

PROSPECTUS SUPPLEMENT
(To Prospectus dated December 23, 2020)



Up to \$50,000,000
Common Stock

We have entered into an Open Market Sale AgreementSM, or the sales agreement, with Jefferies LLC, or Jefferies, dated May 12, 2022, relating to shares of our common stock offered by this prospectus supplement and the accompanying prospectus. In accordance with the terms of the sales agreement, under this prospectus supplement, we may offer and sell shares of our common stock, par value \$0.001 per share, having an aggregate offering price of up to \$50.0 million from time to time through Jefferies, acting as our sales agent.

Sales of shares of our common stock, if any, under this prospectus supplement will be made by any method permitted that is deemed an “at the market offering” as defined in Rule 415(a)(4) promulgated under the Securities Act of 1933, as amended, or the Securities Act. Jefferies is not required to sell any specific number or dollar amount of our common stock, but will act as our sales agent using commercially reasonable efforts consistent with its normal trading and sales practices on terms mutually agreed upon between Jefferies and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

Jefferies will be entitled to compensation under the terms of the sales agreement at a fixed commission rate equal to 3.0% of the aggregate gross proceeds from each sale of the shares sold under the sales agreement. In connection with the sale of the common stock on our behalf, Jefferies will be deemed to be an “underwriter” within the meaning of the Securities Act and the compensation of Jefferies will be deemed to be underwriting commissions or discounts. We have also agreed to provide indemnification and contribution to Jefferies with respect to certain liabilities, including civil liabilities under the Securities Act or the Securities Exchange Act of 1934, as amended, or the Exchange Act. See “Plan of Distribution” beginning on page S-18 for additional information regarding the compensation to be paid to Jefferies.

Our common stock is listed on the Nasdaq Capital Market under the symbol “SEEL.” On May 11, 2022, the last reported sale price of our common stock on the Nasdaq Capital Market was \$0.5079 per share.

Investing in our common stock involves a high degree of risk. See “Risk Factors” beginning on page S-9 of this prospectus supplement and under similar headings in the documents incorporated by reference into this prospectus supplement and the accompanying prospectus for a discussion of certain risks you should consider before investing in our common stock.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

Jefferies

The date of this prospectus supplement is May 12, 2022.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying base prospectus are part of a “shelf” registration statement on Form S-3 that we filed with the U.S. Securities and Exchange Commission, or the SEC, using a “shelf” registration process. This prospectus supplement describes the specific terms of this offering. The accompanying base prospectus, including the documents incorporated by reference therein, provides general information about us, some of which, such as the section therein titled “Plan of Distribution,” may not apply to this offering. Generally, when we refer to this prospectus supplement, we are referring to both this prospectus supplement and the accompanying base prospectus, combined.

We urge you to carefully read this prospectus supplement, the accompanying base prospectus, the documents incorporated by reference herein and therein and the additional information under the heading “Information Incorporated by Reference; Where You Can Find More Information” before buying any of the securities being offered under this prospectus supplement. These documents contain information you should consider when making your investment decision.

You should rely only on the information contained or incorporated by reference in this prospectus supplement and the accompanying base prospectus. We have not, and Jefferies has not, authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus supplement may add, update or change information contained in the accompanying base prospectus. To the extent any information in this prospectus supplement is inconsistent with the accompanying base prospectus, you should rely on the information in this prospectus supplement. The information in this prospectus supplement will be deemed to modify or supersede the information in the accompanying base prospectus and the documents incorporated by reference therein, except for those documents incorporated by reference therein which we file with the SEC after the date of this prospectus supplement.

You should not assume that the information contained or incorporated by reference in this prospectus supplement and the accompanying base prospectus is accurate on any date subsequent to the date set forth on the front cover of this prospectus supplement and the accompanying base prospectus or on any date subsequent to the date of the document incorporated by reference herein or therein, as applicable. Our business, financial condition, results of operations and prospects may have changed since those dates.

We are offering to sell, and seeking offers to buy, the securities described in this prospectus supplement only in jurisdictions where offers and sales are permitted. The distribution of this prospectus supplement and the offering of the securities in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement must inform themselves about, and observe any restrictions relating to, the offering of the securities and the distribution of this prospectus supplement outside the United States. This prospectus supplement does not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference into this prospectus supplement or the accompanying base prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

In this prospectus supplement, unless otherwise indicated or required by the context, the terms “Seelos,” “we,” “our,” “us” and the “Company” refer to Seelos Therapeutics, Inc. and its consolidated subsidiaries.

PROSPECTUS SUPPLEMENT SUMMARY

This summary contains basic information about us and this offering. This summary highlights selected information contained elsewhere in, or incorporated by reference into, this prospectus supplement. This summary is not complete and may not contain all of the information that is important to you and that you should consider before deciding whether or not to invest in our common stock. For a more complete understanding of Seelos and this offering, you should carefully read this prospectus supplement, including any information incorporated by reference into this prospectus supplement, in its entirety. Investing in our securities involves risks that are described in this prospectus supplement under the heading “Risk Factors,” under the headings “Item 1A. Risk Factors” in our [Annual Report on Form 10-K for the year ended December 31, 2021](#), “Part II, Item 1A. Risk Factors” in our [Quarterly Report on Form 10-Q for the quarter ended March 31, 2022](#) and in our other filings with the SEC.

Our Company

Overview

We are a clinical-stage biopharmaceutical company focused on achieving efficient development of products that address significant unmet needs in Central Nervous System, or CNS, disorders and other rare disorders.

Our business model is to advance multiple late-stage therapeutic candidates with proven mechanisms of action that address large markets with unmet medical needs and for which there is a strong economic and scientific rationale for development.

Our product development pipeline is as follows:

Product	Indication	Development Phase	Development Status
SLS-002	Acute Suicidal Ideation and Behavior (ASIB) in Major	Phase II	Completed open-label patient enrollment and announced

Intranasal Racemic Ketamine	Depressive Disorder (MDD)		the initial topline data from Part 1 of the proof-of-concept study on May 17, 2021 and initiated enrollment of Part 2 of a registration directed study
SLS-005 IV Trehalose	Amyotrophic Lateral Sclerosis (ALS)	Phase II/III	On February 28, 2022, we announced dosing of the first participants in the registrational study; enrollment ongoing
	Spinocerebellar Ataxia (SCA)	Phase IIb/III	Startup activities ongoing; enrollment of our first participants expected in the second quarter of 2022
	Sanfilippo Syndrome	Phase II	Obtaining natural history data
SLS-004 Gene Therapy	Parkinson's Disease (PD)	Pre-IND	Preclinical studies ongoing
SLS-006 Partial Dopamine Agonist	Parkinson's Disease (PD)	Phase II/III	Not in active development; considering next steps
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SLS-007 Peptide Inhibitor	Parkinson's Disease (PD)	Pre-IND	Preclinical study ongoing
<p>Lead Programs</p> <p>Our lead programs are currently SLS-002 for the potential treatment of Acute Suicidal Ideation and Behavior, or ASIB, in patients with Major Depressive Disorder, or MDD, and SLS-005 for the potential treatment of Amyotrophic Lateral Sclerosis, or ALS, and Spinocerebellar Ataxia, or SCA. SLS-005 for the potential treatment of Sanfilippo Syndrome currently requires additional natural history data, which is being considered.</p> <p>SLS-002 is intranasal racemic ketamine with two investigational new drug applications, or INDs. The lead program is focused on the treatment of ASIB in MDD. SLS-002 was originally derived from a Javelin Pharmaceuticals, Inc./Hospira, Inc. program with 16 clinical studies involving approximately 500 subjects. SLS-002 addresses an unmet need for an efficacious drug to treat suicidality in the United States. Traditionally, anti-depressants have been used in this setting but many of the existing treatments are known to contribute to an increased risk of suicidal thoughts in some circumstances, and if and when they are effective, it often takes weeks for the full therapeutic effect to be manifested. We believe there is a large opportunity in the United States and European markets for products in this space. Based on information gathered from the databases of the Agency for Healthcare Research and Quality, there were approximately 1,000,000 visits to emergency rooms for suicide attempts in 2013 in the United States alone. Experimental studies suggest ketamine has the potential to be a rapid, effective treatment for refractory depression and suicidality.</p> <p>The clinical development program for SLS-002 includes two parallel healthy volunteer studies (Phase I). We announced interim data from our Phase I study of SLS-002 during the quarterly period ended March 31, 2020. As a result, in March 2020, we completed a Type C meeting with the U.S. Food and Drug Administration, or FDA, and received guidance to conduct a Phase II proof of concept, or PoC, study of SLS-002 for ASIB in patients with MDD, to support the further clinical development of this product candidate, together with nonclinical data under development.</p> <p>As a result of the Type C meeting and the Fast Track designation for SLS-002 for the treatment of ASIB in patients with MDD, we believe we are well positioned to pursue the FDA's expedited programs for drug development and review.</p> <p>On June 23, 2020, we announced the final safety data from our Phase I pharmacokinetics/pharmacodynamics study of intranasal racemic ketamine (SLS-002) as well as the planned design of a Phase II double blind, placebo-controlled PoC study for ASIB in subjects with MDD. We initiated this PoC study in two parts: Part 1 was an open-label study of 17 subjects, and is being followed by Part 2, which is a double blind, placebo-controlled study of approximately 120 subjects. On January 15, 2021, we announced dosing of the first subjects in Part 1 of the PoC study. On March 5, 2021, we announced the completion of open-label enrollment of subjects in Part 1 of the PoC study. On May 17, 2021, we announced positive topline data from Part 1 of the PoC study, the open-label cohort, of our study of SLS-002 (intranasal racemic ketamine), demonstrating a significant treatment effect and a well-tolerated safety profile for ASIB in patients with MDD. This study enrolled 17 subjects diagnosed with MDD requiring psychiatric hospitalization due to significant risk of suicide with a baseline score of ≥ 28 points on the Montgomery-Åsberg Depression Rating Scale, or MADRS, a score of 5 or 6 on MADRS Item-10, a score of ≥ 15 points on the Sheehan-Suicidality Tracking Scale (S-STSS) total score and a history of previous suicide attempt(s), as confirmed on the Columbia Suicide Severity Rating Scale (C-SSRS) with a history of at least one actual attempt, or if the attempt was interrupted or aborted, is judged to have been serious in intent. SLS-002 demonstrated a 76.5% response rate (response meaning 50% reduction from baseline) in the primary endpoint on MADRS twenty-four hours after first dose, with a mean reduction in total score from 39.4 to 14.5 points.</p> <p>On July 6, 2021, we announced dosing of the first subject in Part 2 of the planned registration directed study. Based on feedback from a Type C meeting with the FDA in June 2021, we are planning to increase the subjects in Part 2 to increase the sample size and power to support a potential marketing application.</p>			
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<p>SLS-005 is IV trehalose, a protein stabilizer that crosses the blood-brain-barrier and activates autophagy and the lysosomal pathway. Based on preclinical and in vitro studies, there is a sound scientific rationale for developing trehalose for the treatment of ALS, SCA and other indications such as Sanfilippo Syndrome. Trehalose is a low molecular weight disaccharide (0.342 kDa) that protects against pathological processes in cells. It has been shown to penetrate muscle and cross the blood-brain-barrier. In animal models of several diseases associated with abnormal cellular protein aggregation, it has been shown to reduce pathological aggregation of misfolded proteins as well as to activate autophagy pathways through the activation of Transcription Factor EB, or TFEB, a key factor in lysosomal and autophagy gene expression. Activation of TFEB is an emerging therapeutic target for a number of diseases with pathological accumulation of storage material.</p> <p>Trehalose 90.5 mg/mL IV solution has demonstrated promising clinical potential in prior Phase II clinical development for oculopharyngeal muscular dystrophy, or OPMD, and spinocerebellar ataxia type 3, or SCA3, also known as Machado Joseph disease, with no significant safety signals to date and encouraging efficacy results. Pathological accumulation of protein aggregates within cells, whether in the CNS or in muscle, eventually leads to loss of function and ultimately cell death. Prior preclinical</p>			
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studies indicate that this platform has the potential to prevent mutant protein aggregation in other devastating PolyA/PolyQ diseases.

We own three United States patents for parenteral administration of trehalose for patients with OPMD and SCA3, all of which are expected to expire in 2034. In addition, Orphan Drug Designation, or ODD, for OPMD and SCA3 has been secured in the United States and in the European Union, or EU. In February 2019, we assumed a collaborative agreement, turned subsequently into a research grant, with Team Sanfilippo Foundation, or TSF, a nonprofit medical research foundation founded by parents of children with Sanfilippo Syndrome. On April 30, 2020, we were granted ODD for SLS-005 in Sanfilippo Syndrome from the FDA. SLS-005 was previously granted ODD from the FDA and European Medicines Agency for SCA3 and OPMD as well as Fast Track designation for OPMD. On August 25, 2020, we were issued U.S. patent number 10,751,353 titled "COMPOSITIONS AND METHODS FOR TREATING AN AGGREGATION DISEASE OR DISORDER", which relates to trehalose (SLS-005). The issued patent covers the method of use for trehalose (SLS-005) formulation for treating a disease or disorder selected from any one of the following: spinal and bulbar muscular atrophy, dentatorubral-pallidolusian atrophy, Pick's disease, corticobasal degeneration, progressive supranuclear palsy, frontotemporal dementia or parkinsonism linked to chromosome 17. On May 15, 2020, we were granted Rare Pediatric Disease Designation, or RPDD, for SLS-005 in Sanfilippo Syndrome from the FDA. RPDD is an incentive program created under the Federal Food, Drug, and Cosmetic Act to encourage the development of new therapies for the prevention and treatment of certain rare pediatric diseases. On May 27, 2021, we announced that we were granted ODD for SLS-005 in ALS from the European Medicines Agency. In December 2020, we announced the selection of SLS-005 for the Healey ALS platform trial led by Harvard Medical School, Massachusetts. The Healey ALS platform trial is designed to study multiple potential treatments for ALS simultaneously. The platform trial model aims to greatly accelerate the study access, reduce costs and shorten development timelines. On February 28, 2022, we announced the dosing of the first participants in the Healey ALS platform trial. In November 2021, we announced the FDA acceptance of an IND and grant of Fast Track designation for SLS-005 for the treatment of SCA. Start-up activities are underway and we expect to enroll our first participants in the second quarter of 2022.

Additionally, we are developing several preclinical programs, most of which have well-defined mechanisms of action, including SLS-004, licensed from Duke University, and SLS-007, licensed from The Regents of the University of California, for the potential treatment of Parkinson's Disease, or PD, SLS-008, targeted at chronic inflammation in asthma, atopic dermatitis and orphan indications such as pediatric esophagitis, SLS-010 in narcolepsy and related disorders and SLS-012, an injectable therapy for post-operative pain management.

Strategy and Ongoing Programs

SLS-002: The clinical development program for SLS-002 includes two parallel healthy volunteer studies (Phase I). Following these Phase I studies, we completed a Type C meeting with the FDA in March 2020 and received guidance to conduct a Phase II PoC study of SLS-002 for ASIB in subjects with MDD. We released topline data for Part 1 of our open-label study on May 17, 2021. We initiated enrollment in Part 2 of the registration directed study on July 6, 2021.

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SLS-005 is undergoing startup activities for clinical studies in ALS and SCA. In December 2020, we announced the selection of SLS-005 for the Healey ALS platform trial led by Harvard Medical School, Massachusetts. The Healey ALS platform trial is designed to study multiple potential treatments for ALS simultaneously. The platform trial model aims to greatly accelerate the study access, reduce costs, and shorten development timelines. On February 28, 2022, we announced dosing of the first participants in the Healey ALS platform trial. In November 2021, we announced the FDA acceptance of an IND and grant of Fast Track designation for SLS-005 for the treatment of SCA. We have begun the start up activities for a Phase IIb/III study for SCA and expect to enroll our first participants in the second quarter of 2022. We are continuing to consider trials in Sanfilippo Syndrome and are seeking more natural history data based on the guidance from regulatory agencies.

SLS-004 is an all-in-one lentiviral vector, targeted for gene editing through DNA methylation within intron 1 of the synuclein alpha, or SNCA, gene responsible for expressing alpha-synuclein protein. SLS-004, when delivered to dopaminergic neurons derived from human induced pluripotent stem cells of a PD patient, modified the expression on alpha-synuclein, or α -synuclein, and exhibited reversal of the disease-related cellular-phenotype characteristics of the neurons. The role of mutated SNCA in PD pathogenesis and the need to maintain the normal physiological levels of α -synuclein protein emphasize the yet unmet need to develop new therapeutic strategies, such as SLS-004, targeting the regulatory mechanism of α -synuclein expression. On May 28, 2020, we announced the initiation of a preclinical study of SLS-004 in PD through an all-in-one lentiviral vector targeting the SNCA gene. We are constructing a bimodular viral system harboring an endogenous α -synuclein transgene and inducible regulated repressive CRISPR/Cas9-unit to achieve constitutive activation and inducible suppression of PD-related pathologies. On July 7, 2021, we announced positive in vivo data demonstrating down-regulation of SNCA mRNA and protein expression under this study.

SLS-006 is a true partial dopamine agonist, originally developed by Wyeth Pharmaceuticals, Inc., with previous clinical studies on 340 subjects in various Phase I and Phase II studies. It is a potent D2/D3 agonist/antagonist that has shown promising efficacy with statistical significance in Phase II studies in early-stage PD patients and an attractive safety profile. Moreover, it has also shown synergistic effect with reduced doses of L-DOPA. Currently, this program is not in active development and we are considering the next steps.

SLS-007 is a rationally designed peptide-based approach, targeting the nonamyloid component core, or NACore, of α -synuclein to inhibit the protein from aggregation. Recent in vitro and cell culture research has shown that SLS-007 has the ability to stop the propagation and seeding of α -synuclein aggregates. We will evaluate the potential for in vivo delivery of SLS-007 in a PD transgenic mice model. The goal will be to establish in vivo pharmacokinetics/pharmacodynamics and target engagement parameters of SLS-007, a family of anti- α -synuclein peptidic inhibitors. On June 25, 2020, we announced the initiation of a preclinical study of SLS-007 in PD delivered through an adeno associated viral, or AAV, vector targeting the non-amyloid component core of α -synuclein. We have initiated an in vivo preclinical study of SLS-007 in rodents to assess the ability of two specific novel peptides, S62 and S71, delivered via AAV1/2 viral vector, to protect dopaminergic function in the preformed α -synuclein fibril rodent model of PD. Production of AAV1/2 vectors encoding each of the two novel peptides incorporating hemagglutinin tags has already been completed. This preclinical study is designed to establish the in vivo pharmacokinetic and pharmacodynamic profiles and target engagement parameters of SLS-007.

We intend to become a leading biopharmaceutical company focused on neurological and psychiatric disorders, including orphan indications. Our business strategy includes:

- Advancing SLS-002 in ASIB in MDD and post-traumatic stress disorder;
- Advancing SLS-004 in PD;
- Advancing SLS-005 in ALS, SCA and Sanfilippo Syndrome;
- Advancing SLS-007 in PD as a monotherapy; and
- Acquiring synergistic assets in the CNS therapy space through licensing and partnerships.

We also have two legacy product candidates: a product candidate in the United States for the treatment of erectile dysfunction, which we in-licensed from Warner Chilcott Company, Inc., now a subsidiary of Allergan plc; and a product candidate which has completed a Phase IIa clinical trial for the treatment of Raynaud's Phenomenon, secondary to scleroderma, for which we own worldwide rights.

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Impact of COVID-19

In March 2020, we began taking precautionary measures to protect the health and safety of our employees and contractors and further assessing the actual and

potential impact of the coronavirus, or COVID-19, pandemic on our business, financial condition and operations. COVID-19 infections have been reported throughout the United States, along with other jurisdictions in which our suppliers, partners and collaborators operate. In addition, COVID-19 has caused disruption and volatility in the global capital markets, and has led to an economic slowdown. Certain national, provincial, state and local governmental authorities have issued proclamations and/or directives aimed at minimizing the spread of COVID-19 and additional, more restrictive proclamations and/or directives may be issued in the future. Before the COVID-19 outbreak, most of our employees worked remotely. Up until the fourth quarter of 2021, we had not experienced any significant delays with our past or ongoing clinical trials for SLS-002, or our start up activities for clinical trials for SLS-005. Beginning in the fourth quarter of 2021 and through the date of this prospectus, we have experienced a slowdown in patient enrollment primarily due to staffing issues at our study sites related to the spike in COVID-19 cases due to the Omicron variant. However, the pandemic has not materially affected our liquidity as we maintain our resources in the form of cash.

In addition, although we do not currently expect the preventative measures taken to date to have a material adverse impact on our business for the second quarter of 2022, the continued impact of the COVID-19 pandemic on our business, financial condition and results of operations is unknown and will depend on future developments and risks, which are highly uncertain and cannot be predicted. These developments and risks include, among others, the duration and severity of the COVID-19 pandemic, the emergence or spread of new COVID-19 variants, the impact on the capital markets, the impact on our partners and the regulatory agencies that oversee our sector and any additional preventative and protective actions that governmental authorities, or we, may implement, any of which may result in an extended period of business disruption, including potential delays in commencing future clinical trials, or in completing enrollment for any clinical trials we may commence or in the FDA or other regulatory agencies conducting in-person inspections or accommodations for alternatives to in-person inspections. Any resulting financial impact cannot be reasonably estimated at this time, but the COVID-19 pandemic may force us to make adjustments to our business, our plans and our timeline for developing assets, including our programs. In addition, the pandemic is currently not anticipated to have a material adverse impact on our business, financial condition and results of operations, including our ability to raise additional capital, although, if the pandemic continues at its current rate into the middle of 2022, it could have a material adverse impact on our business.

Corporate Information

Our principal executive offices are located at 300 Park Avenue, 2nd Floor, New York, NY 10022, and our telephone number is (646) 293-2100. Our website is located at www.seelotherapeutics.com. Any information contained on, or that can be accessed through, our website is not incorporated by reference into, nor is it in any way part of, this prospectus supplement and should not be relied upon in connection with making any decision with respect to an investment in our securities. We are required to file annual, quarterly and current reports, proxy statements and other information with the SEC. You may obtain any of the documents filed by us with the SEC at no cost from the SEC's website at www.sec.gov.

We are a "smaller reporting company" as defined in Rule 12b-2 of the Exchange Act and have elected to take advantage of certain of the scaled disclosure available for smaller reporting companies in this prospectus supplement as well as our filings under the Exchange Act.

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THE OFFERING

Common stock offered by us

Shares of our common stock having an aggregate offering price of up to \$50.0 million

Common stock to be outstanding immediately after this offering

Up to 199,930,395 shares of common stock, assuming sales of 94,339,622 shares of our common stock in this offering at a public offering price of \$0.53 per share, which was the last reported sale price of our common stock on the Nasdaq Capital Market on May 9, 2022. The actual number of shares of our common stock issued will vary depending on the sales price under the offering.

Plan of Distribution

"At the market offering" that may be made from time to time on the Nasdaq Capital Market or other existing trading market for our common stock through our sales agent, Jefferies. See "Plan of Distribution" on page S-18 of this prospectus supplement.

Use of Proceeds

We currently plan to use the net proceeds from this offering for general corporate purposes and to advance the development of our product candidates. See "Use of Proceeds" on page S-14 of this prospectus supplement.

Risk Factors

Investing in our securities involves a high degree of risk. See "Risk Factors" beginning on page S-9 of this prospectus supplement and other information included or incorporated by reference into this prospectus supplement for a discussion of factors you should carefully consider before investing in our securities.

Nasdaq Capital Market symbol

"SEEL"

The number of shares of our common stock to be outstanding immediately after this offering is based on 105,590,773 shares of our common stock issued and outstanding as of March 31, 2022 and excludes the following:

- 9,930,227 shares of our common stock issuable upon the exercise of stock options outstanding under the 2012 Plan as of March 31, 2022, at a weighted-average exercise price of \$2.31 per share;
- 15,408 shares of our common stock issuable upon the exercise of stock options outstanding under the 2016 Plan issued on September 23, 2016, at a weighted-average exercise price of \$0.65 per share;
- 353,535 shares of our common stock issuable upon the exercise of stock options outstanding under the 2019 Inducement Plan as of March 31, 2022, at a weighted-average exercise price of \$1.40 per share;
- 2,635,068 shares of our common stock issuable upon the exercise of outstanding warrants as of March 31, 2022, at a weighted-average exercise price of \$4.29 per share;
- 5,518,648 shares of our common stock reserved for future issuance under our Amended and Restated 2012 Stock Long Term Incentive Plan, or the 2012 Plan, as of March 31, 2021;
- 646,465 shares of our common stock reserved for future issuance under our 2019 Inducement Plan (the "2019 Inducement Plan") as of March 31, 2022;

- 2,436,275 shares of our common stock reserved for future issuance under our 2020 Employee Stock Purchase Plan (the “ESPP”) as of March 31, 2022; and
- up to 3,703,614 shares of our common stock issuable upon conversion of certain convertible notes in an aggregate principal amount of \$22,221,688 that we issued in November 2021 and December 2021, or the Notes, which, to the extent outstanding, will become convertible by the holders thereof at a price of \$6.00 per share commencing between August 23, 2022 and September 2, 2022.

Except as otherwise indicated, all information in this prospectus assumes no exercise of the outstanding options or warrants described above and does not assume or give effect to any exercise of outstanding options or warrants or conversion of notes after March 31, 2022.

As of March 31, 2022, our authorized capital stock consisted of 240,000,000 shares of common stock and 10,000,000 shares of preferred stock.

RISK FACTORS

Investing in our common stock involves risk. Before deciding whether to invest in our common stock, you should consider carefully the risks and uncertainties described below. You should also consider the risks, uncertainties and assumptions discussed under the heading “Risk Factors” included in our most recent annual report on Form 10-K, as revised or supplemented by our most recent quarterly report on Form 10-Q, each of which are on file with the SEC and are incorporated herein by reference, and which may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future. There may be other unknown or unpredictable economic, business, competitive, regulatory or other factors that could have material adverse effects on our future results. If any of these risks actually occurs, our business, business prospects, financial condition or results of operations could be seriously harmed. This could cause the trading price of our common stock to decline, resulting in a loss of all or part of your investment. Please also read carefully the section below entitled “Disclosure Regarding Forward-Looking Statements.”

Risks Related to This Offering

We will have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

We currently intend to use the net proceeds of this offering for general corporate purposes and to advance the development of our product candidates, as further described in the section of this prospectus supplement entitled “Use of Proceeds”. We will have broad discretion in the application of the net proceeds in the category of other working capital and general corporate purposes and investors will be relying on the judgment of our management regarding the application of the proceeds of this offering.

The precise amount and timing of the application of these proceeds will depend upon a number of factors, such as the timing and progress of our research and development efforts, our funding requirements and the availability and costs of other funds. As of the date of this prospectus supplement, we cannot specify with certainty all of the particular uses for the net proceeds to us from this offering. Depending on the outcome of our efforts and other unforeseen events, our plans and priorities may change and we may apply the net proceeds of this offering in different manners than we currently anticipate.

The failure by our management to apply these funds effectively could harm our business, financial condition and results of operations. Pending their use, we may invest the net proceeds from this offering in short-term, interest-bearing instruments. These investments may not yield a favorable return to our stockholders.

You may experience immediate and substantial dilution.

The offering price per share in this offering may exceed the net tangible book value per share of our common stock outstanding prior to this offering. Assuming that an aggregate of 94,339,622 shares of our common stock are sold during the term of the sales agreement with Jefferies at a price of \$0.53 per share, the last reported sale price of our common stock on the Nasdaq Capital Market on May 9, 2022, for aggregate gross proceeds of approximately \$50.0 million, after deducting commissions and estimated aggregate offering expenses payable by us you will experience immediate dilution of \$0.06 per share, representing the difference between the assumed offering price per share and our adjusted net tangible book value per share as of March 31, 2022 after giving effect to this offering. The exercise of outstanding stock options and warrants may result in further dilution of your investment. See the section entitled “Dilution” below for a more detailed illustration of the dilution you would incur if you participate in this offering.

Sales of common stock offered hereby will be in “at the market offerings,” and investors who buy shares at different times will likely pay different prices.

Investors who purchase shares in this offering at different times will likely pay different prices, and accordingly may experience different levels of dilution and different outcomes in their investment results. We will have discretion, subject to market demand, to vary the timing, prices and number of shares sold in this offering. In addition, subject to the final determination by our board of directors or any restrictions we may place in any applicable placement notice delivered to a sales agent, there is no minimum or maximum sales price for shares to be sold in this offering. Investors may experience a decline in the value of the shares they purchase in this offering as a result of sales made at prices lower than the prices they paid.

You may experience future dilution as a result of future equity offerings.

In order to raise additional capital, we may in the future offer additional shares of our common stock or other securities convertible into or exchangeable for our common stock at prices that may not be the same as the price per share in this offering. We may sell shares or other securities in any other offering at a price per share that is less than the price per share paid by investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders. The price per share at which we sell additional shares of our common stock, or securities convertible or exchangeable into common stock, in future transactions may be higher or lower than the price per share paid by investors in this offering.

We may never pay dividends on our common stock so any returns would be limited to the appreciation of our stock.

We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate we will declare or pay any cash dividends for the foreseeable future. Further, any future debt agreements may also prohibit us from paying, or place restrictions on our ability to pay, dividends. Any return to stockholders will therefore be limited to the appreciation of their stock.

Resales of our common stock in the public market during this offering by our stockholders may cause the market price of our common stock to fall.

We may issue common stock from time to time in connection with this offering. This issuance from time to time of these new shares of our common stock, or our ability to issue these shares of common stock in this offering, could result in resales of our common stock by our current stockholders concerned about the potential dilution of their holdings. In turn, these resales could have the effect of depressing the market price for our common stock.

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DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement and the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus may contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, about Seelos. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. These forward-looking statements rely on a number of assumptions concerning future events and include statements relating to:

- the potential impact to our business, financial condition and employees, including disruptions to our clinical trials, preclinical studies, supply chain and operations, due to the COVID-19 global pandemic;
- our ability to take advantage of opportunities under the Coronavirus Aid, Relief, and Economic Security Act (the “CARES Act”), and the potential impact of the CARES Act on our business, results of operations, financial condition or liquidity;
- risks and uncertainties associated with our actual and proposed research and development activities, including our clinical trials and preclinical studies;
- risks relating to the fact that the clinical results from the planned Part 2 of our study of SLS-002 may not be replicated or may be materially different from the topline clinical results of Part 1 of the study;
- the timing or likelihood of regulatory filings and approvals or of alternative regulatory pathways for our product candidates;
- the potential market opportunities for commercializing our product candidates;
- our expectations regarding the potential market size and the size of the patient populations for our product candidates, if approved for commercial use, and our ability to serve such markets;
- estimates of our expenses, future revenue, capital requirements and our needs for additional financing;
- our ability to continue as a going concern;
- our ability to develop, acquire and advance our product candidates into, and successfully complete, clinical trials and preclinical studies and obtain regulatory approvals;
- the implementation of our business model and strategic plans for our business and product candidates;
- the initiation, cost, timing, progress and results of future and current preclinical studies and clinical trials, and our research and development programs;
- the terms of future licensing arrangements, and whether we can enter into such arrangements at all;
- timing and receipt or payments of licensing and milestone revenues or payments, if any;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates and our ability to operate our business without infringing the intellectual property rights of others;
- regulatory developments in the United States and foreign countries;
- the performance of our third-party suppliers and manufacturers;
- our ability to maintain and establish collaborations or obtain additional funding;
- the success of competing therapies that are currently or may become available;
- our use of proceeds from this offering;
- our financial performance; and
- developments and projections relating to our competitors and our industry.

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Any forward-looking statements should be considered in light of these factors. Words such as “anticipates,” “believes,” “forecasts,” “potential,” “goal,” “contemplates,” “expects,” “intends,” “plans,” “projects,” “hopes,” “seeks,” “estimates,” “strategy,” “continues,” “ongoing,” “opportunity,” “could,” “would,” “should,” “likely,” “will,” “may,” “can,” “designed to,” “future,” “foreseeable future” and similar expressions and variations, and negatives of these words, identify forward-looking statements. These forward-

looking statements are based on the expectations, estimates, projections, beliefs and assumptions of our management based on information currently available to management, all of which are subject to change. These forward-looking statements are not guarantees of future performance and are subject to risks and uncertainties that could cause actual results to differ materially from the results contemplated by the forward-looking statements. Many of the important factors that will determine these results and values are beyond our ability to control or predict. You are cautioned not to put undue reliance on any forward-looking statements. Except as otherwise required by law, we do not assume any obligation to update any forward-looking statements.

In evaluating an investment in shares of our common stock, you should carefully consider the discussion of risks and uncertainties described under the heading “Risk Factors” contained in this prospectus supplement, and under similar headings in other documents, including in our [Annual Report on Form 10-K for the year ended December 31, 2021](#), as filed with the SEC on March 4, 2022, our [Quarterly Report on Form 10-Q for the quarter ended March 31, 2022](#), filed with the SEC on May 10, 2022, and in our other filings with the SEC, that are incorporated by reference in this prospectus supplement. You should carefully read this prospectus supplement together with the information incorporated by reference in this prospectus supplement as described under the heading “Information Incorporated by Reference; Where You Can Find More Information”, completely and with the understanding that our actual future results may be materially different from what we expect.

All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by our cautionary statements. The forward-looking statements included or incorporated by reference herein are made only as of the date of this prospectus supplement (or as of the date of any such document incorporated by reference). We do not intend, and undertake no obligation, to update these forward-looking statements, except as required by law.

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MARKET AND INDUSTRY DATA

Unless otherwise indicated, we have based the information concerning our industry contained in this prospectus supplement and incorporated by reference herein on our general knowledge of and expectations concerning the industry, which involve risks and uncertainties and are subject to change based on various factors, including those discussed in the “Risk Factors” section of this prospectus supplement and in the other information contained or incorporated by reference in this prospectus supplement. These and other factors could cause the information concerning our industry to differ materially from those expressed in this prospectus supplement and incorporated by reference herein.

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USE OF PROCEEDS

We may issue and sell shares of our common stock having aggregate gross proceeds of up to \$50.0 million from time to time under this prospectus supplement and accompanying prospectus. Because there is no minimum offering amount required as a condition to close this offering, the actual total offering amount, commissions and proceeds to us, if any, are not determinable at this time. The amount of proceeds from this offering will depend upon the number of shares of our common stock sold and the market price at which they are sold. There can be no assurance that we will be able to sell any shares under or fully utilize the sales agreement as a source of financing.

We currently intend to use the net proceeds from this offering for general corporate purposes and to advance the development of our product candidates.

The precise amount and timing of the application of these proceeds will depend upon a number of factors, such as the timing and progress of our research and development efforts, our funding requirements and the availability and costs of other funds. As of the date of this prospectus supplement, we cannot specify with certainty all of the particular uses for the net proceeds to us from this offering. Depending on the outcome of our efforts and other unforeseen events, our plans and priorities may change and we may apply the net proceeds of this offering in different manners than we currently anticipate. Accordingly, our management will have broad discretion in the timing and application of these proceeds. Pending application of the net proceeds as described above, we intend to temporarily invest the proceeds in short-term, interest-bearing, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government.

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DIVIDEND POLICY

We have never declared or paid cash dividends on our common stock and do not anticipate paying cash dividends on our common stock in the foreseeable future. The payment of dividends on our capital stock will depend on our earnings, financial condition and other business and economic factors affecting us at such time as the board of

directors may consider relevant. If we do not pay dividends, our common stock may be less valuable because a return on your investment will only occur if the common stock price appreciates.

DILUTION

If you purchase our common stock in this offering, your interest will be diluted to the extent of the difference between the public offering price per share and the net tangible book value per share of our common stock after this offering. We calculate net tangible book value per share by dividing our net tangible assets (tangible assets less total liabilities) by the number of shares of our common stock issued and outstanding as of March 31, 2022.

Our net tangible book value at March 31, 2022 was \$45.6 million, or \$0.43 per share. After giving effect to the sale of our common stock during the term of the sales agreement with Jefferies in the aggregate amount of \$50.0 million at an assumed offering price of \$0.53 per share, the last reported sale price of our common stock on the Nasdaq Capital Market on May 9, 2022, and after deducting commissions and estimated aggregate offering expenses payable by us, our as adjusted net tangible book value as of March 31, 2022 would have been approximately \$48.3 million, or \$0.47 per share of common stock. This represents an immediate increase in the net tangible book value of \$0.04 per share to our existing stockholders and an immediate dilution in net tangible book value of \$0.06 per share to new investors. The following table illustrates this per share dilution:

Assumed public offering price per share of common stock		\$ 0.53
Net tangible book value per share as of March 31, 2022	\$ 0.43	
Increase in net tangible book value per share attributable to this offering	\$ 0.04	
As adjusted net tangible book value per share as of March 31, 2022, after giving effect to this offering		\$ 0.47
Dilution per share to new investors purchasing shares in this offering		\$ 0.06

The table above assumes for illustrative purposes that an aggregate of 94,339,622 shares of our common stock are sold during the term of the sales agreement with Jefferies at a price of \$0.53 per share, the last reported sale price of our common stock on the Nasdaq Capital Market on May 9, 2022, for aggregate net proceeds of approximately \$48.3 million, after deducting commissions and estimated aggregate offering expenses payable by us. The as adjusted information is illustrative only and will adjust based on the actual price to the public, the actual number of shares sold and other terms of the offering determined at the time shares of our common stock are sold pursuant to this prospectus supplement. The shares pursuant to the sales agreement with Jefferies are being sold from time to time at various prices.

The above discussion and table are based on 105,590,773 shares of our common stock issued and outstanding as of March 31, 2022 and excludes the following:

- 9,930,227 shares of our common stock issuable upon the exercise of stock options outstanding under the 2012 Plan as of March 31, 2022, at a weighted-average exercise price of \$ 2.31 per share;
- 15,408 shares of our common stock issuable upon the exercise of stock options outstanding under the 2016 Plan issued on September 23, 2016, at a weighted-average exercise price of \$0.65 per share;
- 353,535 shares of our common stock issuable upon the exercise of stock options outstanding under the 2019 Inducement Plan as of March 31, 2022, at a weighted-average exercise price of \$ 1.40 per share;
- 2,635,068 shares of our common stock issuable upon the exercise of outstanding warrants as of March 31, 2022, at a weighted-average exercise price of \$4.29 per share;
- 5,518,648 shares of our common stock reserved for future issuance under the 2012 Plan as of March 31, 2021;
- 646,465 shares of our common stock reserved for future issuance under the 2019 Inducement Plan as of March 31, 2022;
- 2,436,275 shares of our common stock reserved for future issuance under the ESPP as of March 31, 2022; and

- up to 3,703,614 shares of our common stock issuable upon conversion of the Notes, which, to the extent outstanding, will become convertible by the holders thereof at a price of \$6.00 per share commencing between August 23, 2022 and September 2, 2022.

To the extent that options or warrants are exercised, new options or other equity awards are issued under our equity incentive plans, or we issue additional shares of common stock or other equity or convertible debt securities in the future, there may be further dilution to investors participating in this offering. Moreover, we may choose to raise additional capital because of market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans. If we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

PLAN OF DISTRIBUTION

We have entered into a sales agreement with Jefferies, under which we may offer and sell our shares of common stock from time to time through Jefferies acting as agent. Pursuant to this prospectus supplement, we may offer and sell up to \$50,000,000 of our shares of common stock. Sales of our shares of common stock, if any, under this prospectus supplement and the accompanying prospectus will be made by any method that is deemed to be an “at the market offering” as defined in Rule 415(a)(4) under the Securities Act.

Each time we wish to issue and sell shares of common stock under the sales agreement, we will notify Jefferies of the number of shares to be issued, the dates on which such sales are anticipated to be made, any limitation on the number of shares to be sold in any one day and any minimum price below which sales may not be made. Once we have so instructed Jefferies, unless Jefferies declines to accept the terms of such notice, Jefferies has agreed to use its commercially reasonable efforts consistent with its normal trading and sales practices to sell such shares up to the amount specified on such terms. The obligations of Jefferies under the sales agreement to sell our shares of common stock are subject to a number of conditions that we must meet.

The settlement of sales of shares between us and Jefferies is generally anticipated to occur on the second trading day following the date on which such sales were made. Sales of our shares of common stock as contemplated in this prospectus supplement will be settled through the facilities of The Depository Trust Company or by such other means as we and Jefferies may agree upon. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

We will pay Jefferies a commission equal to 3.0% of the aggregate gross proceeds we receive from each sale of our shares of common stock. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. In addition, we have agreed to reimburse Jefferies for the fees and disbursements of its counsel, payable upon execution of the sales agreement, in an amount not to exceed \$75,000, in addition to certain ongoing disbursements of its legal counsel, unless we and Jefferies otherwise agree. We estimate that the total expenses for the offering, excluding any commissions or expense reimbursement payable to Jefferies under the terms of the sales agreement, will be approximately \$238,000. The remaining sale proceeds, after deducting any other transaction fees, will equal our net proceeds from the sale of such shares.

Jefferies will provide written confirmation to us before the open on the Nasdaq Capital Market on the day following each day on which shares of common stock are sold under the sales agreement. Each confirmation will include the number of shares sold on that day, the aggregate gross proceeds of such sales and the proceeds to us.

In connection with the sale of the shares of common stock on our behalf, Jefferies will be deemed to be an “underwriter” within the meaning of the Securities Act, and the compensation of Jefferies will be deemed to be underwriting commissions or discounts. We have agreed to indemnify Jefferies against certain liabilities, including liabilities under the Securities Act. We have also agreed to contribute to payments Jefferies may be required to make in respect of such liabilities.

The offering of our shares of common stock pursuant to the sales agreement will terminate upon the earlier of (i) the sale of all shares of common stock subject to the sales agreement and (ii) the termination of the sales agreement as permitted therein.

This summary of the material provisions of the sales agreement does not purport to be a complete statement of its terms and conditions. A copy of the sales agreement will be filed as an exhibit to our Current Report on Form 8-K to be filed with the SEC on May 12, 2022, and will be incorporated by reference in this prospectus supplement.

Jefferies and its affiliates may in the future provide various investment banking, commercial banking, financial advisory and other financial services for us and our affiliates, for which services they have received, and may in the future receive, customary fees. In the course of its business, Jefferies may actively trade our securities for its own account or for the accounts of customers, and, accordingly, Jefferies may at any time hold long or short positions in such securities.

A prospectus supplement and the accompanying prospectus in electronic format may be made available on a website maintained by Jefferies, and Jefferies may distribute the prospectus supplement and the accompanying prospectus electronically.

LEGAL MATTERS

The validity of the shares of our common stock offered by this prospectus supplement will be passed upon for us by Brownstein Hyatt Farber Schreck, LLP, Las Vegas, Nevada. Jefferies LLC is being represented in connection with this offering by Cooley LLP, New York, New York.

EXPERTS

The consolidated financial statements of Seelos Therapeutics, Inc. as of December 31, 2021 and 2020, and for each of the years in the two-year period ended December 31, 2021, have been incorporated by reference herein in reliance upon the report of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing. The audit report covering the December 31, 2021 consolidated financial statements contains an explanatory paragraph that states that Seelos Therapeutics, Inc.’s recurring losses from operations and net capital deficiency raise substantial doubt about the entity’s ability to continue as a going concern. The consolidated financial statements do not include any adjustments that might result from the outcome of that uncertainty.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement under the Securities Act relating to the offering of these securities. The registration statement, including the attached exhibits, contains additional relevant information about us and the securities. This prospectus supplement does not contain all of the information set forth in the registration statement. You can obtain a copy of the registration statement from the SEC at the website address listed above. The registration statement and the documents referred to above are also available on our corporate website at www.seelotherapeutics.com under the heading "Investors". Unless specifically listed above, the information contained on the SEC website or our website is not incorporated by reference into this prospectus supplement and you should not consider that information a part of this prospectus supplement.

We file annual, quarterly and other reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at www.sec.gov. Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K, including any amendments to those reports, and other information that we file with or furnish to the SEC pursuant to Section 13(a) or 15(d) of the Exchange Act can also be accessed free of charge through the Internet. These filings will be available as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus supplement certain information we file with it, which means that we can disclose important information by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus supplement, and information that we file later with the SEC will automatically update and supersede information contained in this prospectus supplement and any accompanying prospectus supplement. We incorporate by reference the documents listed below that we have previously filed with the SEC:

- (a) [our Annual Report on Form 10-K for the fiscal year ended December 31, 2021, filed with the SEC on March 11, 2022;](#)
- (b) [our Quarterly Report on Form 10-Q for the quarter ended March 31, 2022, filed with the SEC on May 10, 2022;](#)
- (c) our Current Reports on Form 8-K filed with the SEC on (i) [January 10, 2022](#), (ii) [April 11, 2022](#) and (iii) [April 22, 2022](#);
- (d) [our Definitive Proxy Statement on Schedule 14A \(to the extent incorporated by reference into our Annual Report on Form 10-K\), filed with the SEC on April 12, 2022;](#) and
- the description of our common stock set forth in the Registrant's [Registration Statement on Form 8-A \(File No. 000-22245\), filed with the SEC on April 10, 2000](#), including
- (e) any amendments or reports filed for the purpose of updating such description.

Any information in any of the foregoing documents will automatically be deemed to be modified or superseded to the extent that information in this prospectus supplement or in a later filed document that is incorporated or deemed to be incorporated herein by reference modifies or replaces such information.

All documents we file pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act on or after the date of this prospectus supplement and before the later of (1) the completion of the offering of the securities described in this prospectus supplement and (2) if applicable, the date we file a post-effective amendment that indicates the termination of the offering of the securities made by this prospectus supplement will also be incorporated by reference in this prospectus supplement from the date of filing of such documents. Upon request, we will provide to each person, including any beneficial owner, to whom a prospectus supplement is delivered, without charge, a copy of any or all of the information that has been incorporated by reference in this prospectus supplement but not delivered with this prospectus supplement.

Notwithstanding the preceding, unless specifically stated to the contrary, none of the information that we disclose under Items 2.02 or 7.01 or, if related to Items 2.02 or 7.01, Item 9.01 of any Current Report on Form 8-K that we may, from time to time, furnish to the SEC will be incorporated by reference into, or otherwise included in, this prospectus supplement. The information contained in each of the documents incorporated by reference speaks only as of the date of such document. Any statement contained in a document incorporated by reference or deemed to be incorporated by reference herein, or contained in this prospectus supplement, shall be deemed to be modified or superseded for purposes of this prospectus supplement to the extent that a statement contained herein or in any subsequently filed document or report that also is incorporated by reference or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, without charge upon written or oral request, a copy of any or all of the documents that are incorporated by reference into this prospectus but not delivered with the prospectus supplement, including exhibits which are specifically incorporated by reference into such documents. You may obtain a copy of any of these documents at no cost, by writing or telephoning us at the following address:

Seelos Therapeutics, Inc.
300 Park Avenue, 2nd Floor
New York, New York 10022
Attn: Corporate Secretary
Phone: (646) 293-2100

PROSPECTUS



\$200,000,000
Common Stock
Preferred Stock
Debt Securities
Warrants
Units

We may offer and sell, from time to time in one or more offerings, up to \$200,000,000 in the aggregate of any combination of the securities identified above from time to time in one or more offerings, either individually or in combination with other securities. We may also offer common stock or preferred stock upon conversion of debt securities, common stock upon conversion of preferred stock, or common stock, preferred stock or debt securities upon the exercise of warrants.

Each time we offer and sell securities, we will provide a supplement to this prospectus that contains specific information about the offering and the amounts, prices and terms of the securities. We may also authorize one or more free writing prospectuses to be provided to you in connection with these offerings. The prospectus supplement and any related free writing prospectuses may also add, update or change information contained in this prospectus with respect to that offering. You should carefully read this prospectus and the applicable prospectus supplement and any related free writing prospectus, as well as any documents incorporated by reference, before you invest in any of our securities.

We may offer and sell the securities described in this prospectus and any prospectus supplement to or through one or more underwriters, dealers and agents, or directly to purchasers, or through a combination of these methods. If any underwriters, dealers or agents are involved in the sale of any of the securities, their names and any applicable purchase price, fee, commission or discount arrangement between or among them will be set forth, or will be calculable from the information set forth, in the applicable prospectus supplement. See the sections of this prospectus entitled "About this Prospectus" and "Plan of Distribution" for more information. No securities may be sold without delivery of this prospectus and the applicable prospectus supplement describing the method and terms of the offering of such securities.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "Risk Factors" on page 8 of this prospectus, the applicable prospectus supplement and in any applicable free writing prospectuses, and under similar headings in the documents that are incorporated by reference into this prospectus.

Our common stock is currently listed on the Nasdaq Capital Market under the symbol "SEEL." On December 14, 2020, the last reported sale price of our common stock was \$1.28 per share. The applicable prospectus supplement will contain information, where applicable, as to any other listing on the Nasdaq Capital Market or any securities market or other exchange of the securities, if any, covered by the applicable prospectus supplement.

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

The date of this prospectus is December 23, 2020.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission (the "SEC") utilizing a "shelf" registration process. Under this shelf registration process, we may offer and sell shares of our common stock and preferred stock, various series of debt securities, warrants to purchase any of such securities and/or units consisting of any combination of such securities, either individually or in combination with other securities, in one or more offerings, up to a total dollar amount of \$200,000,000. This prospectus provides you with a general description of the securities we may offer.

Each time we offer securities under this prospectus, we will provide a prospectus supplement that will contain more specific information about the terms of that offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. The prospectus supplement and any related free writing prospectus we have authorized for use in connection with a specific offering may also add, update or change any of the information contained in this prospectus or in the documents that we have incorporated by reference into this prospectus. We urge you to read carefully this prospectus, the applicable prospectus supplement and any free writing prospectuses we have authorized for use in connection with a specific offering, together with the information incorporated herein by reference as described under the section entitled "Incorporation of Documents by Reference", before buying any of the securities being offered.

THIS PROSPECTUS MAY NOT BE USED TO CONSUMMATE A SALE OF SECURITIES UNLESS IT IS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.

You should rely only on the information contained in, or incorporated by reference into, this prospectus, the applicable prospectus supplement and any free writing prospectuses, along with the information contained in any free writing prospectuses we have authorized for use in connection with a specific offering. We have not authorized anyone to provide you with different or additional information. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so.

The information appearing in this prospectus, the applicable prospectus supplement or any related free writing prospectus is accurate only as of the date on the front of the document and any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, the applicable prospectus supplement or any related free writing prospectus, or any sale of a security. Our business, financial condition, results of operations and prospects may have changed since those dates.

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the heading "Where You Can Find More Information".

INDUSTRY AND MARKET DATA

Unless otherwise indicated, we have based the information concerning our industry contained in this prospectus and incorporated by reference herein on our general knowledge of and expectations concerning the industry, which involve risks and uncertainties and are subject to change based on various factors, including those discussed in the "Risk Factors" section of this prospectus and in the other information contained or incorporated by reference in this prospectus. These and other factors could cause the information concerning our industry to differ materially from those expressed in this prospectus and incorporated by reference herein.

SUMMARY

This summary highlights selected information that is presented in greater detail elsewhere in this prospectus or incorporated by reference in this prospectus. Because it is only a summary, it does not contain all of the information you should consider before investing in our common stock, preferred stock, debt securities, warrants or units, and it is qualified in its entirety by, and should be read in conjunction with, the more detailed information included elsewhere in this prospectus. Before you decide whether to purchase shares of our common stock or preferred stock, or our debt securities, warrants or units, you should read this entire prospectus, the applicable prospectus supplement and any related free writing prospectus carefully, including the risks of investing in our securities discussed under the heading "Risk Factors" contained in the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus. You should also carefully read the information incorporated by reference into this prospectus, including our financial statements, and the exhibits to the registration statement of which this prospectus is a part. Unless the context otherwise requires, the terms "Seelos," "the Company," "we," "us" and "our" in this prospectus refer to Seelos Therapeutics, Inc. and its subsidiaries.

Overview

We are a clinical-stage biopharmaceutical company focused on achieving efficient development of products that address significant unmet needs in Central Nervous System ("CNS") disorders and other rare disorders.

Our business model is to advance multiple late-stage therapeutic candidates with proven mechanisms of action that address large markets with unmet medical needs and for which there is a strong economic and scientific rationale for development.

Our product development pipeline is as follows:

Product	Indication	Development Phase	Development Status
SLS-002 Intranasal Racemic Ketamine	Acute Suicidal Ideation and Behavior (ASIB) in Major Depressive Disorder (MDD)	Proof of Concept	Startup activities initiated
SLS-005 IV Trehalose	Sanfilippo Syndrome Amyotrophic Lateral Sclerosis (ALS)	Phase II Phase IIb/III	Collecting Natural History Data Startup activities for clinical study
SLS-004 Gene Therapy	Parkinson's Disease (PD)	Phase II	Preclinical studies to commence soon
SLS-006 Partial Dopamine Agonist	Parkinson's Disease (PD)	Phase II/III	Evaluating studies to advance into late stage trials

SLS-007 Peptide Inhibitor	Parkinson's Disease (PD)	Pre-IND	Preclinical data expected in early 2021
SLS-008 CRTh2 Antagonist	Pediatric Esophagitis, Asthma, Atopic Dermatitis	Pre-IND	Formulation work underway

Lead Programs

Our lead programs are currently SLS-002 for the treatment of acute suicidal ideation and behavior ("ASIB") in major depressive disorder ("MDD"), and SLS-005 for the potential treatment of Sanfilippo syndrome and Amyotrophic Lateral Sclerosis ("ALS").

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SLS-002 is intranasal racemic ketamine with two investigational new drug applications ("INDs") for the treatment of ASIB in MDD. SLS-002 was originally derived from a Javelin Pharmaceuticals, Inc./Hospira, Inc. program with 16 clinical studies involving approximately 500 subjects. SLS-002 addresses an unmet need for an efficacious drug to treat suicidality in the U.S. Traditionally, anti-depressants have been used in this setting but many of the existing treatments are known to contribute to an increased risk of suicidal thoughts in some circumstances, and if and when they are effective, it often takes weeks for the full therapeutic effect to be manifested.

The clinical development program for SLS-002 includes two parallel healthy volunteer studies (Phase I), expected to be rapidly followed by pivotal registration studies after meeting with the FDA. We believe there is a large opportunity in the U.S. and European markets for products in this space. Based on information gathered from the databases of the Agency for Healthcare Research and Quality, there were more than 500,000 visits to emergency rooms for suicide attempts in 2013 in the U.S. alone. Experimental studies suggest ketamine has the potential to be a rapid, effective treatment for refractory depression and suicidality.

We announced interim data from our Phase I study of SLS-002 during the quarterly period ended March 31, 2020. The study demonstrated that 60mg of SLS-002, when administered as a monotherapy and in combination with an oral antidepressant, was generally safe and well-tolerated. Further, in March 2020, we completed a Type C meeting with the U.S. Food and Drug Administration ("FDA") and received guidance for a proof of concept study of SLS-002 for ASIB in patients with MDD. As a result of the Type C meeting and the Fast Track designation for SLS-002 for the treatment of ASIB in patients with MDD, we believe we are well positioned to take advantage of the FDA's expedited programs for drug development and review.

On June 23, 2020, we announced the final safety data from our Phase I pharmacokinetics/pharmacodynamics study of intranasal racemic ketamine (SLS-002) as well as the planned design of a double blind, placebo-controlled Proof of Concept ("PoC") study for ASIB in patients with MDD to begin in the fall of 2020. We are planning to initiate this PoC study in two parts: Part A is an open-label study of 16 patients, and will be followed by Part B, which is a double blind, placebo-controlled study of approximately 120 patients.

SLS-005 is IV Trehalose, a protein stabilizer that crosses the blood-brain-barrier, activates autophagy and lysosomal biogenesis. Based on the pre-clinical and in-vitro studies, there is a sound scientific rationale for developing Trehalose for the treatment of Sanfilippo syndrome and ALS. Trehalose is a low molecular weight disaccharide (.342 kDa) that protects against pathological processes in cells. It has been shown to penetrate muscle and cross the blood brain barrier. In animal models of several diseases associated with abnormal cellular-protein aggregation, it has been shown to reduce pathological aggregation of misfolded proteins as well as to activate autophagy pathways through the activation of Transcription Factor EB ("TFEB"), a key factor in lysosomal and autophagy gene expression. Activation of TFEB is an emerging therapeutic target for a number of diseases with pathologic accumulation of storage material. Trehalose 90 mg/mL IV solution has demonstrated promising clinical potential in prior Phase II clinical development for oculopharyngeal muscular dystrophy ("OPMD") and spinocerebellar ataxia type 3 ("SCA3"), also known as Machado Joseph disease, with a good safety profile and encouraging efficacy results. Pathological accumulation of protein aggregates within cells, whether in the CNS or in muscle, eventually leads to loss of function and ultimately cell death. Prior preclinical studies indicate that this platform has the potential to prevent mutant protein aggregation in other devastating PolyA/PolyQ diseases.

We own two U.S. patents for parenteral administration of trehalose for patients with OPMD and SCA3, both of which are expected to expire in 2033. In addition, Orphan Drug Designation for OPMD and SCA3 has been secured in the U.S. and in the European Union. In February 2019, we assumed a collaborative agreement, turned subsequently into a research grant, with Team Sanfilippo Foundation, a nonprofit medical research foundation founded by parents of children with Sanfilippo syndrome. On April 30, 2020 we were granted Orphan Drug Designation ("ODD") for SLS-005 in Sanfilippo syndrome from the FDA. SLS-005 was previously granted ODD from the FDA and European Medicines Agency for SCA3 and OPMD as well as Fast Track designation for OPMD. On May 4, 2020 we received a Notice of Allowance from the United States Patent and Trademark Office for our U.S. patent number 10,437,637 (application number 16/263,707) titled "COMPOSITIONS AND METHODS FOR TREATING AN AGGREGATION DISEASE OR DISORDER" for trehalose (SLS-005). The allowed claims cover the composition of matter and method of use for trehalose (SLS-005) for treating a disease or disorder selected from any one of the following: Spinal and bulbar muscular atrophy; Dentatonbral-pallidolusyan atrophy; Pick's disease; corticobasal degeneration; progressive supranuclear palsy; frontotemporal dementia; or parkinsonism linked to chromosome 17. On May 15, 2020, we were granted Rare Pediatric Disease Designation (RPDD) for SLS-005 in Sanfilippo syndrome from the FDA. RPDD is an incentive program created under the Federal Food, Drug, and

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Cosmetic Act created to encourage the development of new therapies for the prevention and treatment of certain rare pediatric diseases. At present, we are initiating the startup activities for clinical study in ALS.

Additionally, we are developing several preclinical programs, most of which have well-defined mechanisms of action, including: SLS-004, licensed from Duke University, and SLS-007, licensed from The Regents of the University of California, for the potential treatment of Parkinson's Disease ("PD"), SLS-008, targeted at chronic inflammation in asthma and orphan indications such as pediatric esophagitis, SLS-010 in narcolepsy and related disorders and SLS-012, an injectable therapy for post-operative pain management.

Strategy and Ongoing Programs

SLS-002: The clinical development program for SLS-002 includes two parallel healthy volunteer studies (Phase I), expected to be rapidly followed by pivotal registration studies after meeting with the FDA. We completed a Type C meeting with the FDA in March 2020 to seek guidance for a proof of concept study of SLS-002 for ASIB in patients with MDD and the startup activities are under way.

SLS-005 will be studied in a clinical trial which is a combined Phase IIb/III, multicenter study designed to assess safety, tolerability and efficacy of IV Trehalose in Sanfilippo syndrome A and B patients. Outcome measures include functional outcomes, biomarkers, neuro-cognitive assessments and quality of life measurements. Additionally, we intend to conduct a second study that will include Sanfilippo syndrome C and D patients as well as Sanfilippo syndrome A and B patients who do not meet the criteria of inclusion for the Phase IIb/III study into a separate expanded patient access study. At present, Seelos is collecting natural history data for Sanfilippo patients A and B. We are also undergoing startup activities for clinical study in ALS.

SLS-004 is an all-in-one lentiviral vector, targeted for gene editing through DNA methylation within intron 1 of the SNCA gene responsible for expressing alpha-synuclein protein. SLS-004, when delivered to dopaminergic neurons derived from human induced pluripotent stem cells (hiPSCs) of a PD patient, modified the expression on alpha-synuclein

and exhibited reversal of the disease-related cellular-phenotypes characteristics of the neurons. The role of mutated SNCA in PD pathogenesis and the need to maintain the normal physiological levels of alpha-synuclein protein emphasize the so-far unmet need to develop new therapeutic strategies, such as SLS-004, targeting the regulatory mechanism of alpha-synuclein expression. On May 28, 2020, we announced the initiation of a preclinical study of SLS-004 in PD through an all-in-one lentiviral vector targeting the synuclein alpha gene. We are constructing a bimodular viral system harboring an endogenous alpha-synuclein (α -synuclein) transgene and inducible regulated repressive CRISPR/Cas9-unit to achieve constitutive activation and inducible suppression of PD-related pathologies.

SLS-006 is a true partial dopamine agonist, originally developed by Wyeth Pharmaceuticals, Inc., with previous clinical studies on 340 subjects in various Phase I and Phase II studies. It is a potent D2/D3 agonist/antagonist that has shown promising efficacy with statistical significance in Phase II studies in early stage PD patients and an attractive safety profile. Moreover, it has also shown synergistic effect with reduced doses of L-DOPA. We are evaluating studies to advance the product candidate into late stage trials.

SLS-007 is a rationally designed peptide-based approach, targeting the NACore (nonamyloid component core) of alpha-synuclein to inhibit the protein from aggregation. Recent in-vitro and cell culture research have shown SLS-007 has the ability to stop the propagation and seeding of α -synuclein aggregates. We will evaluate the potential for in-vivo delivery of SLS-007 in a PD transgenic mice model. The goal will be to establish in-vivo pharmacokinetics/pharmacodynamics and target engagement parameters of SLS-007, a family of anti-alpha-synuclein peptidic inhibitors. On June 25, 2020, we announced the initiation of a preclinical study of SLS-007 in PD delivered through an adeno associated viral ("AAV") vector targeting the non-amyloid component core of α -synuclein. We have initiated an in vivo preclinical study of SLS-007 in rodents to assess the ability of two specific novel peptides, S62 and S71, delivered via AAV1/2 viral vector, to protect dopaminergic function in the preformed α -synuclein fibril rodent model of PD. Production of AAV1/2 vectors encoding each of the two novel peptides incorporating hemagglutinin tags has already been completed. This preclinical study is designed to establish the in vivo pharmacokinetic and pharmacodynamic profiles and target engagement parameters of SLS-007. Top-line data is currently expected in early 2021.

SLS-008 is an orally available antagonist for Chemoattractant Receptor-homologous molecules expressed on TH2 cells ("CRTh2"), targeted at chronic inflammation in asthma and a pediatric orphan indication. We have a "family" of compounds under our SLS-008 program. We intend to file an IND after completion of IND-enabling studies, which are currently in progress, in an undisclosed pediatric orphan indication where there is a high unmet need for an effective oral therapy.

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Additionally, we are developing several preclinical programs, most of which have well-defined mechanisms of action, including:

- SLS-010, an oral histamine H3A receptor antagonist that shows promising activity in narcolepsy and related disorders; and
- SLS-012, an injectable therapy for post-operative pain management.

Recent Developments

Coronavirus (COVID-19)

In March 2020, we began taking precautionary measures to protect the health and safety of our employees and contractors and further assessing the actual and potential impact of the coronavirus ("COVID-19") pandemic on our business, financial condition and operations. COVID-19 infections have been reported throughout the United States, along with other jurisdictions in which our suppliers, partners and collaborators operate. In addition, COVID-19 has caused disruption and volatility in the global capital markets, and has led to an economic slowdown. Certain national, provincial, state and local governmental authorities have issued proclamations and/or directives aimed at minimizing the spread of COVID-19 and additional, more restrictive proclamations and/or directives may be issued in the future. Before the recent COVID-19 outbreak, most of our employees worked remotely. In addition, our ongoing clinical trial for SLS-002 in ASIB in MDD and completed the clinical testing phase in February 2020. On June 23, 2020, we released the final pharmacokinetics/pharmacodynamics portion of the data. Accordingly, the impact of the travel restrictions and shelter-in-place orders have not had a material impact on our operations to date. Additionally, the pandemic has not materially affected our liquidity as we maintain our resources in the form of cash.

In addition, although we do not expect the preventative measures taken to date to have a material adverse impact on our business for the fourth quarter of 2020, the ultimate impact of the COVID-19 pandemic on our business, financial condition and results of operations is unknown and will depend on future developments and risks, which are highly uncertain and cannot be predicted. These developments and risks include, among others, the duration and severity of the COVID-19 outbreak, the impact on capital markets, the impact on our partners and the regulatory agencies that oversee our sector and any additional preventative and protective actions that governmental authorities, or we, may implement, any of which may result in an extended period of business disruption, including potential delays in commencing future clinical trials or delays in completing enrollment for any clinical trials we may commence. Any resulting financial impact cannot be reasonably estimated at this time, but the COVID-19 pandemic may force us to make adjustments to our business, our plans and our timeline for developing assets, including our programs. In addition, the pandemic is anticipated to have a material adverse impact on our business, financial condition and results of operations, including our ability to raise additional capital, if the pandemic continues at its current rate into the first quarter of 2021.

PPP Loan

On May 4, 2020, we qualified for and received a loan pursuant to the Paycheck Protection Program, a program implemented by the U.S. Small Business Administration under the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act"), from a qualified lender, for an aggregate principal amount of approximately \$147,000 (the "PPP Loan"). The PPP Loan bears interest at a fixed rate of 1.0% per annum, with the first six months of interest deferred, has a term of two years and is unsecured and guaranteed by the U.S. Small Business Administration. The principal amount of the PPP Loan is subject to forgiveness under the Paycheck Protection Program upon our request to the extent that the PPP Loan proceeds are used to pay expenses permitted by the Paycheck Protection Program, including payroll costs, covered rent and mortgage obligations and covered utility payments incurred by us. We intend to apply for forgiveness of the PPP Loan with respect to these covered expenses. To the extent that all or part of the PPP Loan is not forgiven, we will be required to pay interest on the PPP Loan at a rate of 1.0% per annum, and commencing in the fourth quarter of 2020, principal and interest payments will be required through the maturity date in May 2022. The terms of the PPP Loan provide for customary events of default including, among other things, payment defaults, breach of representations and warranties and insolvency events. The obligation to repay the PPP Loan may be accelerated upon the occurrence of an event of default.

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Corporate Information

Our principal executive offices are located at 300 Park Avenue, 12th Floor, New York, NY 10022, and our telephone number is (646) 293-2100. Our website is located at www.seelostherapeutics.com. Any information contained on, or that can be accessed through, our website is not incorporated by reference into, nor is it in any way part of, this prospectus and should not be relied upon in connection with making any decision with respect to an investment in our securities. We are required to file annual, quarterly and current reports, proxy statements and other information with the SEC. You may obtain any of the documents filed by us with the SEC at no cost from the SEC's website at <http://www.sec.gov>.

We are a "smaller reporting company" as defined in Rule 12b-2 of the Exchange Act and have elected to take advantage of certain of the scaled disclosure available for smaller reporting companies in this prospectus as well as our filings under the Exchange Act.

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RISK FACTORS

Risk Factor Summary

Below is a summary of the principal factors that make an investment in our securities speculative or risky. This summary does not address all of the risks that we face. Additional discussion of the risks summarized in this risk factor summary, and other risks that we face, can be found below and should be carefully considered, together with all of the other information appearing in or incorporated by reference into this prospectus, the applicable prospectus supplement and any related free writing prospectus before making investment decisions regarding the offered securities.

- We are a clinical-stage company, we have a very limited operating history, are not currently profitable, do not expect to become profitable in the near future and may never become profitable.
- We are dependent on the success of one or more of our current product candidates and we cannot be certain that any of them will receive regulatory approval or be commercialized.
- If development of our product candidates does not produce favorable results, we and our collaborators, if any, may be unable to commercialize these products.
- We expect to continue to incur significant research and development expenses, which may make it difficult for us to attain profitability.
- Given our lack of current cash flow, we will need to raise additional capital; however, it may be unavailable to us or, even if capital is obtained, may cause dilution or place significant restrictions on our ability to operate our business. If we fail to raise the necessary additional capital, we may be unable to complete the development and commercialization of our product candidates, or continue our development programs.
- Our product candidates may cause undesirable side effects that could delay or prevent their regulatory approval or commercialization or have other significant adverse implications on our business, financial condition and results of operations.
- Delays in the commencement or completion of clinical trials could result in increased costs to us and delay our ability to establish strategic collaborations.
- A pandemic, epidemic or outbreak of an infectious disease, such as COVID-19, may materially and adversely affect our business and operations.
- Results of earlier clinical trials may not be predictive of the results of later-stage clinical trials.
- We intend to rely on third parties to conduct our preclinical studies and clinical trials and perform other tasks. If these third parties do not successfully carry out their contractual duties, meet expected deadlines, or comply with regulatory requirements, we may not be able to obtain regulatory approval for or commercialize our product candidates and our business, financial condition and results of operations could be substantially harmed.
- Our product candidates are subject to extensive regulation under the FDA, the EMA or comparable foreign authorities, which can be costly and time consuming, cause unanticipated delays or prevent the receipt of the required approvals to commercialize our product candidates.
- If our competitors have product candidates that are approved faster, marketed more effectively, are better tolerated, have a more favorable safety profile or are demonstrated to be more effective than ours, our commercial opportunity may be reduced or eliminated.
- We rely completely on third parties to manufacture our preclinical and clinical drug supplies, and our business, financial condition and results of operations could be harmed if those third parties fail to provide us with sufficient quantities of drug product, or fail to do so at acceptable quality levels or prices.
- The commercial success of our product candidates depends upon their market acceptance among physicians, patients, healthcare payors and the medical community.
- If we fail to retain current members of our senior management and scientific personnel, or to attract and keep additional key personnel, we may be unable to successfully develop or commercialize our product candidates.
- We may not be successful in obtaining or maintaining necessary rights to our product candidates through acquisitions and in-licenses.

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- If we fail to comply with our obligations in the agreements under which we in-license intellectual property and other rights from third parties or otherwise experience disruptions to our business relationships with our licensors, we could lose intellectual property rights that are important to our business.
 - We may not be able to protect our proprietary or licensed technology in the marketplace.
 - The market price of our common stock is expected to be volatile.

Risk Factors

Investing in any securities offered pursuant to this prospectus, the applicable prospectus supplement and any related free writing prospectus involves a high degree of risk. Before making an investment decision, you should carefully consider the risks described below, under "Risk Factors" in the applicable prospectus supplement, any related free writing prospectus and in our most recent Annual Report on Form 10-K, or in any updates in our Quarterly Reports on Form 10-Q, together with all of the other information appearing in or incorporated by reference into this prospectus, the applicable prospectus supplement and any related free writing prospectus, before deciding whether to purchase any of the securities being offered. Our business, financial condition or results of operations could be materially adversely affected by any of these risks. The occurrence of any of these risks might cause you to lose all or part of your investment in the offered securities.

Risks Related to the Company

We are a clinical-stage company, the company has a very limited operating history, are not currently profitable, do not expect to become profitable in the near future and may never become profitable.

We are a clinical-stage biopharmaceutical company. Since our incorporation, we have focused primarily on the development and acquisition of clinical-stage therapeutic candidates, which has not changed as a result of the completion of the business combination between Apricus Biosciences, Inc., a Nevada corporation ("Apricus"), and Seelos Therapeutics, Inc., a Delaware corporation ("STI"), in accordance with the terms of the Agreement and Plan of Merger and Reorganization entered into on July 30, 2018, pursuant to which (i) a subsidiary of Apricus merged with and into STI, with STI (renamed as "Seelos Corporation") continuing as a wholly owned subsidiary of Apricus and the surviving corporation of the merger and (ii) Apricus was renamed as "Seelos Therapeutics, Inc." (the "Merger"). All of our therapeutic candidates are in the clinical development stage and none of our pipeline therapeutic candidates have been approved for marketing or are being marketed or commercialized.

As a result, we have no meaningful historical operations upon which to evaluate our business and prospects and have not yet demonstrated an ability to obtain marketing approval for any of our product candidates or successfully overcome the risks and uncertainties frequently encountered by companies in the biopharmaceutical industry. We also have generated minimal revenues from collaboration and licensing agreements and no revenues from product sales to date and continue to incur significant research and development and other expenses. As a result, we have not been profitable and have incurred significant operating losses in every reporting period since our inception. We have incurred an accumulated deficit of \$68.7 million from our inception through September 30, 2020.

For the foreseeable future, we expect to continue to incur losses, which will increase significantly from historical levels as we expand our drug development activities, seek partnering and/or regulatory approvals for our product candidates and begin to commercialize them if they are approved by the U.S. Food and Drug Administration (the "FDA") the European Medicines Agency (the "EMA") or comparable foreign authorities. Even if we succeed in developing and commercializing one or more product candidates, we may never become profitable.

We are dependent on the success of one or more of our current product candidates and we cannot be certain that any of them will receive regulatory approval or be commercialized.

We have spent significant time, money and effort on the licensing and development of our core assets, SLS-002, SLS-005 and SLS-006 and our other earlier-stage assets, SLS-004, SLS-007, SLS-008, SLS-010 and SLS-012. To date, no pivotal clinical trials designed to provide clinically and statistically significant proof of efficacy, or to provide sufficient evidence of safety to justify approval, have been completed with any of our pipeline product candidates. All of our product candidates will require additional development, including clinical trials as well as further preclinical studies to evaluate their toxicology, carcinogenicity and pharmacokinetics and optimize their formulation, and regulatory clearances before they can be commercialized. Positive results obtained during early

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development do not necessarily mean later development will succeed or that regulatory clearances will be obtained. Our drug development efforts may not lead to commercial drugs, either because our product candidates may fail to be safe and effective or because we have inadequate financial or other resources to advance our product candidates through the clinical development and approval processes. If any of our product candidates fail to demonstrate safety or efficacy at any time or during any phase of development, we would experience potentially significant delays in, or be required to abandon, development of the product candidate.

We do not anticipate that any of our current product candidates will be eligible to receive regulatory approval from the FDA, the EMA or comparable foreign authorities and begin commercialization for a number of years, if ever. Even if we ultimately receive regulatory approval for any of these product candidates, we or our potential future partners, if any, may be unable to commercialize them successfully for a variety of reasons. These include, for example, the availability of alternative treatments, lack of cost-effectiveness, the cost of manufacturing the product on a commercial scale and competition with other drugs. The success of our product candidates may also be limited by the prevalence and severity of any adverse side effects. If we fail to commercialize one or more of our current product candidates, we may be unable to generate sufficient revenues to attain or maintain profitability, and our financial condition and stock price may decline.

If development of our product candidates does not produce favorable results, we and our collaborators, if any, may be unable to commercialize these products.

To receive regulatory approval for the commercialization of our core assets, SLS-002, SLS-005 and SLS-006 and our earlier-stage assets, SLS-004, SLS-007, SLS-008, SLS-010 and SLS-012, or any other product candidates that we may develop, adequate and well-controlled clinical trials must be conducted to demonstrate safety and efficacy in humans to the satisfaction of the FDA, the EMA and comparable foreign authorities. In order to support marketing approval, these agencies typically require successful results in one or more Phase III clinical trials, which our current product candidates have not yet reached and may never reach. The development process is expensive, can take many years and has an uncertain outcome. Failure can occur at any stage of the process. We may experience numerous unforeseen events during, or as a result of, the development process that could delay or prevent commercialization of our current or future product candidates, including the following:

- clinical trials may produce negative or inconclusive results;
- preclinical studies conducted with product candidates during clinical development to, among other things, evaluate their toxicology, carcinogenicity and pharmacokinetics and optimize their formulation may produce unfavorable results;
- patient recruitment and enrollment in clinical trials may be slower than we anticipate;
- costs of development may be greater than we anticipate;
- our product candidates may cause undesirable side effects that delay or preclude regulatory approval or limit their commercial use or market acceptance, if approved;
- collaborators who may be responsible for the development of our product candidates may not devote sufficient resources to these clinical trials or other preclinical studies of these candidates or conduct them in a timely manner; or
- we may face delays in obtaining regulatory approvals to commence one or more clinical trials.

Success in early development does not mean that later development will be successful because, for example, product candidates in later-stage clinical trials may fail to demonstrate sufficient safety and efficacy despite having progressed through initial clinical trials.

We have licensed or acquired all of the intellectual property related to our product candidates from third parties. All clinical trials, preclinical studies and other analyses performed to date with respect to our product candidates have been conducted by their original owners. Therefore, as a company, we have limited experience in conducting clinical trials for our product candidates. Since our experience with our product candidates is limited, we will need to train our existing personnel and hire additional personnel in order to successfully administer and manage our clinical trials and other studies as planned, which may result in delays in completing such planned clinical trials and preclinical studies. Moreover, to date our product candidates have been tested in less than the number of patients that will likely need to be studied to obtain regulatory approval. The data collected from clinical trials with larger patient populations may not demonstrate sufficient safety and efficacy to support regulatory approval of these product candidates.

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We currently do not have strategic collaborations in place for clinical development of any of our current product candidates, except for our collaborative agreement with Team Sanfilippo Foundation ("TSF"), which we assumed in connection with the asset purchase agreement with Bioblast Pharma Ltd. for IV Trehalose, which is now known as SLS-005. Therefore, in the future, we or any potential future collaborative partner will be responsible for establishing the targeted endpoints and goals for development of our product candidates. These targeted endpoints and goals may be inadequate to demonstrate the safety and efficacy levels required for regulatory approvals. Even if we believe data collected during the development of our product candidates are promising, such data may not be sufficient to support marketing approval by the FDA, the EMA or comparable foreign authorities. Further, data generated during development can be interpreted in different ways, and the FDA, the EMA or comparable foreign authorities may interpret such data in different ways than us or our collaborators. Our failure to adequately demonstrate the safety and efficacy of our product candidates would prevent our receipt of regulatory approval, and ultimately the potential commercialization of these product candidates.

Since we do not currently possess the resources necessary to independently develop and commercialize our product candidates or any other product candidates that we may develop, we may seek to enter into collaborative agreements to assist in the development and potential future commercialization of some or all of these assets as a component of our strategic plan. However, our discussions with potential collaborators may not lead to the establishment of collaborations on acceptable terms, if at all, or it may take longer than expected to establish new collaborations, leading to development and potential commercialization delays, which would adversely affect our business, financial condition and results of operations.

We expect to continue to incur significant research and development expenses, which may make it difficult for us to attain profitability.

We expect to expend substantial funds in research and development, including preclinical studies and clinical trials of our product candidates, and to manufacture and market any product candidates in the event they are approved for commercial sale. We also may need additional funding to develop or acquire complementary companies, technologies and

assets, as well as for working capital requirements and other operating and general corporate purposes. Moreover, our planned increases in staffing will dramatically increase our costs in the near and long-term.

However, our spending on current and future research and development programs and product candidates for specific indications may not yield any commercially viable products. Due to our limited financial and managerial resources, we must focus on a limited number of research programs and product candidates and on specific indications. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities.

Because the successful development of our product candidates is uncertain, we are unable to precisely estimate the actual funds we will require to develop and potentially commercialize them. In addition, we may not be able to generate sufficient revenue, even if we are able to commercialize any of our product candidates, to become profitable.

Given our lack of current cash flow, we will need to raise additional capital; however, it may be unavailable to us or, even if capital is obtained, may cause dilution or place significant restrictions on our ability to operate our business. If we fail to raise the necessary additional capital, we may be unable to complete the development and commercialization of our product candidates, or continue our development programs.

Since we will be unable to generate sufficient, if any, cash flow to fund our operations for the foreseeable future, we will need to seek additional equity or debt financing to provide the capital required to maintain or expand our operations.

As of September 30, 2020, we had a cash balance of approximately \$8.1 million. On February 13, 2020, we completed an underwritten public offering pursuant to which we sold 6,666,667 shares of our common stock at a price to the public of \$0.75 per share. On February 19, 2020, we sold an additional 999,999 shares of our common stock at a price to the public of \$0.75 per share pursuant to the full exercise of the underwriters' option to purchase additional shares to cover over-allotments. The net proceeds to us from the offering were \$4.8 million, after deducting underwriting discounts and commissions and other offering expenses payable by us. On March 16, 2020, we completed an additional underwritten public offering pursuant to which we sold 7,500,000 shares of our

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common stock at a price to the public of \$0.60 per share. The net proceeds to us from the offering were \$4.0 million, after deducting underwriting discounts and commissions and other offering expenses payable by us. On September 4, 2020, we completed a registered direct offering and concurrent private placement pursuant to which we sold 8,865,000 shares of our common stock and warrants to purchase up to 6,648,750 shares of our common stock at a combined price of \$0.79 per share. The net proceeds to us from the offering were \$6.4 million, after deducting the placement agent's fees and other offering expenses payable by us.

As a result of our recurring losses from operations, there is uncertainty regarding our ability to maintain liquidity sufficient to operate our business effectively, which raises substantial doubt about our ability to continue as a going concern. If we are unsuccessful in our efforts to raise outside financing, we may be required to significantly reduce or cease operations. The report of our independent registered public accounting firm on our audited financial statements for the year ended December 31, 2019 included a "going concern" explanatory paragraph indicating that our recurring losses from operations raise substantial doubt about our ability to continue as a going concern.

We are filing the shelf registration statement on Form S-3 of which this prospectus forms a part with the SEC. Once effective, we may use the shelf registration statement on Form S-3 of which this prospectus forms a part to offer from time to time any combination of debt securities, common and preferred stock and warrants. Under current SEC regulations, in the event that the aggregate market value of our common stock held by non-affiliates ("public float") is less than \$75.0 million, the amount we can raise through primary public offerings of securities, including sales under an Equity Distribution Agreement with Piper Jaffray & Co. (the "Equity Distribution Agreement") (if we determine to un-suspend the continuous offering thereunder), in any twelve-month period using shelf registration statements is limited to an aggregate of one-third of our public float. SEC regulations permit us to use the highest closing sales price of our common stock (or the average of the last bid and last ask prices of our common stock) on any day within 60 days of sales under the shelf registration statement. As of December 10, 2020, our public float was approximately \$55.2 million based on 53.3 million shares of our common stock outstanding at a price of \$1.10 per share, which was the closing sale price of our common stock on December 10, 2020. Our public float was less than \$75.0 million as of December 10, 2020, therefore we are limited to an aggregate of one-third of our public float in the amount we could raise through primary public offerings of securities in any twelve-month period using shelf registration statements. Although we would still maintain the ability to raise funds through other means, such as through the filing of a registration statement on Form S-1 or in private placements, the rules and regulations of the Securities and Exchange Commission (the "SEC") or any other regulatory agencies may restrict our ability to conduct certain types of financing activities, or may affect the timing of and amounts we can raise by undertaking such activities.

In addition, the impact of the COVID-19 pandemic on the global financial markets may reduce our ability to access capital, which could negatively affect our liquidity and ability to continue as a going concern.

There can be no assurance that we will be able to raise sufficient additional capital on acceptable terms or at all. If such additional financing is not available on satisfactory terms, or is not available in sufficient amounts, we may be required to delay, limit or eliminate the development of business opportunities and our ability to achieve our business objectives, our competitiveness, and our business, financial condition and results of operations will be materially adversely affected. In addition, we may be required to grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves. Our inability to fund our business could lead to the loss of your investment.

Our future capital requirements will depend on many factors, including, but not limited to:

- the scope, rate of progress, results and cost of our clinical trials, preclinical studies and other related activities;
- our ability to establish and maintain strategic collaborations, licensing or other arrangements and the financial terms of such arrangements;
- the timing of, and the costs involved in, obtaining regulatory approvals for any of our current or future product candidates;
- the number and characteristics of the product candidates we seek to develop or commercialize;
- the cost of manufacturing clinical supplies, and establishing commercial supplies, of our product candidates;
- the cost of commercialization activities if any of our current or future product candidates are approved for sale, including marketing, sales and distribution costs;

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- the expenses needed to attract and retain skilled personnel;
- the costs associated with being a public company;
- the amount of revenue, if any, received from commercial sales of our product candidates, should any of our product candidates receive marketing approval; and
- the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing possible patent claims, including litigation costs and the outcome of any such litigation.

If we raise additional capital by issuing equity securities, the percentage ownership of our existing stockholders may be reduced, and accordingly these stockholders may experience substantial dilution. We may also issue equity securities that provide for rights, preferences and privileges senior to those of our common stock. Given our need for cash and that equity issuances are the most common type of fundraising for similarly situated companies, the risk of dilution is particularly significant for our stockholders. In addition, debt financing may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital

expenditures or declaring dividends and may be secured by all or a portion of our assets. Our inability to raise capital when needed would harm our business, financial condition and results of operations, and could cause our stock price to decline or require that we wind down our operations altogether.

As a result of our failure to timely file our Quarterly Report on Form 10-Q for the quarter ended March 31, 2019, we were previously ineligible to file new short form registration statements on Form S-3. If we become ineligible to file a new short form registration statement on Form S-3 in the future, our ability to raise capital on terms favorable to us, in a timely manner or at all, may be impaired.

Form S-3 permits eligible issuers to conduct registered offerings using a short form registration statement that allows the issuer to incorporate by reference its past and future filings and reports made under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). In addition, Form S-3 enables eligible issuers to conduct primary offerings "off the shelf" under Rule 415 of the Securities Act of 1933, as amended (the "Securities Act"). The shelf registration process, combined with the ability to forward incorporate information, allows issuers to avoid delays and interruptions in the offering process and to access the capital markets in a more expeditious and efficient manner than raising capital in a standard registered offering pursuant to a Registration Statement on Form S-1. The ability to register securities for resale may also be limited as a result of the loss of Form S-3 eligibility.

The significant changes to the results of operations and presentation of financial statements required to account for the Merger in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2019, and the significant turnover in key personnel in connection with the Merger combined to cause a delay in the completion of our financial statements as of, and for the period ended, March 31, 2019. In particular, because the warrants issued in the Merger were subsequently amended on multiple occasions in the first quarter, and a number of warrants were exercised during the quarter, we were required to remeasure the value of the warrants at multiple points during the quarter. This, in turn, resulted in a non-cash modification of the fair value of the warrants during the quarter. Accordingly, we were unable to complete the compilation, analysis and review of information required to be included in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2019 until May 21, 2019, one day after the deadline for such filing.

As a result of our failure to timely file our Quarterly Report on Form 10-Q for the quarter ended March 31, 2019, we were previously ineligible to file new short form registration statements on Form S-3 and were no longer permitted to use our existing registration statements on Form S-3 as of March 17, 2020, the filing date of our Annual Report on Form 10-K for the fiscal year ended December 31, 2019. As a consequence, we were not permitted to sell all of the amount of common stock we could otherwise sell, subject to the limits of General Instruction I.B.6 of Form S-3, under the Equity Distribution Agreement (if we had determined to un-suspend the continuous offering thereunder).

On June 1, 2020, we regained the ability to file new short form registration statements on Form S-3 and to use our existing registration statement on Form S-3. However, if we become ineligible to file a new short form registration statement on Form S-3 or to use an existing registration statement on Form S-3, our ability to raise necessary capital to run our operations and progress our product development programs may be impaired. If we seek to access the capital markets through a registered offering during the period of time that we are unable to use Form S-3, we may be required to publicly disclose the proposed offering and the material terms thereof before the offering commences, we may experience delays in the offering process due to SEC review of a Form S-1 registration statement and we may incur increased offering and transaction costs and other considerations. Disclosing a public

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offering prior to the formal commencement of an offering may result in downward pressure on our stock price. If we are unable to raise capital through a registered offering, we would be required to conduct our equity financing transactions on a private placement basis, which may be subject to pricing, size and other limitations imposed under the rules of The Nasdaq Stock Market LLC, or seek other sources of capital.

Our product candidates may cause undesirable side effects that could delay or prevent their regulatory approval or commercialization or have other significant adverse implications on our business, financial condition and results of operations.

Undesirable side effects observed in clinical trials or in supportive preclinical studies with our product candidates could interrupt, delay or halt their development and could result in the denial of regulatory approval by the FDA, the EMA or comparable foreign authorities for any or all targeted indications or adversely affect the marketability of any such product candidates that receive regulatory approval. In turn, this could eliminate or limit our ability to commercialize our product candidates.

Our product candidates may exhibit adverse effects in preclinical toxicology studies and adverse interactions with other drugs. There are also risks associated with additional requirements the FDA, the EMA or comparable foreign authorities may impose for marketing approval with regard to a particular disease.

Our product candidates may require a risk management program that could include patient and healthcare provider education, usage guidelines, appropriate promotional activities, a post-marketing observational study, and ongoing safety and reporting mechanisms, among other requirements. Prescribing could be limited to physician specialists or physicians trained in the use of the drug, or could be limited to a more restricted patient population. Any risk management program required for approval of our product candidates could potentially have an adverse effect on our business, financial condition and results of operations.

Undesirable side effects involving our product candidates may have other significant adverse implications on our business, financial condition and results of operations. For example:

- we may be unable to obtain additional financing on acceptable terms, if at all;
- our collaborators may terminate any development agreements covering these product candidates;
- if any development agreements are terminated, we may determine not to further develop the affected product candidates due to resource constraints and may not be able to establish additional collaborations for their further development on acceptable terms, if at all;
- if we were to later continue the development of these product candidates and receive regulatory approval, earlier findings may significantly limit their marketability and thus significantly lower our potential future revenues from their commercialization;
- we may be subject to product liability or stockholder litigation; and
- we may be unable to attract and retain key employees.

In addition, if any of our product candidates receive marketing approval and we or others later identify undesirable side effects caused by the product:

- regulatory authorities may withdraw their approval of the product, or we or our partners may decide to cease marketing and sale of the product voluntarily;
- we may be required to change the way the product is administered, conduct additional clinical trials or preclinical studies regarding the product, change the labeling of the product, or change the product's manufacturing facilities; and
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of the affected product and could substantially increase the costs and expenses of commercializing the product, which in turn could delay or prevent us from generating significant revenues from the sale of the product.

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Our efforts to discover product candidates beyond our current product candidates may not succeed, and any product candidates we recommend for clinical development may not actually begin clinical trials.

We intend to use our technology, including our licensed technology, knowledge and expertise to develop novel drugs to address some of the world's most widespread and costly central nervous system, respiratory and other disorders, including orphan indications. We intend to expand our existing pipeline of core assets by advancing drug compounds from current ongoing discovery programs into clinical development. However, the process of researching and discovering drug compounds is expensive, time-consuming and unpredictable. Data from our current preclinical programs may not support the clinical development of our lead compounds or other compounds from these programs, and we may not identify any additional drug compounds suitable for recommendation for clinical development. Moreover, any drug compounds we recommend for clinical development may not demonstrate, through preclinical studies, indications of safety and potential efficacy that would support advancement into clinical trials. Such findings would potentially impede our ability to maintain or expand our clinical development pipeline. Our ability to identify new drug compounds and advance them into clinical development also depends upon our ability to fund our research and development operations, and we cannot be certain that additional funding will be available on acceptable terms, or at all.

Delays in the commencement or completion of clinical trials could result in increased costs to us and delay our ability to establish strategic collaborations.

Delays in the commencement or completion of clinical trials could significantly impact our drug development costs. We do not know whether planned clinical trials will begin on time or be completed on schedule, if at all. The commencement of clinical trials can be delayed for a variety of reasons, including, but not limited to, delays related to:

- obtaining regulatory approval to commence one or more clinical trials;
- reaching agreement on acceptable terms with prospective third-party contract research organizations ("CROs") and clinical trial sites;
- manufacturing sufficient quantities of a product candidate or other materials necessary to conduct clinical trials;
- obtaining institutional review board approval to conduct one or more clinical trials at a prospective site;
- recruiting and enrolling patients to participate in one or more clinical trials; and
- the failure of our collaborators to adequately resource our product candidates due to their focus on other programs or as a result of general market conditions.

In addition, once a clinical trial has begun, it may be suspended or terminated by us, our collaborators, the institutional review boards or data safety monitoring boards charged with overseeing our clinical trials, the FDA, the EMA or comparable foreign authorities due to a number of factors, including:

- failure to conduct the clinical trial in accordance with regulatory requirements or clinical protocols;
- inspection of the clinical trial operations or clinical trial site by the FDA, the EMA or comparable foreign authorities resulting in the imposition of a clinical hold;
- unforeseen safety issues; or
- lack of adequate funding to continue the clinical trial.

If we experience delays in the completion, or termination, of any clinical trial of our product candidates, the commercial prospects of our product candidates will be harmed, and our ability to commence product sales and generate product revenues from any of our product candidates will be delayed. In addition, any delays in completing our clinical trials will increase our costs and slow down our product candidate development and approval process. Delays in completing our clinical trials could also allow our competitors to obtain marketing approval before we do or shorten the patent protection period during which we may have the exclusive right to commercialize our product candidates. Any of these occurrences may harm our business, financial condition and prospects significantly. In addition, 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 approval of our product candidates.

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A pandemic, epidemic or outbreak of an infectious disease, such as COVID-19, may materially and adversely affect our business and operations.

On March 11, 2020, the World Health Organization declared COVID-19 a pandemic. The COVID-19 pandemic is affecting the United States and global economies and may affect our operations and those of third parties on which we rely, including by causing disruptions in the supply of our product candidates and the conduct of future clinical trials. In addition, the COVID-19 pandemic may affect the operations of the FDA and other health authorities, which could result in delays of reviews and approvals, including with respect to our product candidates. Additionally, while the potential economic impact brought by, and the duration of the COVID-19 pandemic is difficult to assess or predict, the impact of the COVID-19 pandemic on the global financial markets may reduce our ability to access capital, which could negatively impact our short-term and long-term liquidity. In addition, the loss of any of our employees as a result of COVID-19 or another pandemic, may have a material adverse effect on our operations. The ultimate impact of the COVID-19 pandemic is highly uncertain and subject to change. We do not yet know the full extent of potential delays or impacts on our business, financing or clinical trial activities or on healthcare systems or the global economy as a whole. However, these effects could have a material impact on our liquidity, capital resources, operations and business and those of the third parties on which we rely.

Results of earlier clinical trials may not be predictive of the results of later-stage clinical trials.

The results of preclinical studies and early clinical trials of product candidates may not be predictive of the results of later-stage clinical trials. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy results despite having progressed through preclinical studies and initial clinical trials. Many companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to adverse safety profiles or lack of efficacy, notwithstanding promising results in earlier studies. Similarly, our future clinical trial results may not be successful for these or other reasons.

This product candidate development risk is heightened by any changes in the planned clinical trials compared to the completed clinical trials. As product candidates are developed through preclinical to early to late stage clinical trials towards approval and commercialization, it is customary that various aspects of the development program, such as manufacturing and methods of administration, are altered along the way in an effort to optimize processes and results. While these types of changes are common and are intended to optimize the product candidates for late stage clinical trials, approval and commercialization, such changes carry the risk that they will not achieve these intended objectives.

Any of these changes could make the results of our planned clinical trials or other future clinical trials we may initiate less predictable and could cause our product candidates to perform differently, including causing toxicities, which could delay completion of our clinical trials, delay approval of our product candidates, and/or jeopardize our ability to commence product sales and generate revenues.

If we experience delays in the enrollment of patients in our clinical trials, our receipt of necessary regulatory approvals could be delayed or prevented.

We may not be able to initiate or continue clinical trials for our product candidates if we are unable to locate and enroll a sufficient number of eligible patients to participate in these trials as required by the FDA or other regulatory authorities. In addition, the COVID-19 pandemic may result in a reduction of patient enrollment, a loss of patient enrollment and other delays affecting our clinical trials. Patient enrollment, a significant factor in the timing of clinical trials, is affected by many factors, including the size and nature of the patient population, the proximity of patients to clinical sites, the eligibility criteria for the trial, the design of the clinical trial, competing clinical trials and clinicians' and patients' perceptions as to the potential advantages of the drug being studied in relation to other available therapies, including any new drugs that may be approved for the indications we are

investigating.

If we fail to enroll and maintain the number of patients for which the clinical trial was designed, the statistical power of that clinical trial may be reduced, which would make it harder to demonstrate that the product candidate being tested in such clinical trial is safe and effective. Additionally, enrollment delays in our clinical trials may result in increased development costs for our product candidates, which would cause the value of our company to decline and limit our ability to obtain additional financing. Our inability to enroll a sufficient number of patients for any of our current or future clinical trials would result in significant delays or may require us to abandon one or more clinical trials altogether.

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We intend to rely on third parties to conduct our preclinical studies and clinical trials and perform other tasks. If these third parties do not successfully carry out their contractual duties, meet expected deadlines, or comply with regulatory requirements, we may not be able to obtain regulatory approval for or commercialize our product candidates and our business, financial condition and results of operations could be substantially harmed.

We intend to rely upon third-party CROs, medical institutions, clinical investigators and contract laboratories to monitor and manage data for our ongoing preclinical and clinical programs. Nevertheless, we maintain responsibility for ensuring that each of our clinical trials and preclinical studies is conducted in accordance with the applicable protocol, legal, regulatory, and scientific standards and our reliance on these third parties does not relieve us of our regulatory responsibilities. We and our CROs and other vendors are required to comply with current requirements on good manufacturing practices ("cGMP") good clinical practices ("GCP") and good laboratory practice ("GLP"), which are a collection of laws and regulations enforced by the FDA, the EMA and comparable foreign authorities for all of our product candidates in clinical development. Regulatory authorities enforce these regulations through periodic inspections of preclinical study and clinical trial sponsors, principal investigators, preclinical study and clinical trial sites, and other contractors. If we or any of our CROs or vendors fails to comply with applicable regulations, the data generated in our preclinical studies and clinical trials may be deemed unreliable and the FDA, the EMA or comparable foreign authorities may require us to perform additional preclinical studies and clinical trials before approving our marketing applications. We cannot assure you that upon inspection by a given regulatory authority, such regulatory authority will determine that any of our clinical trials comply with GCP regulations. In addition, our clinical trials must be conducted with products produced consistent with cGMP regulations. Our failure to comply with these regulations may require us to repeat clinical trials, which would delay the development and regulatory approval processes.

We may not be able to enter into arrangements with CROs on commercially reasonable terms, or at all. In addition, our CROs will not be our employees, and except for remedies available to us under our agreements with such CROs, we will not be able to control whether or not they devote sufficient time and resources to our ongoing preclinical and clinical programs. If CROs do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the data they obtain is compromised due to the failure to adhere to our protocols, regulatory requirements, or for other reasons, our clinical trials may be extended, delayed or terminated and we may not be able to obtain regulatory approval for or successfully commercialize our product candidates. CROs may also generate higher costs than anticipated. As a result, our business, financial condition and results of operations and the commercial prospects for our product candidates could be materially and adversely affected, our costs could increase, and our ability to generate revenue could be delayed.

Switching or adding additional CROs, medical institutions, clinical investigators or contract laboratories involves additional cost and requires management time and focus. In addition, there is a natural transition period when a new CRO commences work replacing a previous CRO. As a result, delays occur, which can materially impact our ability to meet our desired clinical development timelines. There can be no assurance that we will not encounter similar challenges or delays in the future or that these delays or challenges will not have a material adverse effect on our business, financial condition or results of operations.

Our product candidates are subject to extensive regulation under the FDA, the EMA or comparable foreign authorities, which can be costly and time consuming, cause unanticipated delays or prevent the receipt of the required approvals to commercialize our product candidates.

The clinical development, manufacturing, labeling, storage, record-keeping, advertising, promotion, export, marketing and distribution of our product candidates are subject to extensive regulation by the FDA and other U.S. regulatory agencies, the EMA or comparable authorities in foreign markets. In the U.S., neither we nor our collaborators are permitted to market our product candidates until we or our collaborators receive approval of a new drug application ("NDA") from the FDA or receive similar approvals abroad. The process of obtaining these approvals is expensive, often takes many years, and can vary substantially based upon the type, complexity and novelty of the product candidates involved. Approval policies or regulations may change and may be influenced by the results of other similar or competitive products, making it more difficult for us to achieve such approval in a timely manner or at all. Any guidance that may result from recent FDA advisory panel discussions may make it more expensive to develop and commercialize such product candidates. In addition, as a company, we have not previously filed NDAs with the FDA or filed similar applications with other foreign regulatory agencies. This lack

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of experience may impede our ability to obtain FDA or other foreign regulatory agency approval in a timely manner, if at all, for our product candidates for which development and commercialization is our responsibility.

Despite the time and expense invested, regulatory approval is never guaranteed. The FDA, the EMA or comparable foreign authorities can delay, limit or deny approval of a product candidate for many reasons, including:

- a product candidate may not be deemed safe or effective;
- agency officials of the FDA, the EMA or comparable foreign authorities may not find the data from non-clinical or preclinical studies and clinical trials generated during development to be sufficient;
- the FDA, the EMA or comparable foreign authorities may not approve our third-party manufacturers' processes or facilities; or
- the FDA, the EMA or a comparable foreign authority may change its approval policies or adopt new regulations.
- Our inability to obtain these approvals would prevent us from commercializing our product candidates.

Even if our product candidates receive regulatory approval in the U.S., we may never receive approval or commercialize our products outside of the U.S.

In order to market any products outside of the U.S., we must establish and comply with numerous and varying regulatory requirements of other countries regarding safety and efficacy. Approval procedures vary among countries and can involve additional product testing and additional administrative review periods. The time required to obtain approval in other countries might differ from that required to obtain FDA approval. The regulatory approval process in other countries may include all of the risks detailed above regarding FDA approval in the U.S. as well as other risks. Regulatory approval in one country does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one country may have a negative effect on the regulatory process in others. Failure to obtain regulatory approval in other countries or any delay seeking or obtaining such approval would impair our ability to develop foreign markets for our product candidates.

Even if any of our product candidates receive regulatory approval, our product candidates may still face future development and regulatory difficulties.

If any of our product candidates receive regulatory approval, the FDA, the EMA or comparable foreign authorities may still impose significant restrictions on the indicated uses or marketing of the product candidates or impose ongoing requirements for potentially costly post-approval studies and trials. In addition, regulatory agencies subject a product, our manufacturer and the manufacturer's facilities to continual review and periodic inspections. If a regulatory agency discovers previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or problems with the facility where the product is manufactured, a regulatory agency may impose restrictions on that product, our collaborators or us, including requiring withdrawal of the product from the market. Our product candidates will also be subject to ongoing FDA, the EMA or comparable foreign authorities' requirements for the labeling, packaging, storage, advertising, promotion, record-keeping and submission of safety and other post-market

information on the drug. If our product candidates fail to comply with applicable regulatory requirements, a regulatory agency may:

- issue warning letters or other notices of possible violations;
- impose civil or criminal penalties or fines or seek disgorgement of revenue or profits;
- suspend any ongoing clinical trials;
- refuse to approve pending applications or supplements to approved applications filed by us or our collaborators;
- withdraw any regulatory approvals;
- impose restrictions on operations, including costly new manufacturing requirements, or shut down our manufacturing operations; or
- seize or detain products or require a product recall.

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The FDA, the EMA and comparable foreign authorities actively enforce the laws and regulations prohibiting the promotion of off-label uses.

The FDA, the EMA and comparable foreign authorities strictly regulate the promotional claims that may be made about prescription products, such as our product candidates, if approved. In particular, a product may not be promoted for uses that are not approved by the FDA, the EMA or comparable foreign authorities as reflected in the product's approved labeling. If we receive marketing approval for our product candidates for our proposed indications, physicians may nevertheless use our products for their patients in a manner that is inconsistent with the approved label, if the physicians personally believe in their professional medical judgment that our products could be used in such manner. However, if we are found to have promoted our products for any off-label uses, the federal government could levy civil, criminal or administrative penalties, and seek fines against us. Such enforcement has become more common in the industry. The FDA, the EMA or comparable foreign authorities could also request that we enter into a consent decree or a corporate integrity agreement, or seek a permanent injunction against us under which specified promotional conduct is monitored, changed or curtailed. If we cannot successfully manage the promotion of our product candidates, if approved, we could become subject to significant liability, which would materially adversely affect our business, financial condition and results of operations.

If our competitors have product candidates that are approved faster, marketed more effectively, are better tolerated, have a more favorable safety profile or are demonstrated to be more effective than ours, our commercial opportunity may be reduced or eliminated.

The biopharmaceutical industry is characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary products. While we believe that our technology, knowledge, experience and scientific resources provide us with competitive advantages, we face potential competition from many different sources, including commercial biopharmaceutical enterprises, academic institutions, government agencies and private and public research institutions. Any product candidates that we successfully develop and commercialize will compete with existing therapies and new therapies that may become available in the future.

Many of our competitors have significantly greater financial resources and expertise in research and development, manufacturing, preclinical studies, clinical trials, regulatory approvals and marketing approved products than we do. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. Our competitors may succeed in developing technologies and therapies that are more effective, better tolerated or less costly than any which we are developing, or that would render our product candidates obsolete and noncompetitive. Even if we obtain regulatory approval for any of our product candidates, our competitors may succeed in obtaining regulatory approvals for their products earlier than we do. We will also face competition from these third parties in recruiting and retaining qualified scientific and management personnel, in establishing clinical trial sites and patient registration for clinical trials, and in acquiring and in-licensing technologies and products complementary to our programs or advantageous to our business.

The key competitive factors affecting the success of each of our product candidates, if approved, are likely to be its efficacy, safety, tolerability, frequency and route of administration, convenience and price, the level of branded and generic competition and the availability of coverage and reimbursement from government and other third-party payors.

The pharmaceutical market for the treatment of major depressive disorder includes selective serotonin reuptake inhibitors ("SSRIs"), serotonin and norepinephrine reuptake inhibitors ("SNRIs") and atypical antipsychotics. A number of these marketed antidepressants will be generic and would be key competitors to SLS-002. These products include Forest Laboratory's Lexapro/Ciprallex (escitalopram) and Viibryd (vilazodone), Pfizer, Inc.'s Zoloft (sertraline), Effexor (venlafaxine) and Pristiq (desvenlafaxine), GlaxoSmithKline plc's Paxil/Seroxat (paroxetine), Eli Lilly and Company's Prozac (fluoxetine) and Cymbalta (duloxetine), AstraZeneca plc's Seroquel (quetiapine) and Bristol-Myers Squibb Company's Abilify (aripiprazole), among others.

Patients with treatment-resistant depression often require treatment with several antidepressants, such as an SSRI or SNRI, combined with an "adjunct" therapy such as an antipsychotic compound, such as AstraZeneca plc's Seroquel (quetiapine) and Bristol-Myers Squibb Company's Abilify (aripiprazole), or mood stabilizers, such as Janssen Pharmaceutical's Topamax (topiramate). In addition, Janssen's Spravato (intranasal esketamine), which has been approved for treatment-resistant depression and for depressive systems in adults with major depressive disorder with suicidal thoughts or actions, targets the NMDA receptor and is expected to have a faster onset of therapeutic effect as compared to currently available therapies.

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Current treatments for Parkinson's Disease ("PD") are intended to improve the symptoms of patients. The cornerstone of PD therapy is levodopa, as it is the most effective therapy for reducing symptoms of PD. There are other drug therapies in development that will target the disease, such as gene and stem cell therapy and A2A receptor agonists.

We, or any future collaborators, may not be able to obtain orphan drug designation or orphan drug exclusivity for our product candidates.

Regulatory authorities in some jurisdictions, including the United States and Europe, may designate drugs for relatively small patient populations as orphan drugs. Under the Orphan Drug Act, the FDA may designate a product as an orphan drug if it is a drug intended to treat a rare disease or condition, which is generally defined as a patient population of fewer than 200,000 individuals annually in the United States. In the United States and Europe, obtaining orphan drug approval may allow us to obtain financial incentives, such as an extended period of exclusivity during which only we are allowed to market the orphan drug. While we plan to seek orphan drug designation from the FDA for SLS-005 for Sanfilippo syndrome and SLS-008 for the treatment of a pediatric indication, we, or any future collaborators, may not be granted orphan drug designations for our product candidates in the U.S. or in other jurisdictions.

Even if we, or any future collaborators, obtain orphan drug designation for a product candidate, we, or they, may not be able to obtain orphan drug exclusivity for that product candidate. Generally, a product with orphan drug designation only becomes entitled to orphan drug exclusivity if it receives the first marketing approval for the indication for which it has such designation, in which case the FDA or the EMA will be precluded from approving another marketing application for the same drug for that indication for the applicable exclusivity period. The applicable exclusivity period is seven years in the United States and ten years in Europe. The European exclusivity period can be reduced to six years if a drug no longer meets the criteria for orphan drug designation or if the drug is sufficiently profitable so that market exclusivity is no longer justified. Orphan drug exclusivity may be lost if the FDA or the EMA determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantity of the drug to meet the needs of patients with the rare disease or condition.

Even if we, or any future collaborators, obtain orphan drug exclusivity for a product, that exclusivity may not effectively protect the product from competition because FDA has

taken the position that, under certain circumstances, another drug with the same active chemical and pharmacological characteristics, or moiety, can be approved for the same condition. Specifically, the FDA's regulations provide that it can approve another drug with the same active moiety for the same condition if the FDA concludes that the later drug is clinically superior in that it is shown to be safer, more effective or makes a major contribution to patient care.

We are subject to a multitude of manufacturing risks, any of which could substantially increase our costs and limit supply of our product candidates.

The process of manufacturing our product candidates is complex, highly regulated, and subject to several risks. For example, the process of manufacturing our product candidates is extremely susceptible to product loss due to contamination, equipment failure or improper installation or operation of equipment, or vendor or operator error. Even minor deviations from normal manufacturing processes for any of our product candidates could result in reduced production yields, product defects and other supply disruptions. If microbial, viral or other contaminations are discovered in our product candidates or in the manufacturing facilities in which our product candidates are made, such manufacturing facilities may need to be closed for an extended period of time to investigate and remedy the contamination. In addition, the manufacturing facilities in which our product candidates are made could be adversely affected by equipment failures, labor shortages, natural disasters, public health crises, pandemics and epidemics, such as the recent coronavirus disease 2019 (COVID-19), power failures and numerous other factors.

In addition, any adverse developments affecting manufacturing operations for our product candidates may result in shipment delays, inventory shortages, lot failures, withdrawals or recalls or other interruptions in the supply of our product candidates. We also may need to take inventory write-offs and incur other charges and expenses for product candidates that fail to meet specifications, undertake costly remediation efforts or seek costlier manufacturing alternatives.

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We rely completely on third parties to manufacture our preclinical and clinical drug supplies, and our business, financial condition and results of operations could be harmed if those third parties fail to provide us with sufficient quantities of drug product, or fail to do so at acceptable quality levels or prices.

We do not currently have, nor do we plan to acquire, the infrastructure or capability internally to manufacture our preclinical and clinical drug supplies for use in our clinical trials, and we lack the resources and the capability to manufacture any of our product candidates on a clinical or commercial scale. We rely on our manufacturers to purchase from third-party suppliers the materials necessary to produce our product candidates for our clinical trials. There are a limited number of suppliers for raw materials that we use to manufacture our product candidates, and there may be a need to identify alternate suppliers to prevent a possible disruption of the manufacture of the materials necessary to produce our product candidates for our clinical trials, and, if approved, ultimately for commercial sale. We do not have any control over the process or timing of the acquisition of these raw materials by our manufacturers. Although we generally do not begin a clinical trial unless we believe we have a sufficient supply of a product candidate to complete such clinical trial, any significant delay or discontinuity in the supply of a product candidate, or the raw material components thereof, for an ongoing clinical trial due to the need to replace a third-party manufacturer could considerably delay completion of our clinical trials, product testing and potential regulatory approval of our product candidates, which could harm our business, financial condition and results of operations.

We and our contract manufacturers are subject to significant regulation with respect to manufacturing our product candidates. The manufacturing facilities on which we rely may not continue to meet regulatory requirements.

All entities involved in the preparation of therapeutics for clinical trials or commercial sale, including our contract manufacturers for our product candidates, are subject to extensive regulation. Components of a finished therapeutic product approved for commercial sale or used in late-stage clinical trials must be manufactured in accordance with cGMP. These regulations govern manufacturing processes and procedures and the implementation and operation of quality systems to control and assure the quality of investigational products and products approved for sale. Poor control of production processes can lead to the introduction of contaminants or to inadvertent changes in the properties or stability of our product candidates that may not be detectable in final product testing. We or our contract manufacturers must supply all necessary documentation in support of an NDA or marketing authorization application ("MAA") on a timely basis and must adhere to GLP and cGMP regulations enforced by the FDA, the EMA or comparable foreign authorities through their facilities inspection program. Some of our contract manufacturers may not have produced a commercially approved pharmaceutical product and therefore may not have obtained the requisite regulatory authority approvals to do so. The facilities and quality systems of some or all of our third-party contractors must pass a pre-approval inspection for compliance with the applicable regulations as a condition of regulatory approval of our product candidates or any of our other potential products. In addition, the regulatory authorities may, at any time, audit or inspect a manufacturing facility involved with the preparation of our product candidates or any of our other potential products or the associated quality systems for compliance with the regulations applicable to the activities being conducted. Although we plan to oversee the contract manufacturers, we cannot control the manufacturing process of, and are completely dependent on, our contract manufacturing partners for compliance with the regulatory requirements. If these facilities do not pass a pre-approval plant inspection, regulatory approval of the products may not be granted or may be substantially delayed until any violations are corrected to the satisfaction of the regulatory authority, if ever.

The regulatory authorities also may, at any time following approval of a product for sale, audit the manufacturing facilities of our third-party contractors. If any such inspection or audit identifies a failure to comply with applicable regulations or if a violation of our product specifications or applicable regulations occurs independent of such an inspection or audit, we or the relevant regulatory authority may require remedial measures that may be costly or time consuming for us or a third party to implement, and that may include the temporary or permanent suspension of a clinical trial or commercial sales or the temporary or permanent closure of a facility. Any such remedial measures imposed upon us or third parties with whom we contract could materially harm our business, financial condition and results of operations.

If we or any of our third-party manufacturers fail to maintain regulatory compliance, the FDA, the EMA or comparable foreign authorities can impose regulatory sanctions including, among other things, refusal to approve a pending application for a product candidate, withdrawal of an approval or suspension of production. As a result, our business, financial condition and results of operations may be materially and adversely affected.

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Additionally, if supply from one manufacturer is interrupted, an alternative manufacturer would need to be qualified through an NDA supplement or MAA variation, or equivalent foreign regulatory filing, which could result in further delay. The regulatory agencies may also require additional studies or trials if a new manufacturer is relied upon for commercial production. Switching manufacturers may involve substantial costs and is likely to result in a delay in our desired clinical and commercial timelines.

These factors could cause us to incur higher costs and could cause the delay or termination of clinical trials, regulatory submissions, required approvals, or commercialization of our product candidates. Furthermore, if our suppliers fail to meet contractual requirements and we are unable to secure one or more replacement suppliers capable of production at a substantially equivalent cost, our clinical trials may be delayed or we could lose potential revenue.

Any collaboration arrangement that we may enter into in the future may not be successful, which could adversely affect our ability to develop and commercialize our current and potential future product candidates.

We may seek collaboration arrangements with biopharmaceutical companies for the development or commercialization of our current and potential future product candidates. To the extent that we decide to enter into collaboration agreements, we will face significant competition in seeking appropriate collaborators. Moreover, collaboration arrangements are complex and time consuming to negotiate, execute and implement. We may not be successful in our efforts to establish and implement collaborations or other alternative arrangements should we choose to enter into such arrangements, and the terms of the arrangements may not be favorable to us. If and when we collaborate with a third party for development and commercialization of a product candidate, we can expect to relinquish some or all of the control over the future success of that product candidate to the third party. The success of our collaboration arrangements will depend heavily on the efforts and activities of our collaborators. Collaborators generally have significant discretion in determining the efforts and resources that they will apply to these collaborations.

Disagreements between parties to a collaboration arrangement can lead to delays in developing or commercializing the applicable product candidate and can be difficult to resolve

in a mutually beneficial manner. In some cases, collaborations with biopharmaceutical companies and other third parties are terminated or allowed to expire by the other party. Any such termination or expiration would adversely affect our business, financial condition and results of operations.

If we are unable to develop our own commercial organization or enter into agreements with third parties to sell and market our product candidates, we may be unable to generate significant revenues.

We do not have a sales and marketing organization, and we have no experience as a company in the sales, marketing and distribution of pharmaceutical products. If any of our product candidates are approved for commercialization, we may be required to develop our sales, marketing and distribution capabilities, or make arrangements with a third party to perform sales and marketing services. Developing a sales force for any resulting product or any product resulting from any of our other product candidates is expensive and time consuming and could delay any product launch. We may be unable to establish and manage an effective sales force in a timely or cost-effective manner, if at all, and any sales force we do establish may not be capable of generating sufficient demand for our product candidates. To the extent that we enter into arrangements with collaborators or other third parties to perform sales and marketing services, our product revenues are likely to be lower than if we marketed and sold our product candidates independently. If we are unable to establish adequate sales and marketing capabilities, independently or with others, we may not be able to generate significant revenues and may not become profitable.

The commercial success of our product candidates depends upon their market acceptance among physicians, patients, healthcare payors and the medical community.

Even if our product candidates obtain regulatory approval, our products, if any, may not gain market acceptance among physicians, patients, healthcare payors and the medical community. The degree of market acceptance of any of our approved product candidates will depend on a number of factors, including:

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- the effectiveness of our approved product candidates as compared to currently available products;
 - patient willingness to adopt our approved product candidates in place of current therapies;
 - our ability to provide acceptable evidence of safety and efficacy;
 - relative convenience and ease of administration;
 - the prevalence and severity of any adverse side effects;
 - restrictions on use in combination with other products;
 - availability of alternative treatments;
 - pricing and cost-effectiveness assuming either competitive or potential premium pricing requirements, based on the profile of our product candidates and target markets;
 - effectiveness of us or our partners' sales and marketing strategy;
 - our ability to obtain sufficient third-party coverage or reimbursement; and
 - potential product liability claims.

In addition, the potential market opportunity for our product candidates is difficult to precisely estimate. Our estimates of the potential market opportunity for our product candidates include several key assumptions based on our industry knowledge, industry publications, third-party research reports and other surveys. Independent sources have not verified all of our assumptions. If any of these assumptions proves to be inaccurate, then the actual market for our product candidates could be smaller than our estimates of the potential market opportunity. If the actual market for our product candidates is smaller than we expect, our product revenue may be limited, it may be harder than expected to raise funds and it may be more difficult for us to achieve or maintain profitability. If we fail to achieve market acceptance of our product candidates in the U.S. and abroad, our revenue will be limited and it will be more difficult to achieve profitability.

If we fail to obtain and sustain an adequate level of reimbursement for our potential products by third-party payors, potential future sales would be materially adversely affected.

There will be no viable commercial market for our product candidates, if approved, without reimbursement from third-party payors. Reimbursement policies may be affected by future healthcare reform measures. We cannot be certain that reimbursement will be available for our current product candidates or any other product candidate we may develop. Additionally, even if there is a viable commercial market, if the level of reimbursement is below our expectations, our anticipated revenue and gross margins will be adversely affected.

Third-party payors, such as government or private healthcare insurers, carefully review and increasingly question and challenge the coverage of and the prices charged for drugs. Reimbursement rates from private health insurance companies vary depending on the company, the insurance plan and other factors. Reimbursement rates may be based on reimbursement levels already set for lower cost drugs and may be incorporated into existing payments for other services. There is a current trend in the U.S. healthcare industry toward cost containment.

Large public and private payors, managed care organizations, group purchasing organizations and similar organizations are exerting increasing influence on decisions regarding the use of, and reimbursement levels for, particular treatments. Such third-party payors, including Medicare, may question the coverage of, and challenge the prices charged for, medical products and services, and many third-party payors limit coverage of or reimbursement for newly approved healthcare products. In particular, third-party payors may limit the covered indications. Cost-control initiatives could decrease the price we might establish for products, which could result in product revenues being lower than anticipated. We believe our drugs will be priced significantly higher than existing generic drugs and consistent with current branded drugs. If we are unable to show a significant benefit relative to existing generic drugs, Medicare, Medicaid and private payors may not be willing to provide reimbursement for our drugs, which would significantly reduce the likelihood of our products gaining market acceptance.

We expect that private insurers will consider the efficacy, cost-effectiveness, safety and tolerability of our potential products in determining whether to approve reimbursement for such products and at what level. Obtaining these approvals can be a time consuming and expensive process. Our business, financial condition and results of operations would be materially adversely affected if we do not receive approval for reimbursement of our potential products from private insurers on a timely or satisfactory basis. Limitations on coverage could also be imposed at the local Medicare carrier level or by fiscal intermediaries. Medicare Part D, which provides a pharmacy benefit to Medicare patients as discussed below, does not require participating prescription drug plans to cover all drugs within a class of products. Our business, financial condition and results of operations could be materially adversely affected if Part D prescription drug plans were to limit access to, or deny or limit reimbursement of, our product candidates or other potential products.

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Reimbursement systems in international markets vary significantly by country and by region, and reimbursement approvals must be obtained on a country-by-country basis. In many countries, the product cannot be commercially launched until reimbursement is approved. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. The negotiation process in some countries can exceed 12 months. To obtain reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our products to other available therapies.

If the prices for our potential products are reduced or if governmental and other third-party payors do not provide adequate coverage and reimbursement of our drugs, our future revenue, cash flows and prospects for profitability will suffer.

Current and future legislation may increase the difficulty and cost of commercializing our product candidates and may affect the prices we may obtain if our product candidates are approved for commercialization.

In the U.S. and some foreign jurisdictions, there have been a number of adopted and proposed legislative and regulatory changes regarding the healthcare system that could prevent or delay regulatory approval of our product candidates, restrict or regulate post-marketing activities and affect our ability to profitably sell any of our product candidates for which we obtain regulatory approval.

In the U.S., the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 ("MMA") changed the way Medicare covers and pays for pharmaceutical products. Cost reduction initiatives and other provisions of this legislation could limit the coverage and reimbursement rate that we receive for any of our approved products. While the MMA only applies to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own reimbursement rates. Therefore, any reduction in reimbursement that results from the MMA may result in a similar reduction in payments from private payors.

In March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010 (collectively the "PPACA"), was enacted. The PPACA was intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against healthcare fraud and abuse, add new transparency requirements for healthcare and health insurance industries, impose new taxes and fees on the health industry and impose additional health policy reforms. The PPACA increased manufacturers' rebate liability under the Medicaid Drug Rebate Program by increasing the minimum rebate amount for both branded and generic drugs and revised the definition of "average manufacturer price", which may also increase the amount of Medicaid drug rebates manufacturers are required to pay to states. The legislation also expanded Medicaid drug rebates and created an alternative rebate formula for certain new formulations of certain existing products that is intended to increase the rebates due on those drugs. The Centers for Medicare & Medicaid Services, which administers the Medicaid Drug Rebate Program, also has proposed to expand Medicaid rebates to the utilization that occurs in the territories of the U.S., such as Puerto Rico and the Virgin Islands. Further, beginning in 2011, the PPACA imposed a significant annual fee on companies that manufacture or import branded prescription drug products and required manufacturers to provide a 50% discount off the negotiated price of prescriptions filled by beneficiaries in the Medicare Part D coverage gap, referred to as the "donut hole." Legislative and regulatory proposals have been introduced at both the state and federal level to expand post-approval requirements and restrict sales and promotional activities for pharmaceutical products.

There have been recent public announcements by members of the U.S. Congress, President Trump and his administration regarding their plans to repeal and replace the PPACA and Medicare. For example, on December 22, 2017, President Trump signed into law the Tax Cuts and Jobs Act of 2017, which, among other things, eliminated the individual mandate requiring most Americans (other than those who qualify for a hardship exemption) to carry a minimum level of health coverage, effective January 1, 2019. We are not sure whether additional legislative changes will be enacted, or whether the FDA regulations, guidance or interpretations will be changed, or what the impact of such changes on the marketing approvals of our product candidates, if any, may be. In addition, increased scrutiny by the U.S. Congress of the FDA's approval process may significantly delay or prevent marketing approval, as well as subject us to more stringent product labeling and post-marketing approval testing and other requirements.

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In Europe, the United Kingdom withdrew from the European Union on January 31, 2020. A significant portion of the regulatory framework in the United Kingdom is derived from the regulations of the European Union, and European Union pharmaceutical law remains applicable to the United Kingdom until December 31, 2020. We cannot predict what consequences the withdrawal of the United Kingdom from the European Union might have on the regulatory frameworks of the United Kingdom or the European Union, or on our future operations, if any, in these jurisdictions.

Changes in government funding for the FDA and other government agencies could hinder their ability to hire and retain key leadership and other personnel, properly administer drug innovation, or prevent our product candidates from being developed or commercialized, which could negatively impact our business, financial condition and results of operations.

The ability of the FDA to review and approve new products can be affected by a variety of factors, including budget and funding levels, ability to hire and retain key personnel, and statutory, regulatory and policy changes. Average review times at the agency have fluctuated in recent years as a result. In addition, government funding of other agencies that fund research and development activities is subject to the political process, which is inherently fluid and unpredictable.

In December 2016, the 21st Century Cures Act was signed into law. This new legislation is designed to advance medical innovation and empower the FDA with the authority to directly hire positions related to drug and device development and review. However, government proposals to reduce or eliminate budgetary deficits may include reduced allocations to the FDA and other related government agencies. These budgetary pressures may result in a reduced ability by the FDA to perform their respective roles; including the related impact to academic institutions and research laboratories whose funding is fully or partially dependent on both the level and timing of funding from government sources.

Disruptions at the FDA and other agencies may also slow the time necessary for our product candidates to be reviewed or approved by necessary government agencies, which could adversely affect our business, financial condition and results of operations.

We are subject to "fraud and abuse" and similar laws and regulations, and a failure to comply with such regulations or prevail in any litigation related to noncompliance could harm our business, financial condition and results of operations.

In the U.S., we are subject to various federal and state healthcare "fraud and abuse" laws, including anti-kickback laws, false claims laws and other laws intended, among other things, to reduce fraud and abuse in federal and state healthcare programs. The federal Anti-Kickback Statute makes it illegal for any person, including a prescription drug manufacturer, or a party acting on its behalf, to knowingly and willfully solicit, receive, offer or pay any remuneration that is intended to induce the referral of business, including the purchase, order or prescription of a particular drug, or other good or service for which payment in whole or in part may be made under a federal healthcare program, such as Medicare or Medicaid. Although we seek to structure our business arrangements in compliance with all applicable requirements, these laws are broadly written, and it is often difficult to determine precisely how the law will be applied in specific circumstances. Accordingly, it is possible that our practices may be challenged under the federal Anti-Kickback Statute.

The federal False Claims Act prohibits anyone from, among other things, knowingly presenting or causing to be presented for payment to the government, including the federal healthcare programs, claims for reimbursed drugs or services that are false or fraudulent, claims for items or services that were not provided as claimed, or claims for medically unnecessary items or services. Under the Health Insurance Portability and Accountability Act of 1996, we are prohibited from knowingly and willfully executing a scheme to defraud any healthcare benefit program, including private payors, or knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services to obtain money or property of any healthcare benefit program. Violations of fraud and abuse laws may be punishable by criminal or civil sanctions, including penalties, fines or exclusion or suspension from federal and state healthcare programs such as Medicare and Medicaid and debarment from contracting with the U.S. government. In addition, private individuals have the ability to bring actions on behalf of the government under the federal False Claims Act as well as under the false claims laws of several states.

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Many states have adopted laws similar to the federal Anti-Kickback Statute, some of which apply to the referral of patients for healthcare services reimbursed by any source, not just governmental payors. In addition, some states have passed laws that require pharmaceutical companies to comply with the April 2003 Office of Inspector General Compliance Program Guidance for Pharmaceutical Manufacturers or the Pharmaceutical Research and Manufacturers of America's Code on Interactions with Healthcare Professionals. Several states also impose other marketing restrictions or require pharmaceutical companies to make marketing or price disclosures to the state. There are ambiguities as to what is required to comply with these state requirements and if we fail to comply with an applicable state law requirement, we could be subject to penalties.

Neither the government nor the courts have provided definitive guidance on the application of fraud and abuse laws to our business. Law enforcement authorities are increasingly focused on enforcing these laws, and it is possible that some of our practices may be challenged under these laws. Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. If we are found in violation of one of these laws, we could be subject to significant civil, criminal and administrative penalties, damages, fines, exclusion from governmental funded federal or state healthcare programs and the curtailment or restructuring of our operations. If this occurs, our business, financial condition and results of operations may be materially adversely affected.

If we face allegations of noncompliance with the law and encounter sanctions, our reputation, revenues and liquidity may suffer, and any of our product candidates that are ultimately approved for commercialization could be subject to restrictions or withdrawal from the market.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response, and could generate negative publicity. Any failure to comply with ongoing regulatory requirements may significantly and adversely affect our ability to generate revenues from any of our product candidates that are ultimately approved for commercialization. If regulatory sanctions are applied or if regulatory approval is withdrawn, our business, financial condition and results of operations will be adversely affected. Additionally, if we are unable to generate revenues from product sales, our potential for achieving profitability will be diminished and our need to raise capital to fund our operations will increase.

If we fail to retain current members of our senior management and scientific personnel, or to attract and keep additional key personnel, we may be unable to successfully develop or commercialize our product candidates.

Our success depends on our continued ability to attract, retain and motivate highly qualified management and scientific personnel. As of November 6, 2020, we have 8 employees. Our organization will rely primarily on outsourcing research, development and clinical trial activities, and manufacturing operations, as well as other functions critical to our business. We believe this approach enhances our ability to focus on our core product opportunities, allocate resources efficiently to different projects and allocate internal resources more effectively. We have filled several key open positions and are currently recruiting for a few remaining positions. However, competition for qualified personnel is intense. We may not be successful in attracting qualified personnel to fulfill our current or future needs and there is no guarantee that any of these individuals will join us on a full-time employment basis, or at all. In the event we are unable to fill critical open employment positions, we may need to delay our operational activities and goals, including the development of our product candidates, and may have difficulty in meeting our obligations as a public company. We do not maintain "key person" insurance on any of our employees.

In addition, competitors and others are likely in the future to attempt to recruit our employees. The loss of the services of any of our key personnel, the inability to attract or retain highly qualified personnel in the future or delays in hiring such personnel, particularly senior management and other technical personnel, could materially and adversely affect our business, financial condition and results of operations. In addition, the replacement of key personnel likely would involve significant time and costs, and may significantly delay or prevent the achievement of our business objectives.

From time to time, our management seeks the advice and guidance of certain scientific advisors and consultants regarding clinical and regulatory development programs and other customary matters. These scientific advisors and consultants are not our employees and may have commitments to, or consulting or advisory contracts with, other

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entities that may limit their availability to us. In addition, our scientific advisors may have arrangements with other companies to assist those companies in developing products or technologies that may compete with us.

We will need to increase the size of our organization and may not successfully manage our growth.

We are a clinical-stage biopharmaceutical company with a small number of planned employees, and our management system currently in place is not likely to be adequate to support our future growth plans. Our ability to grow and to manage our growth effectively will require us to hire, train, retain, manage and motivate additional employees and to implement and improve our operational, financial and management systems. These demands also may require the hiring of additional senior management personnel or the development of additional expertise by our senior management personnel. Hiring a significant number of additional employees, particularly those at the management level, would increase our expenses significantly. Moreover, if we fail to expand and enhance our operational, financial and management systems in conjunction with our potential future growth, it could have a material adverse effect on our business, financial condition and results of operations.

Our management's lack of public company experience could put us at greater risk of incurring fines or regulatory actions for failure to comply with federal securities laws and could put us at a competitive disadvantage, and could require our management to devote additional time and resources to ensure compliance with applicable corporate governance requirements.

Our executive officer does not have prior experience in managing and operating a public company, which could have an adverse effect on his ability to quickly respond to problems or adequately address issues and matters applicable to public companies. Any failure to comply with federal securities laws, rules or regulations could subject us to fines or regulatory actions, which may materially adversely affect our business, financial condition and results of operations. Further, since our executive officer does not have prior experience managing and operating a public company, we may need to dedicate additional time and resources to comply with legally mandated corporate governance policies relative to our competitors whose management teams have more public company experience.

We are exposed to product liability, non-clinical and clinical liability risks which could place a substantial financial burden upon us, should lawsuits be filed against us.

Our business exposes us to potential product liability and other liability risks that are inherent in the testing, manufacturing and marketing of pharmaceutical formulations and products. In addition, the use in our clinical trials of pharmaceutical products and the subsequent sale of these products by us or our potential collaborators may cause us to bear a portion of or all product liability risks. A successful liability claim or series of claims brought against us could have a material adverse effect on our business, financial condition and results of operations.

We currently carry product liability insurance for our clinical development activities. On occasion, large judgments have been awarded in class action lawsuits based on drugs that had unanticipated adverse effects. A successful product liability claim or series of claims brought against us could cause our stock price to decline and, if judgments exceed our insurance coverage, could adversely affect our results of operations and business.

Our research and development activities involve the use of hazardous materials, which subject us to regulation, related costs and delays and potential liabilities.

Our research and development activities involve the controlled use of hazardous materials and chemicals, and we will need to develop additional safety procedures for the handling and disposing of hazardous materials. If an accident occurs, we could be held liable for resulting damages, which could be substantial. We are also subject to numerous environmental, health and workplace safety laws and regulations, including those governing laboratory procedures, exposure to blood-borne pathogens and the handling of biohazardous materials. Additional federal, state and local laws and regulations affecting our operations may be adopted in the future. We may incur substantial costs to comply with, and substantial fines or penalties if we violate any of these laws or regulations.

We rely significantly on information technology and any failure, inadequacy, interruption or security lapse of that technology, including any cybersecurity incidents, could harm our ability to operate our business effectively.

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Despite the implementation of security measures, our internal computer systems and those of third parties with which we contract are vulnerable to damage from cyber-attacks, computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. System failures, accidents or security breaches could cause interruptions in our operations, and could result in a material disruption of our drug development and clinical activities and business operations, in addition to possibly requiring

substantial expenditures of resources to remedy. The loss of drug development or clinical trial data could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and our development programs and the development of our product candidates could be delayed.

Our employees and consultants may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements.

We are exposed to the risk of employee or consultant fraud or other misconduct. Misconduct by our employees or consultants could include intentional failures to comply with FDA regulations, provide accurate information to the FDA, comply with manufacturing standards, comply with federal and state healthcare fraud and abuse laws and regulations, report financial information or data accurately or disclose unauthorized activities to us. In particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commissions, customer incentive programs and other business arrangements. Employee and consultant misconduct also could involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. It is not always possible to identify and deter such misconduct, and the 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 be in compliance with such 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 have a material adverse effect on our business, financial condition and results of operations, and result in the imposition of significant fines or other sanctions against us.

Business disruptions such as natural disasters could seriously harm our future revenues and financial condition and increase our costs and expenses.

We and our suppliers may experience a disruption in our and their business as a result of natural disasters. A significant natural disaster, such as an earthquake, hurricane, flood or fire, could severely damage or destroy our headquarters or facilities or the facilities of our manufacturers or suppliers, which could have a material and adverse effect on our business, financial condition and results of operations. In addition, terrorist acts or acts of war targeted at the U.S., and specifically the greater New York, New York region, could cause damage or disruption to us, our employees, facilities, partners and suppliers, which could have a material adverse effect on our business, financial condition and results of operations.

We may engage in strategic transactions that could impact our liquidity, increase our expenses and present significant distractions to our management.

From time to time, we may consider strategic transactions, such as acquisitions of companies, asset purchases and out-licensing or in-licensing of products, product candidates or technologies. Additional potential transactions that we may consider include a variety of different business arrangements, including spin-offs, strategic partnerships, joint ventures, restructurings, divestitures, business combinations and investments. Any such transaction may require us to incur non-recurring or other charges, may increase our near- and long-term expenditures and may pose significant integration challenges or disrupt our management or business, which could adversely affect our business, financial condition and results of operations. For example, these transactions may entail numerous operational and financial risks, including:

- exposure to unknown liabilities;
- disruption of our business and diversion of our management's time and attention in order to develop acquired products, product candidates or technologies;

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- incurrence of substantial debt or dilutive issuances of equity securities to pay for any of these transactions;
 - higher-than-expected transaction and integration costs;
 - write-downs of assets or goodwill or impairment charges;
 - increased amortization expenses;
 - difficulty and cost in combining the operations and personnel of any acquired businesses or product lines with our operations and personnel;
 - impairment of relationships with key suppliers or customers of any acquired businesses or product lines due to changes in management and ownership; and
 - inability to retain key employees of any acquired businesses.

Accordingly, although there can be no assurance that we will undertake or successfully complete any transactions of the nature described above, any transactions that we do complete may be subject to the foregoing or other risks, and could have a material adverse effect on our business, financial condition and results of operations.

Risks Related to Our Intellectual Property

We may not be successful in obtaining or maintaining necessary rights to our product candidates through acquisitions and in-licenses.

Because several of our programs require the use of proprietary rights held by third parties, the growth of our business will likely depend in part on our ability to maintain and exploit these proprietary rights. In addition, we may need to acquire or in-license additional intellectual property in the future. We may be unable to acquire or in-license any compositions, methods of use, processes or other intellectual property rights from third parties that we identify as necessary for our product candidates. We face competition with regard to acquiring and in-licensing third-party intellectual property rights, including from a number of more established companies. These established companies may have a competitive advantage over us due to their size, cash resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license intellectual property rights to us. We also may be unable to acquire or in-license third-party intellectual property rights on terms that would allow us to make an appropriate return on our investment.

We may enter into collaboration agreements with U.S. and foreign academic institutions to accelerate development of our current or future preclinical product candidates. Typically, these agreements include an option for the company to negotiate a license to the institution's intellectual property rights resulting from the collaboration. Even with such an option, we may be unable to negotiate a license within the specified timeframe or under terms that are acceptable to us. If we are unable to license rights from a collaborating institution, the institution may offer the intellectual property rights to other parties, potentially blocking our ability to pursue our desired program.

If we are unable to successfully obtain required third-party intellectual property rights or maintain our existing intellectual property rights, we may need to abandon development of the related program and our business, financial condition and results of operations could be materially and adversely affected.

If we fail to comply with our obligations in the agreements under which we in-license intellectual property and other rights from third parties or otherwise experience disruptions to our business relationships with our licensors, we could lose intellectual property rights that are important to our business.

Our license agreement with Ligand Pharmaceuticals Incorporated, Neurogen Corporation and CyDex Pharmaceuticals, Inc. (the "Ligand License Agreement"), our license agreement with the Regents of the University of California (the "UC Regents License Agreement") and our license agreement with Duke University (the "Duke License Agreement", together with the Ligand License Agreement and the UC Regents License Agreement, the "License Agreements") are important to our business and we expect to enter into additional license agreements in the future. The License Agreements impose, and we expect that future license agreements will impose, various milestone payments, royalties and other

obligations on us. If we fail to comply with our obligations under these agreements, or if we file for bankruptcy, we may be required to make certain payments to the licensor, we may lose the exclusivity of our license, or the licensor may have the right to terminate the license, in which event we would not be able to develop or market products covered by the license. Additionally, the milestone and other payments associated with these licenses could materially and adversely affect our business, financial condition and results of operations.

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Pursuant to the terms of the Ligand License Agreement, the licensors each have the right to terminate the Ligand License Agreement with respect to the programs licensed by such licensor under certain circumstances, including, but not limited to: (i) if we do not pay an amount that is not disputed in good faith, (ii) if we willfully breach the Ligand License Agreement in a manner for which legal remedies would not be expected to make such licensor whole, or (iii) if we file or have filed against us a petition in bankruptcy or make an assignment for the benefit of creditors. In the event the Ligand License Agreement is terminated by a licensor, all licenses granted to us by such licensor will terminate immediately. Further, pursuant to the terms of the UC Regents License Agreement, the licensor has the right to terminate the UC Regents License Agreement or reduce our license to a nonexclusive license if we fail to achieve certain milestones within a specified timeframe. Similarly, pursuant to the terms of the Duke License Agreement, the licensor has the right to terminate the Duke License Agreement if we fail to achieve certain milestones within a specified timeframe.

In some cases, patent prosecution of our licensed technology may be controlled solely by the licensor. If our licensor fails to obtain and maintain patent or other protection for the proprietary intellectual property we in-license, then we could lose our rights to the intellectual property or our exclusivity with respect to those rights, and our competitors could market competing products using the intellectual property. In certain cases, we may control the prosecution of patents resulting from licensed technology. In the event we breach any of our obligations related to such prosecution, we may incur significant liability to our licensing partners. Licensing of intellectual property is of critical importance to our business and involves complex legal, business and scientific issues. Disputes may arise regarding intellectual property subject to a licensing agreement, including, but not limited to:

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

If disputes over intellectual property and other rights that we have in-licensed prevents or impairs our ability to maintain our current licensing arrangements on acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates. If we fail to comply with any such obligations to our licensor, such licensor may terminate their licenses to us, in which case we would not be able to market products covered by these licenses. The loss of our licenses would have a material adverse effect on our business.

We are required to make certain cash payments and may be required to pay milestones and royalties pursuant to certain commercial agreements, which could adversely affect the overall profitability for us of any products that we may seek to commercialize.

Under the terms of the Ligand License Agreement, we may be obligated to pay the licensors under the License Agreement up to an aggregate of approximately \$135 million in development, regulatory and sales milestones. We will also be required to pay royalties on future worldwide net product sales. In addition pursuant to the asset purchase agreement, as amended (the "Vyera APA"), with Phoenixus AG f/k/a Vyera Pharmaceuticals AG and Turing Pharmaceuticals AG ("Vyera") we will be required to pay royalties to Vyera on net sales of SLS-002. We will also be required to pay up to an aggregate of approximately \$17 million in development and regulatory milestones and royalties on net sales of SLS-005 pursuant to our asset purchase agreement with Bioblast Pharma Ltd. These cash, milestone and royalty payments could adversely affect the overall profitability for us of any products that we may seek to commercialize. Pursuant to the amended and restated license agreement with Stuart Weg, M.D., we will be required to make cash payments to Dr. Weg in the amount of \$0.125 million in January 2021 and, if certain conditions are not met, we will be required to make an additional cash payment of \$0.2 million in January 2022.

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We may not be able to protect our proprietary or licensed technology in the marketplace.

We depend on our ability to protect our proprietary or licensed technology. We rely on trade secret, patent, copyright and trademark laws, and confidentiality, licensing and other agreements with employees and third parties, all of which offer only limited protection. Our success depends in large part on our ability and any licensor's or licensee's ability to obtain and maintain patent protection in the U.S. and other countries with respect to our proprietary or licensed technology and products. We currently in-license some of our intellectual property rights to develop our product candidates and may in-license additional intellectual property rights in the future. We cannot be certain that patent enforcement activities by our current or future licensors have been or will be conducted in compliance with applicable laws and regulations or will result in valid and enforceable patents or other intellectual property rights. We also cannot be certain that our current or future licensors will allocate sufficient resources or prioritize their or our enforcement of such patents. Even if we are not a party to these legal actions, an adverse outcome could prevent us from continuing to license intellectual property that we may need to operate our business, which would have a material adverse effect on our business, financial condition and results of operations.

We believe we will be able to obtain, through prosecution of patent applications covering our owned technology and technology licensed from others, adequate patent protection for our proprietary drug technology, including those related to our in-licensed intellectual property. If we are compelled to spend significant time and money protecting or enforcing our licensed patents and future patents we may own, designing around patents held by others or licensing or acquiring, potentially for large fees, patents or other proprietary rights held by others, our business, financial condition and results of operations may be materially and adversely affected. If we are unable to effectively protect the intellectual property that we own or in-license, other companies may be able to offer the same or similar products for sale, which could materially adversely affect our business, financial condition and results of operations. The patents of others from whom we may license technology, and any future patents we may own, may be challenged, narrowed, invalidated or circumvented, which could limit our ability to stop competitors from marketing the same or similar products or limit the length of term of patent protection that we may have for our products.

Obtaining and maintaining patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection for licensed patents, pending patent applications and potential future patent applications and patents could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and/or patent applications will be due to be paid to the U.S. Patent and Trademark Office ("USPTO") and various governmental patent agencies outside of the U.S. in several stages over the lifetime of the applicable patent and/or patent application. 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. 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 noncompliance 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. If this occurs with respect to our in-licensed patents or patent applications we may file in the future, our competitors might be able to use our technologies, which would have a material adverse effect on our business, financial condition and results of operations.

The patent positions of pharmaceutical products are often complex and uncertain. The breadth of claims allowed in pharmaceutical patents in the U.S. and many jurisdictions

outside of the U.S. is not consistent. For example, in many jurisdictions, the support standards for pharmaceutical patents are becoming increasingly strict. Some countries prohibit method of treatment claims in patents. Changes in either the patent laws or interpretations of patent laws in the U.S. and other countries may diminish the value of our licensed or owned intellectual property or create uncertainty. In addition, publication of information related to our current product candidates and potential products may prevent us from obtaining or enforcing patents relating to these product candidates and potential products, including without limitation composition-of-matter patents, which are generally believed to offer the strongest patent protection.

Patents that we currently license and patents that we may own or license in the future do not necessarily ensure the protection of our licensed or owned intellectual property for a number of reasons, including, without limitation, the following:

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- the patents may not be broad or strong enough to prevent competition from other products that are identical or similar to our product candidates;
 - there can be no assurance that the term of a patent can be extended under the provisions of patent term extensions afforded by U.S. law or similar provisions in foreign countries, where available;
 - the issued patents and patents that we may obtain or license in the future may not prevent generic entry into the market for our product candidates;
 - we, or third parties from whom we in-license or may license patents, may be required to disclaim part of the term of one or more patents;
 - there may be prior art of which we are not aware that may affect the validity or enforceability of a patent claim;
 - there may be prior art of which we are aware, which we do not believe affects the validity or enforceability of a patent claim, but which, nonetheless, ultimately may be found to affect the validity or enforceability of a patent claim;
 - there may be other patents issued to others that will affect our freedom to operate;
 - if the patents are challenged, a court could determine that they are invalid or unenforceable;
 - there might be a significant change in the law that governs patentability, validity and infringement of our licensed patents or any future patents we may own that adversely affects the scope of our patent rights;
 - a court could determine that a competitor's technology or product does not infringe our licensed patents or any future patents we may own; and
 - the patents could irretrievably lapse due to failure to pay fees or otherwise comply with regulations or could be subject to compulsory licensing.

If we encounter delays in our development or clinical trials, the period of time during which we could market our potential products under patent protection would be reduced.

Our competitors may be able to circumvent our licensed patents or future patents we may own by developing similar or alternative technologies or products in a non-infringing manner. Our competitors may seek to market generic versions of any approved products by submitting abbreviated new drug applications to the FDA in which our competitors claim that our licensed patents or any future patents we may own are invalid, unenforceable or not infringed. Alternatively, our competitors may seek approval to market their own products similar to or otherwise competitive with our products. In these circumstances, we may need to defend or assert our licensed patents or any future patents we may own, including by filing lawsuits alleging patent infringement. In any of these types of proceedings, a court or other agency with jurisdiction may find our licensed patents or any future patents we may own invalid or unenforceable. We may also fail to identify patentable aspects of our research and development before it is too late to obtain patent protection. Even if we own or in-license valid and enforceable patents, these patents still may not provide protection against competing products or processes sufficient to achieve our business objectives.

The issuance of a patent is not conclusive as to its inventorship, scope, ownership, priority, validity or enforceability. In this regard, third parties may challenge our licensed patents or any future patents we may own in the courts or patent offices in the U.S. and abroad. Such challenges may result in loss of exclusivity or freedom to operate or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of our technology and potential products. In addition, given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such product candidates might expire before or shortly after such product candidates are commercialized.

We may infringe the intellectual property rights of others, which may prevent or delay our drug development efforts and prevent us from commercializing or increase the costs of commercializing our products.

Our commercial success depends significantly on our ability to operate without infringing the patents and other intellectual property rights of third parties. For example, there could be issued patents of which we are not aware that our current or potential future product candidates infringe. There also could be patents that we believe we do not infringe, but that we may ultimately be found to infringe.

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Moreover, patent applications are in some cases maintained in secrecy until patents are issued. The publication of discoveries in the scientific or patent literature frequently occurs substantially later than the date on which the underlying discoveries were made and patent applications were filed. Because patents can take many years to issue, there may be currently pending applications of which we are unaware that may later result in issued patents that our product candidates or potential products infringe. For example, pending applications may exist that claim or can be amended to claim subject matter that our product candidates or potential products infringe. Competitors may file continuing patent applications claiming priority to already issued patents in the form of continuation, divisional, or continuation-in-part applications, in order to maintain the pendency of a patent family and attempt to cover our product candidates.

Third parties may assert that we are employing their proprietary technology without authorization and may sue us for patent or other intellectual property infringement. These lawsuits are costly and could adversely affect our business, financial condition and results of operations and divert the attention of managerial and scientific personnel. If we are sued for patent infringement, we would need to demonstrate that our product candidates, potential products or methods either do not infringe the claims of the relevant patent or that the patent claims are invalid, and we may not be able to do this. Proving invalidity is difficult. For example, in the U.S., proving invalidity requires a showing of clear and convincing evidence to overcome the presumption of validity enjoyed by issued patents. Even if we are successful in these proceedings, we may incur substantial costs and the time and attention of our management and scientific personnel could be diverted in pursuing these proceedings, which could have a material adverse effect on us. In addition, we may not have sufficient resources to bring these actions to a successful conclusion. If a court holds that any third-party patents are valid, enforceable and cover our products or their use, the holders of any of these patents may be able to block our ability to commercialize our products unless we acquire or obtain a license under the applicable patents or until the patents expire.

We may not be able to enter into licensing arrangements or make other arrangements at a reasonable cost or on reasonable terms. Any inability to secure licenses or alternative technology could result in delays in the introduction of our products or lead to prohibition of the manufacture or sale of products by us. Even if we are able to obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. We could be forced, including by court order, to cease commercializing the infringing technology or product. In addition, in any such proceeding or litigation, we could be found liable for monetary damages, including treble damages and attorneys' fees, if

we are found to have willfully infringed a patent. A finding of infringement could prevent us from commercializing our product candidates or force us to cease some of our business operations, which could materially and adversely affect our business, financial condition and results of operations. Any claims by third parties that we have misappropriated their confidential information or trade secrets could have a similar material and adverse effect on our business, financial condition and results of operations. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have a material adverse effect on our ability to raise the funds necessary to continue our operations.

Any claims or lawsuits relating to infringement of intellectual property rights brought by or against us will be costly and time consuming and may adversely affect our business, financial condition and results of operations.

We may be required to initiate litigation to enforce or defend our licensed and owned intellectual property. Lawsuits to protect our intellectual property rights can be very time consuming and costly. There is a substantial amount of litigation involving patent and other intellectual property rights in the biopharmaceutical industry generally. Such litigation or proceedings could substantially increase our operating expenses and reduce the resources available for development activities or any future sales, marketing or distribution activities.

In any infringement litigation, any award of monetary damages we receive may not be commercially valuable. 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 litigation. Moreover, there can be no assurance that we will have sufficient financial or other resources to file and pursue such infringement claims, which typically last for years before they are resolved. Further, any claims we assert against a perceived infringer could provoke these parties to assert counterclaims against us alleging that we have infringed their patents. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace.

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In addition, our licensed patents and patent applications, and patents and patent applications that we may apply for, own or license in the future, could face other challenges, such as interference proceedings, opposition proceedings, re-examination proceedings and other forms of post-grant review. Any of these challenges, if successful, could result in the invalidation of, or in a narrowing of the scope of, any of our licensed patents and patent applications and patents and patent applications that we may apply for, own or license in the future subject to challenge. Any of these challenges, regardless of their success, would likely be time consuming and expensive to defend and resolve and would divert our management and scientific personnel's time and attention.

Changes in U.S. patent law could diminish the value of patents in general, thereby impairing our ability to protect our products.

As is the case with other biopharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the biopharmaceutical industry involves both technological and legal complexity and is costly, time-consuming and inherently uncertain. For example, the U.S. previously enacted and is currently implementing wide-ranging patent reform legislation. Specifically, on September 16, 2011, the Leahy-Smith America Invents Act (the "Leahy-Smith Act") was signed into law and included a number of significant changes to U.S. patent law, and many of the provisions became effective in March 2013. However, it may take the courts years to interpret the provisions of the Leahy-Smith Act, and the implementation of the statute could increase the uncertainties and costs surrounding the prosecution of our licensed and future patent applications and the enforcement or defense of our licensed and future patents, all of which could have a material adverse effect on our business, financial condition and results of operations.

In addition, the U.S. Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by the U.S. Congress, the federal courts and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce patents that we might obtain in the future.

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

Filing, prosecuting and defending patents on product candidates throughout the world would be prohibitively expensive. Competitors may use our licensed and owned technologies in jurisdictions where we have not licensed or obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories where we may obtain or license patent protection, but where patent enforcement is not as strong as that in the U.S. These products may compete with our products in jurisdictions where we do not have any issued or licensed patents and any future patent claims or other intellectual property rights may not be effective or sufficient to prevent them from so competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biopharmaceuticals, which could make it difficult for us to stop the infringement of our licensed patents and future patents we may own, or marketing of competing products in violation of our proprietary rights generally. Further, the laws of some foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws of the U.S. As a result, we may encounter significant problems in protecting and defending our licensed and owned intellectual property both in the U.S. and abroad. For example, China currently affords less protection to a company's intellectual property than some other jurisdictions. As such, the lack of strong patent and other intellectual property protection in China may significantly increase our vulnerability regarding unauthorized disclosure or use of our intellectual property and undermine our competitive position. Proceedings to enforce our future patent rights, if any, in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business.

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We may be unable to adequately prevent disclosure of trade secrets and other proprietary information.

In order to protect our proprietary and licensed technology and processes, we rely in part on confidentiality agreements with our corporate partners, employees, consultants, manufacturers, outside scientific collaborators and sponsored researchers and other advisors. These agreements may not effectively prevent disclosure of our confidential information and may not provide an adequate remedy in the event of unauthorized disclosure of confidential information. In addition, others may independently discover our trade secrets and proprietary information. Failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

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

We expect to employ individuals who were previously employed at other biopharmaceutical companies. Although we have no knowledge of any such claims against us, we may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise used or disclosed confidential information of our employees' former employers or other third parties. Litigation may be necessary to defend against these claims. There is no guarantee of success in defending these claims, and even if we are successful, litigation could result in substantial cost and be a distraction to our management and other employees. To date, none of our employees have been subject to such claims.

We may be subject to claims challenging the inventorship of our licensed patents, any future patents we may own and other intellectual property.

Although we are not currently experiencing any claims challenging the inventorship of our licensed patents or our licensed or owned intellectual property, we may in the future be subject to claims that former employees, collaborators or other third parties have an interest in our licensed patents or other licensed or owned intellectual property as an inventor or co-inventor. For example, we may have inventorship disputes arise from conflicting obligations of consultants or others who are involved in developing our product candidates. Litigation may be necessary to defend against these and other claims challenging inventorship. If we 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, valuable intellectual property. Such an outcome could have a material adverse effect on our business, financial condition and results of operations. 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.

If we do not obtain additional protection under the Hatch-Waxman Amendments and similar foreign legislation extending the terms of our licensed patents and any future patents we may own, our business, financial condition and results of operations may be materially and adversely affected.

Depending upon the timing, duration and specifics of FDA regulatory approval for our product candidates, one or more of our licensed U.S. patents or future U.S. patents that we may license or own may be eligible for limited patent term restoration under the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit a patent restoration term of up to five years as compensation for patent term lost during drug development and the FDA regulatory review process. This period is generally one-half the time between the effective date of an investigational new drug application ("IND") (falling after issuance of the patent), and the submission date of an NDA, plus the time between the submission date of an NDA and the approval of that application. Patent term restorations, however, cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval by the FDA.

The application for patent term extension is subject to approval by the USPTO, in conjunction with the FDA. It takes at least six months to obtain approval of the application for patent term extension. We may not be granted an extension because of, for example, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents or otherwise failing to satisfy applicable requirements. Moreover, the applicable time period or the scope of patent protection afforded could be less than we request. If we are unable to obtain patent term extension or restoration or the term of any such extension is less than we request, the period during which we will have the right to exclusively market our product will be shortened and our competitors may obtain earlier approval of competing products, and our ability to generate revenues could be materially adversely affected.

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Risks Related to Owning Our Common Stock

The market price of our common stock is expected to be volatile.

The trading price of our common stock is likely to be volatile. Our stock price could be subject to wide fluctuations in response to a variety of factors, including the following:

- results from, and any delays in, planned clinical trials for our product candidates, or any other future product candidates, and the results of trials of competitors or those of other companies in our market sector;
- any delay in filing an NDA for any of our product candidates and any adverse development or perceived adverse development with respect to the FDA's review of that NDA;
- significant lawsuits, including patent or stockholder litigation;
- inability to obtain additional funding;
- failure to successfully develop and commercialize our product candidates;
- changes in laws or regulations applicable to our product candidates;
- inability to obtain adequate product supply for our product candidates, or the inability to do so at acceptable prices;
- unanticipated serious safety concerns related to any of our product candidates;
- adverse regulatory decisions;
- introduction of new products or technologies by our competitors;
- failure to meet or exceed drug development or financial projections we provide to the public;
- failure to meet or exceed the estimates and projections of the investment community;
- the perception of the biopharmaceutical industry by the public, legislatures, regulators and the investment community;
- announcements of significant acquisitions, strategic partnerships, joint ventures or capital commitments by us or our competitors;
- disputes or other developments relating to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our licensed and owned technologies;
- additions or departures of key scientific or management personnel;
- changes in the market valuations of similar companies;
- general economic and market conditions and overall fluctuations in the U.S. equity market;
- public health crises, pandemics and epidemics, such as the recent coronavirus disease 2019 (COVID-19);
- sales of our common stock by us or our stockholders in the future; and
- trading volume of our common stock.

In addition, the stock market in general, and small biopharmaceutical 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. Further, a decline in the financial markets and related factors beyond our control may cause our stock price to decline rapidly and unexpectedly.

If we fail to comply with the continued listing requirements of the Nasdaq Capital Market, our common stock may be delisted and the price of our common stock and our ability to access the capital markets could be negatively impacted.

We must continue to satisfy the Nasdaq Capital Market's continued listing requirements, including, among other things, a minimum closing bid price requirement of \$1.00 per share for 30 consecutive business days. If a company fails for 30 consecutive business days to meet the \$1.00 minimum closing bid price requirement, The Nasdaq Stock Market LLC ("Nasdaq") will send a deficiency notice to the company, advising that it has been afforded a "compliance period" of 180 calendar days to regain compliance with the applicable requirements.

A delisting of our common stock from the Nasdaq Capital Market could materially reduce the liquidity of our common stock and result in a corresponding material reduction in the price of our common stock. In addition, delisting could harm our ability to raise capital through alternative financing sources on terms acceptable to us, or at all, and may result in the potential loss of confidence by investors and employees.

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On April 14, 2020, we received written notice from Nasdaq indicating that, for the last thirty consecutive business days, the bid price for our common stock had closed below the minimum \$1.00 per share requirement for continued listing on the Nasdaq Capital Market under Nasdaq Listing Rule 5550(a)(2). In accordance with Nasdaq Listing Rule 5810(c)(3)(A), we were provided an initial period of 180 calendar days, or until October 12, 2020, to regain compliance. On June 5, 2020, we received a letter from Nasdaq notifying us that we had regained full compliance with the minimum bid price requirement of the Nasdaq Capital Market under Nasdaq Listing Rule 5550(a)(2). We regained compliance after the closing bid price of our common stock had been at \$1.00 per share or greater for ten consecutive business days, from May 21, 2020 through June 4, 2020.

On April 21, 2020, we received an additional written notice from Nasdaq indicating that, for the last thirty consecutive business days, the market value of our listed securities has been below the minimum requirement of \$35 million for continued listing on the Nasdaq Capital Market under Nasdaq Listing Rule 5550(b)(2). In accordance with Nasdaq Listing Rule 5810(c)(3)(C), we were provided a period of 180 calendar days, or until October 19, 2020, to regain compliance. On May 14, 2020, we received a letter from Nasdaq notifying us that we had regained full compliance with the continued listing standards of the Nasdaq Capital Market under Nasdaq Listing Rule 5550(b), which requires that we maintain (1) stockholders' equity of at least \$2.5 million, (2) minimum market value of listed securities of at least \$35 million, or (3) net income from continuing operations of \$500,000 in the most recently completed fiscal year or in two of the three most recently completed fiscal years. We regained compliance after we filed our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2020 with the SEC on May 7, 2020, which evidenced stockholders' equity of \$6,765,000 as of March 31, 2020.

On November 11, 2020, we received written notice from Nasdaq indicating that, for the last thirty consecutive business days, the bid price for our common stock had closed below the minimum \$1.00 per share requirement for continued listing on the Nasdaq Capital Market under Nasdaq Listing Rule 5550(a)(2). In accordance with Nasdaq Listing Rule 5810(c)(3)(A), we have been provided an initial period of 180 calendar days, or until May 10, 2021, to regain compliance. The written notice states that the Nasdaq Staff will provide written notification that we have achieved compliance with Rule 5550(a)(2) if at any time before May 10, 2021, the bid price of our common stock closes at \$1.00 per share or more for a minimum of ten consecutive business days. There is no guarantee that we will regain compliance by May 10, 2021.

In addition, we have previously received similar notices from Nasdaq that our bid price of our common stock had closed below the minimum \$1.00 per share requirement for continued listing on the Nasdaq Capital Market under Nasdaq Listing Rule 5550(a)(2). Even though we regained compliance with the Nasdaq Capital Market's minimum market value of listed securities requirement and minimum closing bid price requirement, there is no guarantee that we will remain in compliance with such listing requirements or other listing requirements in the future. Any failure to maintain compliance with continued listing requirements of the Nasdaq Capital Market could result in delisting of our common stock from the Nasdaq Capital Market and negatively impact our company and holders of our common stock, including by reducing the willingness of investors to hold our common stock because of the resulting decreased price, liquidity and trading of our common stock, limited availability of price quotations and reduced news and analyst coverage. Delisting may adversely impact the perception of our financial condition, cause reputational harm with investors, our employees and parties conducting business with us and limit our access to debt and equity financing.

Our management owns a significant percentage of our stock and will be able to exert significant control over matters subject to stockholder approval.

As of September 30, 2020, Dr. Mehra, our sole executive officer and a director, owns approximately 6.0% of our outstanding common stock. Therefore, Dr. Mehra will have the ability to influence us through this ownership position.

This significant concentration of stock ownership may adversely affect the trading price for our common stock because investors often perceive disadvantages in owning stock in companies that have stockholders with substantial ownership positions. As a result, Dr. Mehra could significantly influence or determine all matters requiring approval by our stockholders, including the election of directors and the approval of mergers or other business combination transactions. The interests of these stockholders may not always coincide with our interests or the interests of other stockholders. This may also prevent or discourage unsolicited acquisition proposals or offers for our common stock that you may feel are in your best interests as one of our stockholders and he may act in a manner that advances his best interests and not necessarily those of other stockholders, including seeking a premium value for his common stock, and might affect the prevailing market price for our common stock.

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

The Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the "Dodd-Frank Act") as well as rules subsequently implemented by the SEC and Nasdaq have imposed various requirements on public companies. 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. 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 (in ways we cannot currently anticipate) the manner in which we operate our business. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. 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 our current levels of such insurance coverage.

As a publicly traded company, we will incur legal, accounting and other expenses associated with the SEC reporting requirements applicable to a company whose securities are registered under the Exchange Act, as well as corporate governance requirements, including those under the Sarbanes-Oxley Act, the Dodd-Frank Act and other rules implemented by the SEC and Nasdaq. The expenses incurred by public companies generally to meet SEC reporting, finance and accounting and corporate governance requirements have been increasing in recent years as a result of changes in rules and regulations and the adoption of new rules and regulations applicable to public companies.

Sales of a substantial number of shares of our common stock in the public market by our existing stockholders, future issuances of our common stock or rights to purchase our common stock, could cause our stock price to fall.

Sales of a substantial number of shares of our common stock by our existing stockholders in the public market, 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. We are unable to predict the effect that such sales may have on the prevailing market price of our common stock. As of November 6, 2020, we have outstanding warrants to purchase an aggregate of approximately 10.1 million shares of our common stock, and options to purchase an aggregate of approximately 5.1 million shares of our common stock, which, if exercised, would further increase the number of shares of our common stock outstanding and the number of shares eligible for resale in the public market.

The Financing Warrants contain price-based adjustment provisions which, if triggered, may cause substantial additional dilution to our stockholders.

On October 16, 2018, we entered into a Securities Purchase Agreement with the investors listed on the Schedule of Buyers attached thereto, as amended, pursuant to which, among other things, we issued warrants to purchase shares of our common stock (the "Financing Warrants").

The outstanding Financing Warrants contain price-based adjustment provisions, pursuant to which the exercise price of the Financing Warrants may be adjusted downward in the event of certain dilutive issuances by us.

If the Financing Warrants are exercised, additional shares of our common stock will be issued, which will result in dilution to our then-existing stockholders and increase the

number of shares eligible for resale in the public market. As of November 6, 2020, the Financing Warrants were exercisable for approximately 0.8 million shares of our common stock at an exercise price of \$0.2957 per share of common stock. Sales of substantial numbers of such shares in the public market could depress the market price of our common stock.

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Anti-takeover provisions in our governing documents and under Nevada law could make an acquisition of us more difficult and may prevent attempts by our stockholders to replace or remove our management.

Provisions in our articles of incorporation and bylaws may delay or prevent an acquisition or a change in management. These provisions include a classified board of directors and the ability of the board of directors to issue preferred stock without stockholder approval. Although we believe these provisions collectively will provide for an opportunity to receive higher bids by requiring potential acquirers to negotiate with our board of directors, they would apply even if the offer may be considered beneficial by some stockholders. In addition, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove then current management by making it more difficult for stockholders to replace members of the board of directors, which is responsible for appointing the members of management.

Certain provisions of Nevada corporate law deter hostile takeovers. Specifically, Nevada Revised Statutes ("NRS") 78.411 through 78.444 prohibit a publicly held Nevada corporation from engaging in a "combination" with an "interested stockholder" for a period of two years following the date the person first became an interested stockholder, unless (with certain exceptions) the "combination" or the transaction by which the person became an interested stockholder is approved in a prescribed manner. Generally, a "combination" includes a merger, asset or stock sale, or certain other transactions resulting in a financial benefit to the interested stockholder. Generally, an "interested stockholder" is a person who, together with affiliates and associates, beneficially owns or within two years prior to becoming an "interested stockholder" did own, 10% or more of a corporation's voting power. While these statutes permit a corporation to opt out of these protective provisions in its articles of incorporation, our articles of incorporation do not include any such opt-out provision.

Nevada's "acquisition of controlling interest" statutes, NRS 78.378 through 78.393, contain provisions governing the acquisition of a controlling interest in certain Nevada corporations. These "control share" laws provide generally that any person that acquires a "controlling interest" in certain Nevada corporations may be denied voting rights, unless a majority of the disinterested stockholders of the corporation elects to restore such voting rights. These statutes provide that a person acquires a "controlling interest" whenever a person acquires shares of a subject corporation that, but for the application of these provisions of the NRS, would enable that person to exercise (1) one-fifth or more, but less than one-third, (2) one-third or more, but less than a majority or (3) a majority or more, of all of the voting power of the corporation in the election of directors. Once an acquirer crosses one of these thresholds, shares that it acquired in the transaction taking it over the threshold and within the 90 days immediately preceding the date when the acquiring person acquired or offered to acquire a controlling interest become "control shares" to which the voting restrictions described above apply. While these statutes permit a corporation to opt out of these protective provisions in its articles of incorporation or bylaws, our articles of incorporation and bylaws do not include any such opt-out provision.

Further, NRS 78.139 also provides that directors may resist a change or potential change in control of the corporation if the board of directors determines that the change or potential change is opposed to or not in the best interest of the corporation upon consideration of any relevant facts, circumstances, contingencies or constituencies pursuant to NRS 78.138(4).

Our pre-Merger net operating loss carryforwards and certain other tax attributes may be subject to limitations. The pre-Merger net operating loss carryforwards and certain other tax attributes of us may also be subject to limitations as a result of ownership changes resulting from the Merger.

In general, a corporation that undergoes an "ownership change" as defined in Section 382 of the United States Internal Revenue Code of 1986, as amended, is subject to limitations on its ability to utilize its pre-change net operating loss carryforwards to offset future taxable income. In general, an ownership change occurs if the aggregate stock ownership of certain stockholders, generally stockholders beneficially owning five percent or more of a corporation's common stock, applying certain look-through and aggregation rules, increases by more than 50 percentage points over such stockholders' lowest percentage ownership during the testing period, generally three years. We may have experienced ownership changes in the past and may experience ownership changes in the future. It is possible that our net operating loss carryforwards and certain other tax attributes may also be subject to limitation as a result of ownership changes in the past and/or the closing of the Merger. Consequently, even if we achieve profitability, we may not be able to utilize a material portion of our net operating loss carryforwards and certain other tax attributes, which could have a material adverse effect on cash flow and results of operations.

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We may never pay dividends on our common stock so any returns would be limited to the appreciation of our stock.

We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and does not anticipate it will declare or pay any cash dividends for the foreseeable future. Any return to stockholders will therefore be limited to the appreciation of their stock.

General Risk Factors

An active trading market for our common stock may not be sustained, and you may not be able to resell your common stock at a desired market price.

If no active trading market for our common stock is sustained, you may be unable to sell your shares when you wish to sell them or at a price that you consider attractive or satisfactory. The lack of an active market may also adversely affect our ability to raise capital by selling securities in the future or impair our ability to acquire or in-license other product candidates, businesses or technologies using our shares as consideration.

Our internal control over financial reporting may not meet the standards required by Section 404 of the Sarbanes-Oxley Act, and failure to achieve and maintain effective internal control over financial reporting in accordance with Section 404 of the Sarbanes-Oxley Act, could have a material adverse effect on our business and share price.

Our management is required to report on the effectiveness of our internal control over financial reporting. The rules governing the standards that must be met for our management to assess our internal control over financial reporting are complex and require significant documentation, testing and possible remediation.

In connection with the implementation of the necessary procedures and practices related to internal control over financial reporting, we may identify deficiencies or material weaknesses that we may not be able to remediate in time to meet the deadline imposed by the Sarbanes-Oxley Act for compliance with the requirements of Section 404. In addition, we may encounter problems or delays in completing the implementation of any requested improvements and, when required, receiving a favorable attestation in connection with the attestation provided by our independent registered public accounting firm. Failure to achieve and maintain an effective internal control environment could have a material adverse effect on our business, financial condition and results of operations and could limit our ability to report our financial results accurately and in a timely manner.

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

The trading market for our common stock depends, in part, on the research and reports that securities or industry analysts publish about us or our business. If one or more of the analysts who cover us downgrade our stock or publish inaccurate or unfavorable research about our business, our stock price would likely decline. In addition, if our operating results fail to meet the forecast of analysts, our stock price would likely decline. If one or more of these analysts cease coverage of us or fail to publish reports on us regularly, demand for our common stock could decrease, which might cause our stock price and trading volume to decline.

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DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, any accompanying prospectus supplement and the documents incorporated by reference in this prospectus contain "forward-looking statements" by us within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), which statements involve substantial risks and uncertainties. These forward-looking statements are intended to be covered by the safe harbor for forward-looking statements provided by the Private Securities Litigation Reform Act of 1995. Forward-looking statements generally relate to future events or our future financial or operating performance. In some cases, you can identify forward-looking statements because they contain words such as "may," "will," "should," "expects," "plans," "anticipates," "could," "intends," "target," "projects," "contemplates," "believes," "estimates," "predicts," "potential" or "continue" or the negative of these words or other similar terms or expressions that concern our expectations, strategy, plans or intentions. Forward-looking statements contained in this prospectus, any accompanying prospectus supplement and the documents incorporated by reference in this prospectus include, but are not limited to, statements about:

- the potential impact to our business, financial condition and employees, including disruptions to our clinical trials, preclinical studies, supply chain and operations, due to the COVID-19 global pandemic;
- our ability to take advantage of opportunities under the CARES Act, and the potential impact of the CARES Act on our business, results of operations, financial condition or liquidity;
- risks and uncertainties associated with our actual and proposed research and development activities, including our clinical trials and preclinical studies;
- the timing or likelihood of regulatory filings and approvals or of alternative regulatory pathways for our product candidates;
- the potential market opportunities for commercializing our product candidates;
- our expectations regarding the potential market size and the size of the patient populations for our product candidates, if approved for commercial use, and our ability to serve such markets;
- estimates of our expenses, future revenue, capital requirements and our needs for additional financing;
- our ability to continue as a going concern;
- our ability to develop, acquire and advance our product candidates into, and successfully complete, clinical trials and preclinical studies and obtain regulatory approvals;
- the implementation of our business model and strategic plans for our business and product candidates;
- the initiation, cost, timing, progress and results of future and current preclinical studies and clinical trials, and our research and development programs;
- the terms of future licensing arrangements, and whether we can enter into such arrangements at all;
- timing and receipt or payments of licensing and milestone revenues or payments, if any;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates and our ability to operate our business without infringing the intellectual property rights of others;
- regulatory developments in the United States and foreign countries;
- the performance of our third party suppliers and manufacturers;
- our ability to maintain and establish collaborations or obtain additional funding;
- the success of competing therapies that are currently or may become available;
- our financial performance; and
- developments and projections relating to our competitors and our industry.

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We caution you that the forward-looking statements highlighted above do not encompass all of the forward-looking statements made in this prospectus, any accompanying prospectus supplement and the documents incorporated by reference into this prospectus.

We have based the forward-looking statements contained in this prospectus, the applicable prospectus supplement and any related free writing prospectus and in the documents incorporated by reference into this prospectus primarily on our current expectations and projections about future events and trends that we believe may affect our business, financial condition, results of operations and prospects. The outcomes of the events described in these forward-looking statements are subject to risks, uncertainties and other factors that could cause actual results and experience to differ from those projected, including, but not limited to, the risk factors described herein and the risk factors set forth in Part I - Item 1A, "Risk Factors", in our [Annual Report on Form 10-K for the year ended December 31, 2019, as filed with the SEC on March 17, 2020](#), in our [Quarterly Report on Form 10-Q for the quarter ended March 31, 2020, as filed with the SEC on May 7, 2020](#), in our [Quarterly Report on Form 10-Q for the quarter ended June 30, 2020, as filed with the SEC on August 14, 2020](#), and in our [Quarterly Report on Form 10-Q for the quarter ended September 30, 2020, as filed with the SEC on November 12, 2020](#), as updated by our subsequent annual, quarterly and other reports and documents that are incorporated by reference into this prospectus, and elsewhere in the documents incorporated by reference into this prospectus. Moreover, we operate in a very competitive and challenging environment. New risks and uncertainties emerge from time to time, and it is not possible for us to predict all risks and uncertainties that could have an impact on the forward-looking statements contained in this prospectus, the applicable prospectus supplement and any related free writing prospectus and in the documents incorporated by reference into this prospectus. We cannot assure you that the results, events and circumstances reflected in the forward-looking statements will be achieved or occur, and actual results, events or circumstances could differ materially from those described in the forward-looking statements.

The forward-looking statements made in this prospectus, the applicable prospectus supplement and any related free writing prospectus and in the documents incorporated by reference into this prospectus relate only to events as of the date on which the statements are made. We do not undertake any obligation to release publicly any revisions to such forward-looking statements to reflect events or circumstances after the date of this prospectus or to reflect new information or the occurrence of unanticipated events, except as required by law. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures, other strategic transactions or investments we may make or enter into.

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USE OF PROCEEDS

Except as otherwise provided in the applicable prospectus supplement or in any free writing prospectuses we have authorized for use in connection with a specific offering, we currently intend to use the net proceeds from the sale of the securities offered by this prospectus, if any, for working capital and general corporate purposes, which may include capital expenditures, research and development expenditures, regulatory affairs expenditures, clinical trial expenditures, acquisitions of new technologies and investments, business combinations and the repayment, refinancing, redemption or repurchase of indebtedness or capital stock.

The intended application of proceeds from the sale of any particular offering of securities using this prospectus will be described in the accompanying prospectus supplement relating to such offering. The precise amount and timing of the application of these proceeds will depend upon a number of factors, such as the timing and progress of our research and development efforts, our funding requirements and the availability and costs of other funds. Pending application of the net proceeds as described above, we intend to temporarily invest the proceeds in short-term, interest-bearing instruments.

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DESCRIPTION OF CAPITAL STOCK

The following description of our capital stock is not complete and may not contain all the information you should consider before investing in our capital stock. This description is summarized from, and qualified in its entirety by reference to, our Amended and Restated Articles of Incorporation, as amended, which have been publicly filed with the SEC. See "Where You Can Find More Information."

Our authorized capital stock consists of:

- 120,000,000 shares of common stock, \$0.001 par value; and
- 10,000,000 shares of preferred stock, \$0.001 par value.

Common Stock

Holders of shares of common stock are entitled to one vote per share for the election of directors and on all other matters that require stockholder approval. Holders of shares of common stock do not have any cumulative voting rights. Subject to any preferential rights of any outstanding preferred stock, in the event of our liquidation, dissolution or winding up, holders of shares of common stock are entitled to share ratably in the assets remaining after payment of liabilities and the liquidation preferences of any outstanding preferred stock. Shares of common stock do not carry any redemption rights or any preemptive or preferential rights enabling a holder to subscribe for, or receive shares of, any class of our common stock or any other securities convertible into shares of any class of our common stock.

Holders of our common stock are only entitled to receive dividends if, as and when declared by our board of directors in accordance with applicable law. We have never paid cash dividends on shares of common stock. Moreover, we do not anticipate paying periodic cash dividends on shares of common stock for the foreseeable future. Any future determination about the payment of dividends will be made at the discretion of our board of directors and will depend upon its earnings, if any, capital requirements, operating and financial conditions and on such other factors as our board of directors deems relevant.

Preferred Stock

We currently have no outstanding shares of preferred stock. Under our Amended and Restated Articles of Incorporation, as amended, our board of directors has the authority, without further action by stockholders, to designate one or more series of preferred stock and to fix the voting powers, designations, preferences, limitations, restrictions and relative rights granted to or imposed upon the preferred stock, including dividend rights, conversion rights, voting rights, rights and terms of redemption, liquidation preference and sinking fund terms, any or all of which may be preferential to or greater than the rights of the common stock. Of our authorized preferred stock, 1,000,000 shares have been designated as Series A Junior Participating Preferred Stock, 800 shares have been designated as Series B 8% Cumulative Convertible Preferred Stock, and 600 shares have been designated as Series C 6% Cumulative Convertible Preferred Stock.

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 shares of common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in control and may adversely affect the market price of the common stock and the voting and other rights of the holders of shares of common stock.

Our board of directors may specify the following characteristics of any preferred stock:

- the designation and stated value, if any, of the class or series of preferred stock;
- the number of shares of the class or series of preferred stock offered, the liquidation preference, if any, per share;

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- the dividend rate(s), period(s) or payment date(s) or method(s) of calculation, if any, applicable to the class or series of preferred stock;
- whether dividends, if any, are cumulative or non-cumulative and, if cumulative, the date from which dividends on the class or series of preferred stock will accumulate;
- the provisions for a sinking fund, if any, for the class or series of preferred stock;
- the provision for redemption, if applicable, of the class or series of preferred stock;
- the terms and conditions, if applicable, upon which the class or series of preferred stock will be convertible into common stock, including the conversion price or manner of calculation and conversion period;
- voting rights, if any, of the class or series of preferred stock;
- the relative ranking and preferences of the class or series of preferred stock as to dividend rights and rights, if any, upon the liquidation, dissolution or winding up of our affairs;
- any limitations on issuance of any class or series of preferred stock ranking senior to or on a parity with the class or series of preferred stock as to dividend rights and rights, if any, upon liquidation, dissolution or winding up of our affairs; and

- any other specific terms, preferences, rights, limitations or restrictions of the class or series of preferred stock.

Outstanding Warrants

As of September 30, 2020, we had outstanding warrants to purchase 10,055,963 shares of Common Stock as follows:

- warrants to purchase an aggregate of 8,386 shares with an exercise price of \$52.50 per share, all of which are currently exercisable (subject to certain beneficial ownership limitations) and expire on April 20, 2022, all of which shall be automatically exercised on a "cashless" basis upon expiration if the fair market value of the common stock is greater than the exercise price of the warrants on the expiration date of the warrants;
- warrants to purchase an aggregate of 71,357 shares with an exercise price of \$46.50 per share, all of which are currently exercisable (subject to certain beneficial ownership limitations) and expire on May 17, 2022, all of which shall be automatically exercised on a "cashless" basis upon expiration if the fair market value of the common stock is greater than the exercise price of the warrants on the expiration date of the warrants;
- warrants to purchase an aggregate of 11,338 shares with an exercise price of \$12.60 per share, all of which are currently exercisable and expire on January 12, 2023;
- a warrant to purchase an aggregate of 916 shares with an exercise price of \$21.30 per share, all of which are currently exercisable and expire on January 12, 2023;
- warrants to purchase an aggregate of 2,037 shares with an exercise price of \$21.30 per share, which are currently exercisable (subject to certain beneficial ownership limitations) and expire on January 12, 2023;
- warrants to purchase an aggregate of 3,647 shares with an exercise price of \$21.30 per share, all of which are currently exercisable (subject to certain beneficial ownership limitations) and expire on March 3, 2023;
- warrants to purchase an aggregate of 11,081 shares with an exercise price of \$12.60 per share, all of which are currently exercisable and expire on March 3, 2023;
- warrants to purchase an aggregate of 11,836 shares with an exercise price of \$18.75 per share, all of which are currently exercisable (subject to certain beneficial ownership limitations) and expire on March 28, 2023;
- warrants to purchase an aggregate of 80,008 shares with an exercise price of \$15.00 per share, all of which are currently exercisable (subject to certain beneficial ownership limitations) and expire on May 17, 2023;

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- warrants to purchase an aggregate of 7,668 shares with an exercise price of \$10.125 per share, all of which are currently exercisable (subject to certain beneficial ownership limitations) and expire on March 25, 2024, all of which shall be automatically exercised on a "cashless" basis upon expiration if the fair market value of the common stock is greater than the exercise price of the warrants on the expiration date of the warrants;
- warrants to purchase an aggregate of 646 shares with an exercise price of \$387.00 per share, all of which are currently exercisable and expire on October 17, 2024, all of which shall be automatically exercised on a "cashless" basis upon expiration if the fair market value of the common stock is greater than the exercise price of the warrants on the expiration date of the warrants;
- warrants to purchase an aggregate of 510 shares with an exercise price of \$492.00 per share, all of which are currently exercisable and expire on July 23, 2025, all of which shall be automatically exercised on a "cashless" basis upon expiration if the fair market value of the common stock is greater than the exercise price of the warrants on the expiration date of the warrants;
- a warrant to purchase an aggregate of 115,000 shares with an exercise price of \$9.00 per share, which is currently exercisable (subject to certain beneficial ownership limitations) and expires on March 25, 2024, which shall be automatically exercised on a "cashless" basis upon expiration if the fair market value of the common stock is greater than the exercise price of the warrants on the expiration date of the warrant;
- a warrant to purchase an aggregate of 89,239 shares with an exercise price of \$12.00 per share, which is currently exercisable and expires on March 25, 2024, which shall be automatically exercised on a "cashless" basis upon expiration if the fair market value of the common stock is greater than the exercise price of the warrants on the expiration date of the warrant;
- Series A warrants to purchase an aggregate of 756,044 shares with an exercise price of \$0.2957 per share, all of which are currently exercisable (subject to certain beneficial ownership limitations) and expire on January 31, 2024;
- warrants to purchase an aggregate of 2,237,500 shares with an exercise price of \$1.78 per share, all of which are currently exercisable (subject to certain beneficial ownership limitations) and expire on August 28, 2023; and
- warrants to purchase up to an aggregate of 6,648,750 shares of common stock with an exercise price of \$0.84 per share, which will become exercisable on March 9, 2021 (subject to certain beneficial ownership limitations) and expire on March 9, 2026.

All of the outstanding warrants contain provisions for the adjustment of the exercise price in the event of stock dividends, stock splits or similar transactions. In addition, certain of the warrants contain a "cashless exercise" feature that allows the holders thereof to exercise the warrants without a cash payment to us under certain circumstances. Certain of the warrants also contain provisions that provide certain rights to warrant holders in the event of a fundamental transaction, including a merger or consolidation with or into another entity, such as:

- the right to receive the same amount and kind of consideration paid to the holders of common stock in the fundamental transaction;
- the right to require us or a successor entity to purchase the unexercised portion of certain warrants at the warrant's respective fair value using the Black Scholes option pricing formula; or
- the right to require us or a successor entity to redeem the unexercised portion of certain warrants for the same consideration paid to holders of common stock in the fundamental transaction at the warrant's respective fair value using the Black Scholes option pricing formula.

The Series A warrants provide that, from January 31, 2019 through January 31, 2022, inclusive, if we publicly announce, issue or sell, or are deemed to have issued or sold, any shares of our common stock for a price per share less than the exercise price of the Series A warrants in effect immediately prior to such public announcement, issue or sale or deemed issuance or sale, subject to certain limited exceptions, then the exercise price of the Series A warrants shall be reduced to such lower price per share. If we publicly announce, issue or sell, or are deemed to have issued or sold any shares of our common stock for a price per share lower than the exercise price of the Series A warrants then in effect after January 31, 2022, subject to certain limited exceptions, then the exercise price of the Series A warrants shall be reduced to an amount equal to the product of (i) the exercise price in effect

immediately prior to such public announcement, issue or sale or deemed issuance or sale and (ii) the quotient determined by dividing (a) the sum of (x) the product derived by multiplying the exercise price then in effect and the number of shares of our common stock outstanding immediately prior to the new issuance plus (y) the consideration received by us for the new issuance, by (b) the product derived by multiplying (x) the exercise price then in effect by (y) the number of shares of our common stock outstanding immediately after the new issuance. Shares of our common stock will be deemed to be issued or sold if we: (1) grant or sell, or publicly announce the issuance or sale of, any options to purchase shares of our common stock and the lowest price per share for which one share of common stock is issuable upon the exercise of such option (or upon conversion, exercise or exchange of any convertible security issuable upon exercise of such option) is less than the exercise price of the Series A warrant, or (2) issue or sell, or publicly announce the issuance or sale of, any convertible securities and the lowest price per share for which one share of our common stock is issuable upon the conversion, exercise or exchange of such convertible security is less than the exercise price of the Series A warrant. As of September 30, 2020, the exercise price of the Series A warrants was \$0.2957 per share. The exercise price is subject to adjustment in accordance with the foregoing provisions and in the event of stock dividends, stock splits or similar transactions.

Anti-Takeover Effects of Nevada Law and Provisions of our Amended and Restated Articles of Incorporation, as amended, and Amended and Restated Bylaws, as amended

Certain provisions of Nevada law and our Amended and Restated Articles of Incorporation, as amended, and Amended and Restated Bylaws, as amended, could make the following more difficult:

- acquisition of us by means of a tender offer;
- acquisition of us by means of a proxy contest or otherwise; or
- removal of our incumbent officers and directors.

These provisions, summarized below, could have the effect of discouraging certain types of coercive takeover practices and inadequate takeover bids. These provisions may also encourage persons seeking to acquire control of us to first negotiate with our board of directors.

Classified Board. Our Amended and Restated Articles of Incorporation, as amended, provide that our board of directors is to be divided into three classes, as nearly equal in number as possible, with directors in each class serving three-year terms. This provision may have the effect of delaying or discouraging an acquisition of us or a change in our management.

Filling Vacancies. Our Amended and Restated Articles of Incorporation, as amended, provide that newly created directorships resulting from any increase in the authorized number of directors or any vacancies in the our board of directors resulting from death, resignation, retirement, disqualification, removal from office or other cause shall, unless otherwise provided by law or resolution of our board of directors, be filled only by a majority of the directors then in office, though less than a quorum. The directors so chosen shall hold office for a term expiring at the annual meeting of stockholders at which the term of office of the class to which they have been chosen expires.

Removal. The Nevada Revised Statutes ("NRS") provide that any director may be removed from our board of directors by the vote or written consent of stockholders representing not less than two-thirds of the voting power of the issued and outstanding shares entitled to vote, and this standard is also reflected in our Amended and Restated Articles of Incorporation, as amended, and our Amended and Restated Bylaws, as amended.

Requirements for Advance Notification of Stockholder Nominations and Proposals. Our Amended and Restated Bylaws, as amended, establish advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of the board of directors.

Special Meetings of the Stockholders. Our Amended and Restated Bylaws, as amended, provide that special meetings of the stockholders may be called by our chair of our board of directors or our President, or by our board of directors acting pursuant to a resolution adopted by the total number of authorized directors, whether or not there exist any vacancies in previously authorized directorships.

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No Cumulative Voting. Our Amended and Restated Articles of Incorporation, as amended, and Amended and Restated Bylaws, as amended, do not provide for cumulative voting in the election of directors.

Undesignated Preferred Stock. The authorization of undesignated preferred stock in our Amended and Restated Articles of Incorporation, as amended, makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of our company. These and other provisions may have the effect of deferring hostile takeovers or delaying changes in control or management of our company.

Amendment of Charter Provisions. The amendment of any of the above provisions set forth in our Amended and Restated Articles of Incorporation, as amended, except for the provision making it possible for our board of directors to issue undesignated preferred stock, would require approval by a stockholder vote by the holders of at least 66-2/3% of the voting power of all the then-outstanding shares of our capital stock of entitled to vote generally in the election of directors.

In addition, the NRS contains provisions governing the acquisition of a controlling interest in certain Nevada corporations. Nevada's "acquisition of controlling interest" statutes (NRS 78.378 through 78.3793, inclusive) contain provisions governing the acquisition of a controlling interest in certain Nevada corporations. These "control share" laws provide generally that any person that acquires a "controlling interest" in certain Nevada corporations may be denied voting rights, unless a majority of the disinterested stockholders of the corporation elects to restore such voting rights. These laws will apply to us as of a particular date if we were to have 200 or more stockholders of record (at least 100 of whom have addresses in Nevada appearing on our stock ledger at all times during the 90 days immediately preceding that date) and do business in the State of Nevada directly or through an affiliated corporation, unless our articles of incorporation or bylaws in effect on the tenth day after the acquisition of a controlling interest provide otherwise. These laws provide that a person acquires a "controlling interest" whenever a person acquires shares of a subject corporation that, but for the application of these provisions of the NRS, would enable that person to exercise (1) one-fifth or more, but less than one-third, (2) one-third or more, but less than a majority or (3) a majority or more, of all of the voting power of the corporation in the election of directors. Once an acquirer crosses one of these thresholds, shares which it acquired in the transaction taking it over the threshold and within the 90 days immediately preceding the date when the acquiring person acquired or offered to acquire a controlling interest become "control shares" to which the voting restrictions described above apply. These laws may have a chilling effect on certain transactions if our Amended and Restated Articles of Incorporation, as amended, or Amended and Restated Bylaws, as amended, are not amended to provide that these provisions do not apply to us or to an acquisition of a controlling interest, or if our disinterested stockholders do not confer voting rights in the control shares.

Nevada's "combinations with interested stockholders" statutes (NRS 78.411 through 78.444, inclusive) provide that specified types of business "combinations" between certain Nevada corporations and any person deemed to be an "interested stockholder" of the corporation are prohibited for two years after such person first becomes an "interested stockholder" unless the corporation's board of directors approves the combination (or the transaction by which such person becomes an "interested stockholder") in advance, or unless the combination is approved by the board of directors and sixty percent of the corporation's voting power not beneficially owned by the interested stockholder, its affiliates and associates. Furthermore, in the absence of prior approval certain restrictions may apply even after such two-year period. For purposes of these statutes, an "interested stockholder" is any person who is (1) the beneficial owner, directly or indirectly, of 10% or more of the voting power of the outstanding voting shares of the corporation, or (2) an affiliate or associate of the corporation and at any time within the two previous years was the beneficial owner, directly or indirectly, of 10% or more of the voting power of the then-outstanding shares of the corporation. The definition of the term "combination" is sufficiently broad to cover most significant transactions between a corporation and an "interested stockholder". These laws generally apply to Nevada corporations with 200 or more stockholders of record. However, a Nevada corporation may elect in its articles of incorporation not to be governed by these particular laws, but if such election is not made in the corporation's original articles of incorporation, the amendment (1) must be approved by the affirmative vote of the holders of stock representing a majority of the outstanding voting power of the corporation not beneficially owned by interested stockholders or their affiliates and associates, and (2) is not effective until 18 months after the vote approving the amendment and does not apply to any combination with a person who first became an interested stockholder on or before the effective date of the amendment. We have not made such an election in our original articles of incorporation or in our Amended and Restated Articles of Incorporation, as amended, and we have not amended our Amended and Restated Articles of Incorporation to so elect.

Further, NRS 78.139 also provides that directors may resist a change or potential change in control of the corporation if the board of directors determines that the change or potential change is opposed to or not in the best interest of the corporation upon consideration of any relevant facts, circumstances, contingencies or constituencies pursuant to NRS 78.138(4).

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is EQ Shareowner Services. The transfer agent and registrar's address is 1110 Centre Pointe Curve, Suite 101, Mendota Heights, MN 55120.

Listing

Our common stock is listed on the Nasdaq Capital Market under the symbol "SEEL".

DESCRIPTION OF DEBT SECURITIES

We may issue debt securities from time to time, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. While the terms we have summarized below will apply generally to any debt securities that we may offer under this prospectus, we will describe the particular terms of any debt securities that we may offer in more detail in the applicable prospectus supplement. The terms of any debt securities offered under a prospectus supplement may differ from the terms described below. Unless the context requires otherwise, whenever we refer to the indenture, we also are referring to any supplemental indentures that specify the terms of a particular series of debt securities.

We will issue the debt securities under the indenture that we will enter into with the trustee named in the indenture. The indenture will be qualified under the Trust Indenture Act of 1939, as amended (the "Trust Indenture Act"). We have filed the form of indenture as an exhibit to the registration statement of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of the debt securities being offered will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the SEC.

The following summary of material provisions of the debt securities and the indenture is subject to, and qualified in its entirety by reference to, all of the provisions of the indenture applicable to a particular series of debt securities. We urge you to read the applicable prospectus supplements and any related free writing prospectuses we authorize for use in connection with a specific offering of debt securities, as well as the complete indenture that contains the terms of the debt securities.

General Matters

The indenture does not limit the amount of debt securities that we may issue. It provides that we may issue debt securities up to the principal amount that we may authorize and in any currency or currency unit that we may designate. Except for the limitations on consolidation, merger and sale of all or substantially all of our assets contained in the indenture, the terms of the indenture do not contain any covenants or other provisions designed to give holders of any debt securities protection against changes in our operations or financial condition or transactions involving us.

We may issue the debt securities issued under the indenture as "discount securities", which means they may be sold at a discount below their stated principal amount. These debt securities, as well as other debt securities that are not issued at a discount, may be issued with "original issue discount" ("OID") for U.S. federal income tax purposes because of interest payment and other characteristics or terms of the debt securities. Material U.S. federal income tax considerations applicable to debt securities issued with OID will be described in more detail in the applicable prospectus supplement.

We will describe in the applicable prospectus supplement the terms of the series of debt securities being offered, including:

- the title of the series of debt securities;
- any limit upon the aggregate principal amount that may be issued;
- the maturity date or dates;
- the form of the debt securities of the series;
- the applicability of any guarantees;
- whether or not the debt securities will be secured or unsecured, and the terms of any secured debt;
- whether the debt securities rank as senior debt, senior subordinated debt, subordinated debt or any combination thereof, and the terms of any subordination;
- if the price (expressed as a percentage of the aggregate principal amount thereof) at which the debt securities will be issued is a price other than the principal amount thereof, the portion of the principal amount thereof payable upon declaration of acceleration of the maturity thereof, or if applicable, the portion of the principal amount of such debt securities that is convertible into another security or the method by which any such portion shall be determined;

- the interest rate or rates, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;
- our right, if any, to defer payment of interest and the maximum length of any such deferral period;
- if applicable, the date or dates after which, or the period or periods during which, and the price or prices at which, we may, at our option, redeem the series of debt securities pursuant to any optional or provisional redemption provisions and the terms of those redemption provisions;
- the date or dates, if any, on which, and the price or prices at which we are obligated, pursuant to any mandatory sinking fund or analogous fund provisions or otherwise, to redeem, or at the holder's option to purchase, the series of debt securities and the currency or currency unit in which the debt securities are payable;

- the denominations in which we will issue the series of debt securities, if other than denominations of \$1,000 and any integral multiple thereof;
- any and all terms, if applicable, relating to any auction or remarketing of the debt securities of that series and any security for our obligations with respect to such debt securities and any other terms which may be advisable in connection with the marketing of debt securities of that series;
- whether the debt securities of the series shall be issued in whole or in part in the form of a global security or securities; the terms and conditions, if any, upon which such global security or securities may be exchanged in whole or in part for other individual securities, and the depositary for such global security or securities;
- if applicable, the provisions relating to conversion or exchange of any debt securities of the series and the terms and conditions upon which such debt securities will be so convertible or exchangeable, including the conversion or exchange price, as applicable, or how it will be calculated and may be adjusted, any mandatory or optional (at our option or at the holders' option) conversion or exchange features, the applicable conversion or exchange period and the manner of settlement for any conversion or exchange;
- if other than the full principal amount thereof, the portion of the principal amount of debt securities of the series which shall be payable upon declaration of acceleration of the maturity thereof;
- additions to or changes in the covenants applicable to the particular debt securities being issued, including, among others, the consolidation, merger or sale covenant;
- additions to or changes in the events of default with respect to the securities and any change in the right of the trustee or the holders to declare the principal, premium, if any, and interest, if any, with respect to such securities to be due and payable;
- additions to or changes in or deletions of the provisions relating to covenant defeasance and legal defeasance;
- additions to or changes in the provisions relating to satisfaction and discharge of the indenture;
- additions to or changes in the provisions relating to the modification of the indenture both with and without the consent of the holders of the debt securities issued under the indenture;
- the currency of payment of the debt securities if other than U.S. dollars and the manner of determining the equivalent amount in U.S. dollars;
- whether interest will be payable in cash or additional debt securities at our or the holders' option and the terms and conditions upon which the election may be made;
- the terms and conditions, if any, upon which we will pay amounts in addition to the stated interest, premium, if any, and principal amounts of the debt securities of the series to any holder that is not a "United States person" for federal tax purposes;
- any restrictions on transfer, sale or assignment of the debt securities of the series; and
- any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities, any other additions or changes in the provisions of the indenture, and any terms that may be required by us or advisable under applicable laws or regulations.

Conversion or Exchange Rights

We will set forth in the applicable prospectus supplement the terms on which a series of debt securities may be convertible into or exchangeable for our common stock or our other securities. We will include provisions as to settlement upon conversion or exchange and whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions pursuant to which the number of shares of our common stock or our other securities that the holders of the series of debt securities receive would be subject to adjustment.

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Consolidation, Merger or Sale

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, the indenture will not contain any covenant that restricts our ability to merge or consolidate, or sell, convey, transfer or otherwise dispose of our assets as an entirety or substantially as an entirety. However, any successor to or acquirer of such assets (other than a subsidiary of ours) must assume all of our obligations under the indenture or the debt securities, as appropriate.

Events of Default under the Indenture

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, the following are events of default under the indenture with respect to any series of debt securities that we may issue:

- if we fail to pay any installment of interest on any series of debt securities, as and when the same shall become due and payable, and such default continues for a period of 90 days; provided, however, that a valid extension of an interest payment period by us in accordance with the terms of any indenture supplemental thereto shall not constitute a default in the payment of interest for this purpose;
- if we fail to pay the principal of, or premium, if any, on any series of debt securities as and when the same shall become due and payable whether at maturity, upon redemption, by declaration or otherwise, or in any payment required by any sinking or analogous fund established with respect to such series; provided, however, that a valid extension of the maturity of such debt securities in accordance with the terms of any indenture supplemental thereto shall not constitute a default in the payment of principal or premium, if any;
- if we fail to observe or perform any other covenant or agreement contained in the debt securities or the indenture, other than a covenant specifically relating to another series of debt securities, and our failure continues for a period of 90 days after we receive written notice of such failure, requiring the same to be remedied and stating that such is a notice of default thereunder, from the trustee or holders of at least 25% of the aggregate principal amount of the outstanding debt securities of the applicable series; and
- if specified events of bankruptcy, insolvency or reorganization occur.

If an event of default with respect to debt securities of any series occurs and is continuing, other than certain specified events of bankruptcy, insolvency or reorganization, the trustee or the holders of at least 25% of the aggregate principal amount of the outstanding debt securities of that series, by notice to us in writing, and to the trustee if notice is given by such holders, may declare the unpaid principal, premium, if any, and accrued interest, if any, of such series of debt securities immediately due and payable. If certain specified events of bankruptcy, insolvency or reorganization occur with respect to us, the principal amount and accrued interest, if any, of each issue of debt securities then outstanding shall be due and payable without any notice or other action on the part of the trustee or any holder.

The holders of a majority of the principal amount of the outstanding debt securities of an affected series may waive any default or event of default with respect to the series and its consequences, except defaults or events of default regarding payment of principal, premium, if any, or interest, unless we have cured the default or event of default in accordance with the indenture. Any waiver shall cure the default or event of default.

Subject to the terms of the indenture, if an event of default under an indenture shall occur and be continuing, the trustee will be under no obligation to exercise any of its rights or powers under such indenture at the request or direction of any of the holders of the applicable series of debt securities, unless such holders have offered the trustee reasonable indemnity. The holders of a majority of the principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee, or exercising any trust or power conferred on the trustee, with respect to the debt securities of that series, provided that:

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- the direction so given by the holder is not in conflict with any law or the applicable indenture; and
- subject to its duties under the Trust Indenture Act, the trustee need not take any action that might involve it in personal liability or might be unduly prejudicial to the holders not involved in the proceeding.

A holder of the debt securities of any series will have the right to institute a proceeding under the indenture or to appoint a receiver or trustee, or to seek other remedies, only if:

- the holder has given written notice to the trustee of a continuing event of default with respect to that series;
- the holders of at least 25% of the aggregate principal amount of the outstanding debt securities of that series have made a written request;
- such holders have offered to the trustee indemnity satisfactory to it against the costs, expenses and liabilities to be incurred by the trustee in compliance with the request; and
- the trustee does not institute the proceeding, and does not receive from the holders of a majority of the aggregate principal amount of the outstanding debt securities of that series other conflicting directions within 90 days after the notice, request and offer.

These limitations do not apply to a suit instituted by a holder of debt securities if we default in the payment of the principal of, or the premium, if any, or interest on, the debt securities.

We will periodically file statements with the trustee regarding our compliance with specified covenants in the indenture.

Modification of Indenture; Waiver

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, we and the trustee may change an indenture without the consent of any holders with respect to specific matters, including, but not limited to, the following:

- to cure any ambiguity, defect or inconsistency in the indenture or in the debt securities of any series;
- to comply with the provisions described above under "-Consolidation, Merger or Sale";
- to provide for uncertificated debt securities in addition to or in place of certificated debt securities;
- to add to our covenants, restrictions, conditions or provisions such new covenants, restrictions, conditions or provisions for the benefit of the holders of all or any series of debt securities, to make the occurrence, or the occurrence and the continuance, of a default in any such additional covenants, restrictions, conditions or provisions an event of default or to surrender any right or power conferred upon us in the indenture;
- to add to, delete from or revise the conditions, limitations and restrictions on the authorized amount, terms or purposes of issue, authentication and delivery of debt securities, as set forth in the indenture;
- to make any change that does not adversely affect the interests of any holder of debt securities of any series in any material respect;
- to provide for the issuance of, and to establish the form and terms and conditions of, the debt securities of any series as provided above under "-General Matters", to establish the form of any certifications required to be furnished pursuant to the terms of the indenture or any series of debt securities, or to add to the rights of the holders of any series of debt securities;
- to evidence and provide for the acceptance of appointment under any indenture by a successor trustee; or
- to comply with any requirements of the SEC in connection with the qualification of any indenture under the Trust Indenture Act.

In addition, under the indenture, the rights of holders of a series of debt securities may be changed by us and the trustee with the written consent of the holders of at least a majority of the aggregate principal amount of the outstanding debt securities of each series that is affected. However, unless we provide otherwise in the prospectus

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supplement applicable to a particular series of debt securities, we and the trustee may make the following changes only with the consent of each holder of any outstanding debt securities affected:

- extending the fixed maturity of any debt securities of any series;
- reducing the principal amount, reducing the rate of or extending the time of payment of interest, or reducing any premium payable upon the redemption of any series of debt securities; or
- reducing the percentage of debt securities, the holders of which are required to consent to any amendment, supplement, modification or waiver.

Discharge

The indenture provides that we can elect to be discharged from our obligations with respect to one or more series of debt securities, except for specified obligations, including, but not limited to, the following obligations to:

- provide for payment;
- register the transfer or exchange of debt securities of the series;
- replace stolen, lost or mutilated debt securities of the series;
- pay principal of and premium and interest on any debt securities of the series;

- maintain paying agencies;
- hold monies for payment in trust;
- recover excess money held by the trustee;
- compensate and indemnify the trustee; and
- appoint any successor trustee.

In order to exercise our rights to be discharged, we must deposit with the trustee money or government obligations sufficient to pay all the principal of, and any premium, if any, and interest on, the debt securities of the series on the dates payments are due.

Form, Exchange and Transfer

We will issue the debt securities of each series only in fully registered form without coupons and, unless we provide otherwise in the applicable prospectus supplement, in denominations of \$1,000 and any integral multiple thereof. The indenture provides that we may issue debt securities of a series in temporary or permanent global form and as book-entry securities that will be deposited with, or on behalf of, The Depository Trust Company, New York, New York, known as DTC, or another depository named by us and identified in the applicable prospectus supplement with respect to that series. To the extent the debt securities of a series are issued in global form and as book-entry, a description of terms relating to any book-entry securities will be set forth in the applicable prospectus supplement.

At the option of the holder, subject to the terms of the indenture and the limitations applicable to global securities described in the applicable prospectus supplement, the holder of the debt securities of any series can exchange the debt securities for other debt securities of the same series, in any authorized denomination and of like tenor and aggregate principal amount.

Subject to the terms of the indenture and the limitations applicable to global securities set forth in the applicable prospectus supplement, holders of the debt securities may present the debt securities for exchange or for registration of transfer, duly endorsed or with the form of transfer endorsed thereon duly executed if so required by us or the security registrar, at the office of the security registrar or at the office of any transfer agent designated by us for this purpose. Unless otherwise provided in the debt securities that the holder presents for transfer or exchange, we will impose no service charge for any registration of transfer or exchange, but we may require payment of any taxes or other governmental charges.

We will name in the applicable prospectus supplement the security registrar, and any transfer agent in addition to the security registrar, that we initially designate for any debt securities. We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for the debt securities of each series.

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If we elect to redeem the debt securities of any series, we will not be required to:

- issue, register the transfer of, or exchange any debt securities of that series during a period beginning at the opening of business 15 days before the date of mailing of a notice of redemption of any debt securities that may be selected for redemption and ending at the close of business on the date of the mailing; or
- register the transfer of or exchange any debt securities so selected for redemption, in whole or in part, except for the unredeemed portion of any debt securities we are redeeming in part.

Information Concerning the Trustee

The trustee, other than during the occurrence and continuance of an event of default under an indenture, undertakes to perform only those duties as are specifically set forth in the applicable indenture. Upon an event of default under an indenture, the trustee must use the same degree of care as a prudent person would exercise or use in the conduct of his or her own affairs. Subject to this provision, the trustee is under no obligation to exercise any of the powers given to it by the indenture at the request of any holder of debt securities unless it is offered reasonable security and indemnity against the costs, expenses and liabilities that it might incur.

Payment and Paying Agents

Unless we otherwise indicate in the applicable prospectus supplement, we will make payment of the interest on any debt securities on any interest payment date to the person in whose name the debt securities, or one or more predecessor securities, are registered at the close of business on the regular record date for the interest.

We will pay principal of and any premium and interest on the debt securities of a particular series at the office of the paying agents designated by us, except that, unless we otherwise indicate in the applicable prospectus supplement, we will make interest payments by check that we will mail to the holder or by wire transfer to certain holders. Unless we otherwise indicate in the applicable prospectus supplement, we will designate the corporate trust office of the trustee as our sole paying agent for payments with respect to debt securities of each series. We will name in the applicable prospectus supplement any other paying agents that we initially designate for the debt securities of a particular series. We will maintain a paying agent in each place of payment for the debt securities of a particular series.

All money we pay to a paying agent or the trustee for the payment of the principal of, or any premium or interest on, any debt securities that remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of the debt security thereafter may look only to us for payment thereof.

Governing Law

The indenture and the debt securities, and any claim, controversy or dispute arising under or related to the indenture or the debt securities, will be governed by and construed in accordance with the laws of the State of New York, except to the extent that the Trust Indenture Act is applicable.

PPP Loan

On May 4, 2020, we qualified for and received the PPP Loan pursuant to the Paycheck Protection Program for an aggregate principal amount of approximately \$147,000. The PPP Loan bears interest at a fixed rate of 1.0% per annum, with the first six months of interest deferred, has a term of two years and is unsecured and guaranteed by the U.S. Small Business Administration. The principal amount of the PPP Loan is subject to forgiveness under the Paycheck Protection Program upon our request to the extent that the PPP Loan proceeds are used to pay expenses permitted by the Paycheck Protection Program, including payroll costs, covered rent and mortgage obligations and covered utility payments incurred by us. We intend to apply for forgiveness of the PPP Loan with respect to these covered expenses. To the extent that all or part of the PPP Loan is not forgiven, we will be required to pay interest on the PPP Loan at a rate of 1.0% per annum, and commencing in the fourth quarter of 2020, principal and interest payments will be required through the maturity date in May 2022. The terms of the PPP Loan provide for customary events of default including, among other things, payment defaults, breach of representations and warranties and insolvency events. The obligation to repay the PPP Loan may be accelerated upon the occurrence of an event of default.

DESCRIPTION OF WARRANTS

The following description, together with the additional information we may include in the applicable prospectus supplements and free writing prospectuses we have authorized for use in connection with a specific offering, summarizes the material terms and provisions of the warrants that we may offer under this prospectus, which may consist of warrants to purchase common stock, preferred stock or debt securities and may be issued in one or more series.

Warrants may be issued independently or together with common stock, preferred stock or debt securities offered by any prospectus supplement, and may be attached to or separate from those securities. While the terms we have summarized below will apply generally to any warrants that we may offer under this prospectus, we will describe the particular terms of any series of warrants that we may offer in more detail in the applicable prospectus supplement and any applicable free writing prospectus we authorize for use in connection with the specific offering. The terms of any warrants offered under a prospectus supplement may differ from the terms described below.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of warrant agreement, if any, including a form of warrant certificate, that describes the terms of the particular series of warrants we are offering. The following summaries of material provisions of the warrants and the warrant agreements are subject to, and qualified in their entirety by reference to, all the provisions of the warrant agreement and warrant certificate applicable to the particular series of warrants that we may offer under this prospectus. We urge you to read the applicable prospectus supplements related to the particular series of warrants that we may offer under this prospectus, as well as any related free writing prospectuses we have authorized for use in connection with a specific offering, and the complete warrant agreements and warrant certificates that contain the terms of the warrants.

General Matters

We will describe in the applicable prospectus supplement the terms relating to a series of warrants being offered, including:

- the title of such securities;
- the offering price or prices and aggregate number of warrants offered;
- the currency or currencies for which the warrants may be purchased;
- if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;
- if applicable, the date on and after which the warrants and the related securities will be separately transferable;
- if applicable, the minimum or maximum amount of such warrants which may be exercised at any one time;
- in the case of warrants to purchase debt securities, the principal amount of debt securities purchasable upon exercise of one warrant and the price at which, and currency in which, this principal amount of debt securities may be purchased upon such exercise;
- in the case of warrants to purchase common stock or preferred stock, the number of shares of common stock or preferred stock, as the case may be, purchasable upon the exercise of one warrant and the price at which, and the currency in which, these shares may be purchased upon such exercise;
- the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreements and the warrants;
- the terms of any rights to redeem or call the warrants;
- the terms of any rights to force the exercise of the warrants;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;
- the dates on which the right to exercise the warrants will commence and expire;
- the manner in which the warrant agreements and warrants may be modified;

- a discussion of any material or special United States federal income tax consequences of holding or exercising the warrants;
- the terms of the securities issuable upon exercise of the warrants; and
- any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including:

- in the case of warrants to purchase debt securities, the right to receive payments of principal of, or premium, if any, or interest on, the debt securities purchasable upon exercise or to enforce covenants in the applicable indenture; or
- in the case of warrants to purchase common stock or preferred stock, the right to receive dividends, if any, or, payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

Exercise of Warrants

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to the specified time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with specified information, and paying the required amount to the warrant agent in immediately available funds, as provided in the applicable prospectus supplement. We will set forth on the reverse side of the warrant certificate and in the applicable prospectus supplement the information that the holder of the warrant will be required to deliver to the warrant agent in connection with the exercise of the warrant.

Upon receipt of the required payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will issue and deliver the securities purchasable upon such exercise. If fewer than all of the warrants represented by the warrant certificate are exercised, then we will issue a new warrant certificate for the remaining amount of warrants. If we so indicate in the applicable prospectus supplement, holders of the warrants may surrender securities as all or part of the exercise price for warrants.

Governing Law

Unless we provide otherwise in the applicable prospectus supplement, the warrants and warrant agreements, and any claim, controversy or dispute arising under or related to the warrants or warrant agreements, will be governed by and construed in accordance with the laws of the State of New York.

Enforceability of Rights By Holders of Warrants

Each warrant agent will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action its right to exercise, and receive the securities purchasable upon exercise of, its warrants.

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Warrant Agreement Will Not Be Qualified Under Trust Indenture Act

No warrant agreement will be qualified as an indenture, and no warrant agent will be required to qualify as a trustee, under the Trust Indenture Act. Therefore, holders of warrants issued under a warrant agreement will not have the protection of the Trust Indenture Act with respect to their warrants.

Calculation Agent

Calculations relating to warrants may be made by a calculation agent, an institution that we appoint as our agent for this purpose. The prospectus supplement for a particular warrant will name the institution that we have appointed to act as the calculation agent for that warrant as of the original issue date for that warrant. We may appoint a different institution to serve as calculation agent from time to time after the original issue date without the consent or notification of the holders.

The calculation agent's determination of any amount of money payable or securities deliverable with respect to a warrant will be final and binding in the absence of manifest error.

Outstanding Warrants

As of September 30, 2020, we had outstanding warrants to purchase 10,055,963 shares of common stock as follows:

- warrants to purchase an aggregate of 8,386 shares with an exercise price of \$52.50 per share, all of which are currently exercisable (subject to certain beneficial ownership limitations) and expire on April 20, 2022, all of which shall be automatically exercised on a "cashless" basis upon expiration if the fair market value of the common stock is greater than the exercise price of the warrants on the expiration date of the warrants;
- warrants to purchase an aggregate of 71,357 shares with an exercise price of \$46.50 per share, all of which are currently exercisable (subject to certain beneficial ownership limitations) and expire on May 17, 2022, all of which shall be automatically exercised on a "cashless" basis upon expiration if the fair market value of the common stock is greater than the exercise price of the warrants on the expiration date of the warrants;
- warrants to purchase an aggregate of 11,338 shares with an exercise price of \$12.60 per share, all of which are currently exercisable and expire on January 12, 2023;
- a warrant to purchase an aggregate of 916 shares with an exercise price of \$21.30 per share, all of which are currently exercisable and expire on January 12, 2023;
- warrants to purchase an aggregate of 2,037 shares with an exercise price of \$21.30 per share, which are currently exercisable (subject to certain beneficial ownership limitations) and expire on January 12, 2023;
- warrants to purchase an aggregate of 3,647 shares with an exercise price of \$21.30 per share, all of which are currently exercisable (subject to certain beneficial ownership limitations) and expire on March 3, 2023;
- warrants to purchase an aggregate of 11,081 shares with an exercise price of \$12.60 per share, all of which are currently exercisable and expire on March 3, 2023;
- warrants to purchase an aggregate of 11,836 shares with an exercise price of \$18.75 per share, all of which are currently exercisable (subject to certain beneficial ownership limitations) and expire on March 28, 2023;
- warrants to purchase an aggregate of 80,008 shares with an exercise price of \$15.00 per share, all of which are currently exercisable (subject to certain beneficial ownership limitations) and expire on May 17, 2023;
- warrants to purchase an aggregate of 7,668 shares with an exercise price of \$10.125 per share, all of which are currently exercisable (subject to certain beneficial ownership limitations) and expire on March 25, 2024, all of which shall be automatically exercised on a "cashless" basis upon expiration if the fair market value of the common stock is greater than the exercise price of the warrants on the expiration date of the warrants;

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- warrants to purchase an aggregate of 646 shares with an exercise price of \$387.00 per share, all of which are currently exercisable and expire on October 17, 2024, all of which shall be automatically exercised on a "cashless" basis upon expiration if the fair market value of the common stock is greater than the exercise price of the warrants on the expiration date of the warrants;
 - warrants to purchase an aggregate of 510 shares with an exercise price of \$492.00 per share, all of which are currently exercisable and expire on July 23, 2025, all of which shall be automatically exercised on a "cashless" basis upon expiration if the fair market value of the common stock is greater than the exercise price of the warrants on the expiration date of the warrants;
 - a warrant to purchase an aggregate of 115,000 shares with an exercise price of \$9.00 per share, which is currently exercisable (subject to certain beneficial ownership limitations) and expires on March 25, 2024, which shall be automatically exercised on a "cashless" basis upon expiration if the fair market value of the common stock is greater than the exercise price of the warrants on the expiration date of the warrant;
 - a warrant to purchase an aggregate of 89,239 shares with an exercise price of \$12.00 per share, which is currently exercisable and expires on March 25, 2024, which shall be automatically exercised on a "cashless" basis upon expiration if the fair market value of the common stock is greater than the exercise price of the warrants on the expiration date of the warrant;

- Series A warrants to purchase an aggregate of 756,044 shares with an exercise price of \$0.2957 per share, all of which are currently exercisable (subject to certain beneficial ownership limitations) and expire on January 31, 2024;
- warrants to purchase an aggregate of 2,237,500 shares with an exercise price of \$1.78 per share, all of which are currently exercisable (subject to certain beneficial ownership limitations) and expire on August 28, 2023; and
- warrants to purchase up to an aggregate of 6,648,750 shares of common stock with an exercise price of \$0.84 per share, which will become exercisable on March 9, 2021 (subject to certain beneficial ownership limitations) and expire on March 9, 2026.

All of the outstanding warrants contain provisions for the adjustment of the exercise price in the event of stock dividends, stock splits or similar transactions. In addition, certain of the warrants contain a "cashless exercise" feature that allows the holders thereof to exercise the warrants without a cash payment to us under certain circumstances. Certain of the warrants also contain provisions that provide certain rights to warrant holders in the event of a fundamental transaction, including a merger or consolidation with or into another entity, such as:

- the right to receive the same amount and kind of consideration paid to the holders of common stock in the fundamental transaction;
- the right to require us or a successor entity to purchase the unexercised portion of certain warrants at the warrant's respective fair value using the Black Scholes option pricing formula; or
- the right to require us or a successor entity to redeem the unexercised portion of certain warrants for the same consideration paid to holders of common stock in the fundamental transaction at the warrant's respective fair value using the Black Scholes option pricing formula.

The Series A warrants provide that, from January 31, 2019 through January 31, 2022, inclusive, if we publicly announce, issue or sell, or are deemed to have issued or sold, any shares of our common stock for a price per share less than the exercise price of the Series A warrants in effect immediately prior to such public announcement, issue or sale or deemed issuance or sale, subject to certain limited exceptions, then the exercise price of the Series A warrants shall be reduced to such lower price per share. If we publicly announce, issue or sell, or are deemed to have issued or sold any shares of our common stock for a price per share lower than the exercise price of the Series A warrants then in effect after January 31, 2022, subject to certain limited exceptions, then the exercise price of the Series A warrants shall be reduced to an amount equal to the product of (i) the exercise price in effect immediately prior to such public announcement, issue or sale or deemed issuance or sale and (ii) the quotient determined by dividing (a) the sum of (x) the product derived by multiplying the exercise price then in effect and the number of shares of our common stock outstanding immediately prior to the new issuance plus (y) the consideration received by us for the new issuance, by (b) the product derived by multiplying (x) the exercise price then in effect by (y) the number of shares of our common stock outstanding immediately after the new issuance. Shares of our

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common stock will be deemed to be issued or sold if we: (1) grant or sell, or publicly announce the issuance or sale of, any options to purchase shares of our common stock and the lowest price per share for which one share of common stock is issuable upon the exercise of such option (or upon conversion, exercise or exchange of any convertible security issuable upon exercise of such option) is less than the exercise price of the Series A warrant, or (2) issue or sell, or publicly announce the issuance or sale of, any convertible securities and the lowest price per share for which one share of our common stock is issuable upon the conversion, exercise or exchange of such convertible security is less than the exercise price of the Series A warrant. As of September 30, 2020, the exercise price of the Series A warrants was \$0.2957 per share. The exercise price is subject to adjustment in accordance with the foregoing provisions and in the event of stock dividends, stock splits or similar transactions.

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DESCRIPTION OF UNITS

We may issue units consisting of any combination of the other types of securities offered under this prospectus in one or more series. We may evidence each series of units by unit certificates that we will issue under a separate agreement. We may enter into unit agreements with a unit agent. Each unit agent will be a bank or trust company that we select. We will indicate the name and address of the unit agent in the applicable prospectus supplement relating to a particular series of units.

The following description, together with the additional information included in the applicable prospectus supplement, summarizes the general features of the units that we may offer under this prospectus. You should read any prospectus supplement and any free writing prospectus we authorize for use in connection with a specific offering of units, as well as the complete unit agreements that contain the terms of the units. Specific unit agreements will contain additional important terms and provisions and we will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from another report that we file with the SEC, the form of each unit agreement relating to units offered under this prospectus.

If we offer any units, certain terms of that series of units will be described in the applicable prospectus supplement, including, without limitation, the following, as applicable:

- the title of the series of units;
- identification and description of the separate constituent securities comprising the units;
- the price or prices at which the units will be issued;
- the date, if any, on and after which the constituent securities comprising the units will be separately transferable;
- a discussion of certain U.S. federal income tax considerations applicable to the units; and
- any other terms of the units and their constituent securities.

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We can issue securities in registered form or in the form of one or more global securities. We describe global securities in greater detail below. We refer to those persons who have securities registered in their own names on the books that we or any applicable trustee or depository maintain for this purpose as the "holders" of those securities. These persons are the legal holders of the securities. We refer to those persons who, indirectly through others, own beneficial interests in securities that are not registered in their own names, as "indirect holders" of those securities. As we discuss below, indirect holders are not legal holders, and investors in securities issued in book-entry form or in street name will be indirect holders.

Book-Entry Holders

We may issue securities in book-entry form only, as we will specify in the applicable prospectus supplement. This means securities may be represented by one or more global securities registered in the name of a financial institution that holds them as depository on behalf of other financial institutions that participate in the depository's book-entry system. These participating institutions, which are referred to as participants, in turn, hold beneficial interests in the securities on behalf of themselves or their customers.

Only the person in whose name a security is registered is recognized as the holder of that security. Global securities will be registered in the name of the depository or its participants. Consequently, for global securities, we will recognize only the depository as the holder of the securities, and we will make all payments on the securities to the depository. The depository passes along the payments it receives to its participants, which in turn pass the payments along to their customers who are the beneficial owners. The depository and its participants do so under agreements they have made with one another or with their customers; they are not obligated to do so under the terms of the securities.

As a result, investors in a global security will not own securities directly. Instead, they will own beneficial interests in a global security, through a bank, broker or other financial institution that participates in the depository's book-entry system or holds an interest through a participant. As long as the securities are issued in global form, investors will be indirect holders, and not legal holders, of the securities.

Street Name Holders

We may terminate a global security in certain situations, as described under "-Special Situations When a Global Security Will Be Terminated", or issue securities that are not issued in global form. In these cases, investors may choose to hold their securities in their own names or in "street name". Securities held by an investor in street name would be registered in the name of a bank, broker or other financial institution that the investor chooses, and the investor would hold only a beneficial interest in those securities through an account he or she maintains at that institution.

For securities held in street name, we or any applicable trustee or depository will recognize only the intermediary banks, brokers and other financial institutions in whose names the securities are registered as the holders of those securities, and we or any such trustee or depository will make all payments on those securities to them. These institutions pass along the payments they receive to their customers who are the beneficial owners, but only because they agree to do so in their customer agreements or because they are legally required to do so. Investors who hold securities in street name will be indirect holders, not holders, of those securities.

Legal Holders

Our obligations, as well as the obligations of any applicable trustee or third party employed by us or a trustee, run only to the legal holders of the securities. We do not have obligations to investors who hold beneficial interests in global securities, in street name or by any other indirect means. This will be the case whether an investor chooses to be an indirect holder of a security or has no choice because we are issuing the securities only in global form.

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For example, once we make a payment or give a notice to the legal holder, we have no further responsibility for the payment or notice even if that legal holder is required, under agreements with its participants or customers or by law, to pass the payment or notice along to the indirect holders but does not do so. Similarly, we may want to obtain the approval of the holders to amend an indenture, to relieve us of the consequences of a default or of our obligation to comply with a particular provision of an indenture, or for other purposes. In such an event, we would seek approval only from the legal holders, and not the indirect holders, of the securities. Whether and how the legal holders contact the indirect holders is up to the legal holders.

Special Considerations for Indirect Holders

If you hold securities through a bank, broker or other financial institution, either in book-entry form because the securities are represented by one or more global securities or in street name, you should check with your own institution to find out:

- how it handles securities payments and notices;
- whether it imposes fees or charges;
- how it would handle a request for the holders' consent, if ever required;
- whether and how you can instruct it to send you securities registered in your own name so you can be a holder, if that is permitted in the future;
- how it would exercise rights under the securities if there were a default or other event triggering the need for holders to act to protect their interests; and
- if the securities are in book-entry form, how the depository's rules and procedures will affect these matters.

Global Securities

A global security is a security that represents one or any other number of individual securities held by a depository. Generally, all securities represented by the same global securities will have the same terms.

Each security issued in book-entry form will be represented by a global security that we issue to, deposit with and register in the name of a financial institution or its nominee that we select. The financial institution that we select for this purpose is called the depository. Unless we specify otherwise in the applicable prospectus supplement, The Depository Trust Company, New York, New York, known as DTC, will be the depository for all securities issued in book-entry form.

A global security may not be transferred to or registered in the name of anyone other than the depository, its nominee or a successor depository, unless special termination situations arise. We describe those situations below under "-Special Situations When a Global Security Will Be Terminated". As a result of these arrangements, the depository, or its nominee, will be the sole registered owner and legal holder of all securities represented by a global security, and investors will be permitted to own only beneficial interests in a global security. Beneficial interests must be held by means of an account with a broker, bank or other financial institution that in turn has an account with the depository or with another institution that does. Thus, an investor whose security is represented by a global security will not be a legal holder of the security, but only an indirect holder of a beneficial interest in the global security.

If the prospectus supplement for a particular security indicates that the security will be issued as a global security, then the security will be represented by a global security at all times unless and until the global security is terminated. If termination occurs, we may issue the securities through another book-entry clearing system or decide that the securities may no longer be held through any book-entry clearing system.

Special Considerations for Global Securities

As an indirect holder, an investor's rights relating to a global security will be governed by the account rules of the investor's financial institution and of the depository, as well as

If securities are issued only as global securities, an investor should be aware of the following:

- an investor cannot cause the securities to be registered in his or her name, and cannot obtain non-global certificates for his or her interest in the securities, except in the special situations described below;
- an investor will be an indirect holder and must look to his or her own bank or broker for payments on the securities and protection of his or her legal rights relating to the securities, as described above;
- an investor may not be able to sell interests in the securities to some insurance companies and to other institutions that are required by law to own their securities in non-book-entry form;
- an investor may not be able to pledge his or her interest in the global security in circumstances where certificates representing the securities must be delivered to the lender or other beneficiary of the pledge in order for the pledge to be effective;
- the depositary's policies, which may change from time to time, will govern payments, transfers, exchanges and other matters relating to an investor's interest in the global security;
- we and any applicable trustee have no responsibility for any aspect of the depositary's actions or for its records of ownership interests in the global security, nor will we or any applicable trustee supervise the depositary in any way;
- the depositary may, and we understand that DTC will, require that those who purchase and sell interests in the global security within its book-entry system use immediately available funds, and your broker or bank may require you to do the same; and
- financial institutions that participate in the depositary's book-entry system, and through which an investor holds its interest in the global security, may also have their own policies affecting payments, notices and other matters relating to the securities.

There may be more than one financial intermediary in the chain of ownership for an investor. We do not monitor and are not responsible for the actions of any of those intermediaries.

Special Situations When a Global Security Will Be Terminated

In a few special situations described below, a global security will terminate and interests in it will be exchanged for physical certificates representing those interests. After that exchange, the choice of whether to hold securities directly or in street name will be up to the investor. Investors must consult their own banks or brokers to find out how to have their interests in securities transferred to their own names, so that they will be direct holders. The rights of holders and street name investors are described above.

A global security will terminate when the following special situations occur:

- if the depositary notifies us that it is unwilling, unable or no longer qualified to continue as depositary for that global security and we do not appoint another institution to act as depositary within 90 days;
- if we notify any applicable trustee that we wish to terminate that global security; or
- if an event of default has occurred with regard to securities represented by that global security and has not been cured or waived.

The applicable prospectus supplement may also list additional situations for terminating a global security that would apply only to the particular series of securities covered by the prospectus supplement. When a global security terminates, the depositary, and neither we nor any applicable trustee, is responsible for deciding the names of the institutions that will be the initial direct holders.

PLAN OF DISTRIBUTION

We may sell the securities from time to time pursuant to underwritten public offerings, direct sales to the public, "at the market" offerings, negotiated transactions, block trades or a combination of these methods. We may sell the securities to or through underwriters or dealers, through agents, or directly to one or more purchasers. We may distribute securities from time to time in one or more transactions:

- at a fixed price or prices, which may be changed;
- at market prices prevailing at the time of sale;
- at prices related to such prevailing market prices; or
- at negotiated prices.

A prospectus supplement or supplements (and any related free writing prospectus that we may have authorized for use in connection with a specific offering) will describe the terms of the offering of the securities, including, to the extent applicable:

- the name or names of the underwriters, if any;
- the purchase price of the securities or other consideration therefor, and the proceeds, if any, we will receive from the sale;
- any over-allotment options under which underwriters may purchase additional securities from us;
- any agency fees or underwriting discounts and other items constituting agents' or underwriters' compensation;
- any public offering price;
- any discounts or concessions allowed or re-allowed or paid to dealers; and
- any securities exchange or market on which the securities may be listed.

Only underwriters named in the prospectus supplement will be underwriters of the securities offered by the prospectus supplement.

If underwriters are used in the sale, they will acquire the securities for their own account and may resell the securities from time to time in one or more transactions at a fixed public offering price or at varying prices determined at the time of sale. The obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. Subject to certain conditions, the underwriters will be obligated to purchase all of the securities offered by the prospectus supplement, other than securities covered by any over-allotment option. Any public offering price and any discounts or concessions allowed or re-allowed or paid to dealers may change from time to time. We may use underwriters with whom we have a material relationship. We will describe in the prospectus supplement, naming the underwriter, the nature of any such relationship.

We may sell securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, our agent will act on a best-efforts basis for the period of its appointment.

We may authorize agents or underwriters to solicit offers by certain types of institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

We may provide agents and underwriters with indemnification against civil liabilities, including liabilities under the Securities Act, or contribution with respect to payments that the agents or underwriters may make with respect to these liabilities. Agents and underwriters may engage in transactions with, or perform services for, us in the ordinary course of business.

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All securities we may offer, other than common stock, will be new issues of securities with no established trading market. Any underwriters may make a market in these securities, but will not be obligated to do so and may discontinue any market making at any time without notice. We cannot guarantee the liquidity of the trading markets for any securities.

Any underwriter may engage in over-allotment, stabilizing transactions, short-covering transactions and penalty bids in accordance with Regulation M under the Exchange Act. Over-allotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum price. Syndicate-covering or other short-covering transactions involve purchases of the securities, either through exercise of the over-allotment option or in the open market after the distribution is completed, to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a stabilizing or covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time.

Any underwriters that are qualified market makers on the Nasdaq Capital Market may engage in passive market making transactions in the common stock on the Nasdaq Capital Market in accordance with Regulation M under the Exchange Act, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the common stock. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded. Passive market making may stabilize the market price of the securities at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

In compliance with guidelines of the Financial Industry Regulatory Authority ("FINRA"), the maximum consideration or discount to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate amount of the securities offered pursuant to this prospectus and the applicable prospectus supplement.

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LEGAL MATTERS

The validity of the shares of common stock and preferred stock offered by this prospectus, and certain other matters of Nevada law, will be passed upon for us by Brownstein Hyatt Farber Schreck, LLP, Las Vegas, Nevada. Unless otherwise indicated in the applicable prospectus supplement, certain legal matters in connection with the offering and the enforceability of debt securities or warrants offered by this prospectus, and any supplement thereto, will be passed upon for us by Paul Hastings LLP, Palo Alto, California.

EXPERTS

The consolidated financial statements of Seelos Therapeutics, Inc. as of December 31, 2019 and 2018, and for each of the years in the two-year period ended December 31, 2019, have been incorporated by reference herein in reliance upon the report of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing. The audit report covering the December 31, 2019 financial statements contains an explanatory paragraph that states that Seelos Therapeutics, Inc.'s recurring losses from operations and net capital deficiency raises substantial doubt about the entity's ability to continue as a going concern. The financial statements do not include any adjustments that might result from the outcome of that uncertainty.

WHERE YOU CAN FIND MORE INFORMATION

We are a reporting company and file annual, quarterly and current reports, proxy statements and other information with the SEC. We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the securities being offered under this prospectus. This prospectus does not contain all of the information set forth in the registration statement and the exhibits to the registration statement. For further information with respect to us and the securities being offered under this prospectus, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, including Seelos Therapeutics, Inc. The SEC's Internet site can be found at <http://www.sec.gov>.

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INCORPORATION OF DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" information into this prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The documents incorporated by reference into this prospectus contain important information that you should read about us.

The following documents are incorporated by reference into this prospectus:

- [Our Annual Report on Form 10-K for the fiscal year ended December 31, 2019, filed with the SEC on March 17, 2020;](#)
- Our Quarterly Reports on Form 10-Q for the quarters ended (i) [March 31, 2020, filed with the SEC on May 7, 2020,](#) (ii) [June 30, 2020, filed with the SEC on August 14, 2020,](#) and (iii) [September 30, 2020, filed with the SEC on November 12, 2020;](#)
- [Our Definitive Proxy Statement on Schedule 14A, filed with the SEC on April 13, 2020;](#)
- Our Current Reports on Form 8-K filed with the SEC on (i) [January 3, 2020,](#) (ii) [February 11, 2020,](#) (iii) [February 13, 2020,](#) (iv) [March 12, 2020,](#) (v) [March 16, 2020,](#) (vi) [March 30, 2020,](#) (vii) [April 17, 2020;](#) (viii) [April 24, 2020,](#) (ix) [May 15, 2020,](#) (x) [May 19, 2020,](#) (xi) [June 11, 2020,](#) (xii) [September 9, 2020,](#) and (xiii) [November 13, 2020;](#)
- [Our Current Report on Form 8-K/A filed with the SEC on May 21, 2020;](#) and
- The description of our common stock set forth in our [Registration Statement on Form 8-A \(File No. 000-22245\), filed with the SEC on April 10, 2000,](#) including any amendments or reports filed for the purpose of updating such description.

We also incorporate by reference any future filings (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items unless such Form 8-K expressly provides to the contrary) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, including those made after the date of the initial filing of the registration statement of which this prospectus is a part and prior to effectiveness of such registration statement, until we file a post-effective amendment that indicates the termination of the offering of the securities made by this prospectus and such future filings and will become a part of this prospectus from the respective dates that such documents are filed with the SEC. Any statement contained herein or in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes hereof or of the related prospectus supplement to the extent that a statement contained herein or in any other subsequently filed document which is also incorporated or deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

Documents incorporated by reference are available from us, without charge. You may obtain documents incorporated by reference in this prospectus by requesting them in writing or by telephone at the following address:

Seelos Therapeutics, Inc.
300 Park Avenue, 12th Floor
New York, New York 10022
Attn: Corporate Secretary
Phone: (646) 293-2100

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Up to \$50,000,000

Common Stock

PROSPECTUS SUPPLEMENT

Jefferies

May 12, 2022

