible preferred units, 102,146 Series D-2 redeemable convertible preferred units, 341,161 Series D-3 redeemable convertible preferred units and 30,645 Series D-4 redeemable convertible preferred units, each at a purchase price of $9.79 per share, for an aggregate purchase price of approximately $15.0 million.

On October 16, 2020, we completed a reorganization whereby we converted from a Delaware limited liability company, under the name AbSci LLC, to a Delaware corporation under the name Absci Corporation (Conversion). In conjunction with the Conversion, (i) all of our outstanding common units converted on a 1-for-1 basis into 4,606,505 shares of common stock and (ii) all of our outstanding preferred units converted on a 1-for-1 basis into 10,438,524 shares of redeemable convertible preferred stock. Prior to the Conversion, we had issued LLC incentive units to employees, directors and consultants. Upon the Conversion, our outstanding 1,008,055 incentive units converted on a net issuance basis into 808,909 shares of restricted common stock.

From October 2020 through February 2021, we sold an aggregate of 3,568,405 shares of Series E redeemable convertible preferred stock at a purchase price of $19.6166 per share, for an aggregate purchase price of approximately $70.0 million.

On March 17, 2021, we sold convertible promissory notes for an aggregate purchase price of $125.0 million.

The offers and sales of the securities described above were deemed to be exempt from registration pursuant to Section 4(a)(2) of the Securities Act, including Regulation D and Rule 506 promulgated thereunder, as transactions by an issuer not involving a public offering. All of the purchasers in these transactions represented to us in connection with their purchase that they were acquiring the securities for investment and not distribution, that they could bear the risks of the investment and could hold the securities for an indefinite period of time. Such purchasers received written disclosures that the securities had not been registered under the Securities Act and that any resale must be made pursuant to a registration or an available exemption from such registration. All of the foregoing securities are deemed restricted securities for the purposes of the Securities Act.

(b) Grants and Exercises of Stock Options and Issuances of Restricted Stock

Since April 1, 2018, we granted stock options to purchase 1,834,752 shares of our common stock to our employees, directors and consultants at a weighted average exercise price of $4.20 per share under the 2020 Plan, and options for 9,182 shares of common stock were exercised at an exercise price of $3.63 per share.

We sold an aggregate of 212,958 shares of common stock to employees, directors and consultants for cash consideration in the aggregate amount of $21.30 pursuant to the issuance of restricted stock under the 2020 Plan.

The issuances of the securities described above were deemed to be exempt from registration pursuant to Section 4(a)(2) of the Securities Act or Rule 701 promulgated under the Securities Act as transactions pursuant to compensatory benefit plans and contracts relating to compensation as provided under Rule 701. The recipients of such securities were the registrant's employees, consultants or directors and received the securities under the registrant's 2020 Stock Plan. The shares of common stock issued upon the exercise of options are deemed to be restricted securities for purposes of the Securities Act.

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits.

The exhibits to the registration statement are listed in the Exhibit Index to this registration statement and are incorporated herein by reference.

(b) Financial statement schedules.

None.

Exhibit Index

Exhibit No.	Description
1.1*	Form of Underwriting Agreement
3.1*	Amended and Restated Certificate of Incorporation, as amended, of the Registrant, as currently in effect
3.2*	Form of Amended and Restated Certificate of Incorporation of the Registrant, to be in effect immediately prior to completion of the offering.
3.3*	Bylaws of the Registrant and the amendments thereto, as currently in effect.
3.4*	Form of Amended and Restated Bylaws of the Registrant, to be in effect upon completion of the offering
4.1*	Specimen Common Stock Certificate
4.2*	Investors' Rights Agreement by and among the Registrant and certain of its stockholders dated October 19, 2020
5.1*	Opinion of Goodwin Procter LLP
10.1*#	2020 Stock Option and Grant Plan and forms of award agreements thereunder
10.2*#	2021 Stock Option and Incentive Plan and forms of award agreements thereunder
10.3*#	2021 Employee Stock Purchase Plan
10.4*#	Senior Executive Cash Incentive Bonus Plan
10.5*#	Non-Employee Director Compensation Policy
10.6*#	Offer Letter, by and between the Registrant and Gregory Schiffman, dated March 26, 2020
10.7*#	Offer Letter, by and between the Registrant and Matthew Weinstock, dated July 10, 2018
10.8*	Form of Indemnification Agreement by and between the Registrant and each of its directors and officers
10.9*	Office Lease, by and between AbSci, LLC and Broadway Investors II, LLC, dated as of August 11, 2016, as amended by Amendment No. 1 dated as of January 27, 2017, Amendment No. 2 dated as of November 27, 2017, Amendment No. 3 dated as of July 31, 2018, Amendment No. 4 dated as of February 1, 2019 and Amendment No. 5 dated as of July 1, 2019
10.10*	Sublease Agreement, by and between AbSci, LLC and Killian Pacific LLC, dated as of February 1, 2019, as amended by Amendment No. 1 of Sublease dated as of July 1, 2019
10.11*	Lease, by and between the Registrant and Columbia Tech Center, L.L.C., dated as of December 2, 2020, as amended by First Lease Modification Agreement, dated as of March 8, 2021
10.12*†	Joint Marketing Agreement, by and between AbSci, LLC and KBI Biopharma, Inc., dated as of December 5, 2019
16.1*	Letter regarding Change in Independent Registered Public Accounting Firm
23.1*	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm
23.2*	Consent of Goodwin Procter LLP (included in Exhibit 5.1)
24.1*	Power of Attorney (included on signature page)

* To be filed by amendment.
† Certain confidential portions (indicated by brackets and asterisks) have been omitted from this exhibit.
# Represents management compensation plan, contract or arrangement.

Signatures

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this Registration Statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Vancouver, Washington, on the day of , 2021.

ABSCI CORPORATION

By: _____

Sean McClain

Chief Executive Officer and Director

Power of Attorney

Each person whose individual signature appears below hereby authorizes and appoints Sean McClain, Gregory Schiffman and Todd Bedrick, and each of them, with full power of substitution and resubstitution and full power to act without the other, as his true and lawful attorney in fact and agent to act in his name, place and stead and to execute in the name and on behalf of each person, individually and in each capacity stated below, and to file any and all amendments to this Registration Statement, including any and all post effective amendments and amendments thereto, and any registration statement relating to the same offering as this Registration Statement that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys in fact and agents, and each of them, full power and authority to do and perform each and every act and thing, ratifying and confirming all that said attorneys in fact and agents or any of them or their or his substitute or substitutes may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated below.

Signature	Title	Date
Sean McClain	Chief Executive Officer and Director (Principal Executive Officer)	, 2021
Gregory Schiffman	Chief Financial Officer (Principal Financial Officer)	, 2021
Todd Bedrick	Corporate Controller (Principal Accounting Officer)	, 2021
Andreas Pihl	Chief Operating Officer and Director	, 2021
Eli Casdin	Director	, 2021
Zachariah Jonasson, Ph.D.	Director	, 2021
V. Bryan Lawlis, Ph.D.	Director	, 2021
Ivana Magovcevic-Liebisch, Ph.D.	Director	, 2021
Karen McGinnis, CPA	Director	, 2021
Amrit Nagpal	Director	, 2021