Filed Pursuant to Rule 424(b)(4)
Registration File Nos. 333-235879 and 333-236306

PROSPECTUS

7,101,307 Class A Units consisting of shares of common stock and warrants and
1,246,519 Class B Units consisting of shares of Series A Preferred Stock and warrants
(and 8,347,826 shares of common stock underlying such warrants)

We are offering Class A Units, with each Class A Unit consisting of one share of common stock, par value $0.0001 per share (the "common stock") and a warrant to purchase one share of our common stock (together with the shares of common stock underlying such warrants, the "Class A Units") at a public offering price of $1.15 per Class A Unit. Each warrant included in the Class A Units entitles its holder to purchase one share of common stock at an exercise price per share of $1.15.

We are also offering to those purchasers whose purchase of Class A Units in this offering would result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common stock following the consummation of this offering, the opportunity to purchase, if they so choose, in lieu of the number of Class A Units that would result in ownership in excess of 4.99% (or, at the election of the purchaser, 9.99%), Class B Units. Each Class B Unit consists of one share of Series A Preferred Stock, par value $0.0001 per share (the "Series A Preferred Stock"), convertible into one share of common stock and a warrant to purchase one share of common stock (together with the shares of common stock underlying such shares of Series A Preferred Stock and such warrants, the "Class B Units" and, together with the Class A Units, the "units") at a public offering price of $1.15 per Class B Unit. Each warrant included in the Class B Units entitles its holder to purchase one share of common stock at an exercise price per share of $1.15.

The Class A Units and Class B Units have no stand-alone rights and will not be certificated or issued as stand-alone securities. The shares of common stock, Series A Preferred Stock and warrants comprising such units are immediately separable and will be issued separately in this offering. The underwriter has the option to purchase additional shares of common stock and/or warrants to purchase shares of common stock solely to cover over-allotments, if any, at the price to the public less the underwriting discounts and commissions. The over-allotment option may be used to purchase shares of common stock, or warrants, or any combination thereof, as determined by the underwriter, but such purchases cannot exceed an aggregate of 15% of the number of shares of common stock (including the number of shares of common stock issuable upon conversion of shares of Series A Preferred Stock) and warrants sold in the primary offering. The over-allotment option is exercisable for 45 days from the date of this prospectus.

Our common stock is listed on The Nasdaq Capital Market under the symbol "SLRX." On February 6, 2020, the last reported sale price of our common stock on The Nasdaq Capital Market was $1.99.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "Risk Factors" beginning on page 11 of this prospectus, and under similar headings in any amendments or supplements to this prospectus.

We are an "emerging growth company" as defined by the Jumpstart Our Business Startups Act of 2012 and, as such, we have elected to comply with certain reduced public company reporting requirements for this prospectus and future filings. Please see "Prospectus Summary – Implications of Being an Emerging Growth Company."

	Per Class A Unit	Per Class B Unit	Total
Public offering price(1)	$ 1.15	$ 1.15	$9,600,000
Underwriting discounts and commissions(2)(3)	$ 0.095	$ 0.095	$ 794,000
Proceeds, before expenses, to us	$ 1.055	$ 1.055	$8,806,000

(1) The public offering price and underwriting discount corresponds to (x) in respect of the Class A Units (i) a public offering price per share of common stock of $1.14 and (ii) a public offering price per warrant of $0.01 and (y) in respect of the Class B Units (i) a public offering price per share of Series A Preferred Stock of $1.14 and (ii) a public offering price per warrant of $0.01.

(2) Represents an underwriting discount equal to 8.0% of the aggregate gross proceeds raised in this offering, and an additional 1% underwriting discount on gross proceeds in excess of $7.0 million. We have also agreed to reimburse Ladenburg Thalmann for certain expenses. See "Underwriting" for additional information.

(3) We have granted a 45-day option to the underwriter to purchase additional shares of common stock and/or warrants to purchase shares of common stock (up to 15% of the number of shares of common stock (including the number of shares of common stock issuable upon conversion of shares of Series A Preferred Stock) and warrants sold in the primary offering) solely to cover over-allotments, if any.

Certain of our directors, including our chief executive officer, have agreed to purchase in the aggregate approximately $43,000 of shares of our common stock in this offering at the public offering price. The underwriters will receive the same underwriting discount on the shares purchased by these individuals as they will on any other shares sold to the public in this offering.

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 underwriter expects to deliver the securities to purchasers in the offering on or about February 11, 2020.

Ladenburg Thalmann

The date of this prospectus is February 7, 2020.

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ABOUT THIS PROSPECTUS

We incorporate by reference important information into this prospectus. You may obtain the information incorporated by reference without charge by following the instructions under “Incorporation of Certain Information by Reference.” You should carefully read this prospectus as well as additional information described under “Incorporation of Certain Information by Reference,” before deciding to invest in our securities.

We have not authorized anyone to provide any information other than that contained or incorporated by reference in this prospectus or in any free writing prospectus that we have authorized for use in connection with this offering. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus does not constitute an offer to sell, or a solicitation of an offer to purchase, the securities offered by this prospectus in any jurisdiction to or from any person to whom or from whom it is unlawful to make such offer or solicitation of an offer in such jurisdiction.

We are offering to sell, and seeking offers to buy, our securities only in jurisdictions where offers and sales are permitted. The information contained in this prospectus and any free writing prospectus that we have authorized for use in connection with this offering is accurate only as of the respective dates thereof, and the information in the documents incorporated by reference in this prospectus is accurate only as of the date of those respective documents, regardless of the time of delivery of this prospectus or of any sale of our securities. Our business, financial condition, results of operations, and prospects may have changed since those dates. It is important for you to read and consider all information contained or incorporated by reference in this prospectus in making your investment decision. You should read both this prospectus, as well as the documents incorporated by reference into this prospectus and the additional information described under “Incorporation of Certain Information by Reference” in this prospectus before investing in our securities.

Unless otherwise indicated, information contained in or incorporated by reference into this prospectus concerning our business and the industry and markets in which we operate, including with respect to our business prospects, our market position and opportunity, and the competitive landscape, is based on information from our management’s estimates, as well as from industry publications, surveys, and studies conducted by third parties. Our management’s estimates are derived from publicly available information, their knowledge of our business and industry, and assumptions based on such information and knowledge, which they believe to be reasonable. In addition, while we believe that information contained in the industry publications, surveys, and studies has been obtained from reliable sources, we have not independently verified any of the data contained in these third-party sources, and the accuracy and completeness of the information contained in these sources is not guaranteed. Although we are not aware of any misstatements regarding the market and industry data presented in this prospectus and the documents incorporated herein by reference, these estimates involve risks and uncertainties and are subject to change based on various factors, including those discussed under the heading “Risk Factors” in this prospectus and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus, including in our current report on Form 8-K/A filed on September 18, 2019 and Form 10-Q filed on November 12, 2019. Accordingly, you should not place undue reliance on this information.

PROSPECTUS SUMMARY

This summary highlights certain information about us, this offering, and information appearing elsewhere in this prospectus and in the documents we incorporate by reference. This summary is not complete and does not contain all of the information that you should consider before making an investment decision. To fully understand this offering and its consequences to you, you should read this entire prospectus carefully, including the factors described under the heading "Risk Factors" in this prospectus beginning on page 11, and in Amendment No. 1 to our Current Report on Form 8-K filed with the SEC on September 18, 2019, together with any free writing prospectus we have authorized for use in connection with this offering and the financial statements and all other information incorporated by reference in this prospectus. When used in this prospectus, except where the context otherwise requires, the terms the "Company," "we," "us," "our," "Salarius," or similar terms refer to Salarius Pharmaceuticals, Inc.

Company Overview

Salarius Pharmaceuticals, Inc. is a clinical-stage biotechnology company focused on developing effective epigenetic-based cancer treatments for indications with high unmet medical need. Salarius' lead epigenetic enzyme technology was licensed from the University of Utah Research Foundation in 2011.

Salarius is focused on epigenetic strategies for cancer treatment. Epigenetics refers to the system that regulates gene expression through conformational changes to the chromatin rather than changes to the DNA sequence itself. Salarius' lead compound, Seclidemstat ("SP-2577"), is a small molecule, administered orally, that inhibits the epigenetic enzyme lysine specific demethylase 1 ("LSD1"). LSD1 is an enzyme that removes mono- and di-methyl marks on histones (the core protein components of chromatin) to alter gene expression. LSD1's enzymatic activity can cause genes to turn on or off and thereby affect the cell's gene expression and overall activity. In addition, LSD1 can act via its scaffolding properties, independently of its enzymatic function, to remodel chromatin and alter gene expression, modulating cell fate. In healthy cells, LSD1 is necessary for stem cell maintenance and cell development processes. However, in several cancers LSD1 is highly expressed and acts aberrantly to incorrectly silence or activate genes leading to disease progression. High levels of LSD1 expression are often associated with aggressive cancer phenotypes and poor patient prognosis. In addition, recent data from "LSD1 Ablation Stimulates Anti-tumor Immunity and Enables Checkpoint Blockade" by W. Sheng, et al. and "Inhibition of Histone Lysine-specific Demethylase 1 Elicits Breast Tumor Immunity and Enhances Antitumor Efficacy of Immune Checkpoint Blockade" by Y. Qin, et al. suggests that LSD1 plays a role in tumor immune activity. Hence, there has been interest in developing targeted LSD1 inhibitors for treatment of various cancers alone and/or in combination with other approved agents, such as checkpoint inhibitors.

Recent Developments

In December 2019, we announced that our lead investigational drug candidate, Seclidemstat, has been granted Fast Track Designation by the U.S. Food and Drug Administration ("FDA") for the treatment of relapsed/refractory Ewing sarcoma patients.

Fast Track is a process designed by the FDA to expedite the development and review of new drugs with the potential to treat serious or life-threatening conditions and fill unmet medical needs. The aim is to streamline the drug development and review process by allowing for more frequent communications with the agency to assure that questions and issues are resolved quickly, which often leads to earlier drug approval and access by patients.

Coupled with Seclidemstat's previously granted Orphan Drug Designation and Rare Pediatric Disease Designation by the FDA, we believe we are well positioned to take advantage of the FDA's expedited programs for drug development and review.

On October 24, 2019, we entered into a common stock purchase agreement with Aspire Capital Fund, LLC ("Aspire Capital"), which provides that, upon the terms and subject to the conditions and limitations set forth therein, we may offer to Aspire Capital up to an aggregate of $10.9 million of shares of our common stock over a 30-month period. Upon execution of the agreement, we sold to Aspire Capital 210,526 shares of common stock at $4.75 per share for proceeds of $1.0 million, and we issued to Aspire Capital 101,810 shares of our common stock in consideration for entering into the agreement. In December 2019, we issued to Aspire Capital 438,525 shares of common stock for proceeds of approximately $1.6 million. As of December 31, 2019, our available cash was approximately $3.7 million. In the fourth quarter of 2019, our cash expenditures were approximately $2.9 million on a U.S. generally accepted accounting principles ("GAAP") basis, which included a reimbursement of $651,000 from the Cancer Prevention and Research Institution ("CPRIT") and non-recurring merger-related and other costs of approximately $800,000. We currently expect that our quarterly cash expenditures on a non-GAAP basis (excluding reimbursements from CPRIT and non-recurring expenses) in the near future will be in the range of approximately $1.5 million to $1.8 million. However, the timing and amounts of our actual expenditures may vary from period to period, including from our current expectations, due to a variety of factors such as the timing and amount of our CPRIT grant and potential transaction-related costs. We are not able to provide a reconciliation of our expected cash expenditures on a non-GAAP basis to GAAP because certain items that are included have not yet occurred or are out of our control and/or cannot be reasonably predicted. For the same reasons, we are unable to address the probable significance of the unavailable information.

Salarius' Strategy and Ongoing Programs

Salarius' goal is to develop cancer treatments with SP-2577, while attempting to maximize return for investors. To achieve this goal, Salarius is pursuing the following key strategies:

Development of SP-2577 in Ewing Sarcoma Patients

Ewing sarcoma is a rare pediatric bone cancer and the FDA has put in place several different types of incentives for companies pursuing therapeutic opportunities for this type of cancer. Salarius has benefited from several of these incentives, including SP-2577's orphan drug status designation and designation as a potential treatment for a "rare pediatric disease." This means that if proven efficacious with a benefit-risk profile that the FDA judges to be positive and supportive of approval, SP-2577 could qualify for priority review and to receive a priority review voucher ("PRV"). If received, Salarius would have the ability to sell the PRV to other qualifying pharmaceutical companies. Based on PRV selling prices between 2017 and 2018, a PRV has a value ranging between $80 million and $150 million. Salarius initiated a Phase 1/2 clinical trial in the third quarter of 2018 and is currently in the initial dose escalation phase. Additional clinical trials will be necessary to receive FDA approval.

Expand SP-2577 Market by Pursuing Large Market Indications

In parallel to Salarius' development of SP-2577 in Ewing sarcoma patients, Salarius is conducting a Phase 1/2 clinical trial in solid tumor types, including patients with breast, ovarian and prostate cancers, as well as patients with sarcomas, but excluding Ewing sarcomas and central nervous system tumors. The possible markets for successful therapies in these indications could be large and thus greatly expand the potential opportunities for SP-2577 outside of Ewing sarcoma. The trial opened in the second quarter of 2019 and is currently also in the initial dose escalation phase.

The following table lists Salarius' ongoing clinical programs and their respective stages of development:

Product Candidate	Target	Disease Area	Development Stage	Sponsor
SP-2577	LSD1	Ewing sarcoma	Phase 1/2, active recruitment	Salarius
SP-2577	LSD1	Advanced Solid Tumors	Phase 1/2, active recruitment	Salarius

LSD1 Overview

LSD1 Inhibitor: SP-2577

Background

LSD1 is an enzyme that is, in part, responsible for epigenetic regulation of genes that support cancer growth. According to B. Majello, et al. in "Expanding the Role of the Histone Lysine-Specific Demethylase LSD1 in Cancer", LSD1 dysregulation is a key driver in multiple malignances. LSD1 induces a cancer phenotype through its enzymatic activity and through its role as a scaffolding protein in epigenetic complexes.

LSD1's main demethylation target is the histone 3 tail, specifically methyl marks on lysine 4 and lysine 9, or H3K4 and H3K9. Demethylation at H3K4 leads to gene repression, while demethylation at H3K9 leads to gene activation. LSD1 will be directed to either the H3K4 or H3K9 site depending on co-regulators it associates with across the various indications. For example, in prostate cancer, LSD1 associates with the androgen receptor and targets H3K9. In addition to its demethylation activity, LSD1 acts as a scaffolding protein in epigenetic complexes, further regulating gene expression.

LSD1 is over-expressed in various cancers, and higher levels of LSD1 are associated with poor patient prognosis in several types of cancers, making LSD1 inhibition an area of interest in cancer research. Most first-generation LSD1 inhibitors were based off a common tranylcypromine scaffold and thus share the same mechanism of forming a covalent adduct and irreversibly binding to LSD1's cofactor, FAD, to inhibit its enzymatic activity. However, these types of inhibitors do not robustly impact LSD1's scaffolding properties, which also aberrantly affect gene expression. As a result, the first-generation irreversible inhibitors have not been able to demonstrate comprehensive inhibition of LSD1 function and are mostly limited to a subset of indications.

SP-2577: A Reversible LSD1 Inhibitor

SP-2577 is a small-molecule LSD1 inhibitor, orally administered, with a novel scaffold. The molecule was discovered using structure-based computational screening coupled with chemical screening and further optimization with structure-activity relationship studies.

Salarius believes that SP-2577 is different from the majority of LSD1 inhibitors currently in clinical development because in addition to inhibiting LSD1's enzymatic activity, it also more comprehensively inhibits LSD1's scaffolding properties. Salarius also believes that SP-2577 is one of two reversible LSD1 inhibitors in clinical development, and three other LSD1 inhibitors in clinical development are all irreversible. Some irreversible inhibitors have struggled in clinic because, in addition to playing a role in carcinogenesis, LSD1 is involved in regulating genes in normal, healthy cells. Hence, irreversible inhibition of LSD1 may result in unwanted, on-target toxicities, limiting dosing for irreversible LSD1 inhibitors. Based on internal and published data, SP-2577 and its analog (SP-2509) have been observed to reversibly bind to LSD1, which Salarius hypothesizes may avoid these unwanted toxicities and allow more flexible dosing strategies by potentially having a wider therapeutic window. This potential is being studied and developed in Salarius' ongoing clinical programs.

Ewing Sarcoma

Ewing sarcoma is a devastating pediatric and young adult cancer that suffers from a lack of approved targeted therapies. Salarius initiated a Phase 1/2 clinical trial in Ewing sarcoma with SP-2577 in the third quarter of 2018. The cause of Ewing sarcoma is a chromosomal translocation involving the Ewing sarcoma breakpoint region 1 ("EWSR1") gene and ETS family genes, resulting in expression of a fusion oncoprotein. Ewing sarcoma cells exhibit high LSD1 protein expression. LSD1 associates with the fusion oncoprotein to drive disease progression, signifying LSD1 inhibition could be a viable therapeutic strategy.

Based on data from the National Institute of Health ("NIH") and physician collaborators, Salarius believes there are approximately 500 Ewing sarcoma patients diagnosed annually in the United States. The median age of diagnosis is 15 years, and 5-year overall survival for patients with metastatic disease is between 15% and 30%. Current treatment for Ewing sarcoma consists of an intensive chemotherapy regime, radiation and often disfiguring surgeries. Due to the harshness of current treatment options, children and adolescents often experience long-term side effects such as slowed growth and development, learning problems and an increased risk of developing second cancers.

Advanced Solid Tumors

In addition to Ewing sarcoma, LSD1 has been implicated in several other cancers, with high levels of LSD1 expression often associated with more aggressive cancers. These cancers include advanced castration resistant prostate, breast, and various sarcomas. Salarius is studying SP-2577's potential in these types of cancers through a company-sponsored single agent Advanced Solid Tumor study.

SP-2577 Clinical Trials

Ewing Sarcoma: Trial Design

Salarius is conducting a multi-site, open-label, dose-ranging Phase 1/2 trial of SP-2577 for treatment of relapsed/refractory Ewing sarcoma patients. The clinical trial consists of an initial dose escalation phase to determine the maximum tolerated dose, followed by a dose expansion phase and can enroll up to 50 patients in total. Patients must have histologic confirmation of Ewing sarcoma that is refractory or recurrent and must have received one prior course of therapy for the disease. Among other inclusion criteria, patients must be 12 years or older and have a life expectancy of greater than 4 months.

The primary objectives of this clinical trial are to study the safety and tolerability of SP-2577. Secondary objectives include pharmacokinetic assessment, food effects on drug pharmacokinetics, determination of the maximum tolerated dose ("MTD") and assessment of preliminary signs of anti-tumor activity. Additionally, the trial will explore the use of circulating tumor cells ("CTCs"), cell-free DNA ("cfDNA"), Hemoglobin F and changes in molecular signatures of the tumor as pharmacodynamic markers of disease burden, drug effect and tumor response.

Salarius initiated this trial in the third quarter of 2018. As of September 2019, patients have been treated at various dose levels, the highest level being dose 4. Dose escalation levels are shown in the table below.

Dose Level	Twice Daily Dose (mgs)	Percent increase from preceding dose level	Total Daily Dose (mgs)
1	75	0	150
2	150	100%	300
3	300	100%	600
4	600	100%	1200
5	900	50%	1800
6	1200	33%	2400
7	1500	25%	3000

Salarius has eight active study sites: Children's Hospital Los Angeles, Moffit Cancer Center, Dana-Farber Cancer Institute, MD Anderson Cancer Center, Johns Hopkins All Children's Hospital, Nationwide Children's Hospital, Memorial Sloan Kettering and the Sarcoma Oncology Center.

Advanced Solid Tumors: Trial Design

Salarius' second company-sponsored trial is in Advanced Solid Tumors. It is an open-label, dose ranging Phase 1/2 trial of SP-2577 in patients with advanced cancers, excluding Ewing sarcoma. The clinical trial follows a similar format to the Ewing sarcoma trial and has the same dose cohorts. It will consist of a dose escalation and dose expansion phase and can enroll up to 50 patients in total. Patients must be diagnosed with an advanced or recurrent, histologically or cytologically confirmed, solid malignancy that is either metastatic or unresectable.

The primary objectives of this clinical trial are to study the safety and tolerability of SP-2577. Secondary objectives include pharmacokinetic assessment, food effects on drug pharmacokinetics, determination of the MTD and assessment of preliminary signs of anti-tumor activity. Additionally, the trial will look at exploratory markers including Hemoglobin F to assess disease burden, drug effect, and tumor response.

SP-2577 Ongoing Development Programs

In addition to the aforementioned clinical trials, Salarius is exploring other opportunities with SP-2577 which include, in combination with immunotherapy agents (checkpoint inhibitors), patients with select tumor mutations, and in hematological malignancies.

Recent preclinical studies demonstrated that LSD1 inhibition has the potential to sensitize refractory patients to checkpoint inhibitors. While checkpoint inhibitors have been successful in a subset of patients, they remain ineffective in a large portion of cancer patients. Considering that the checkpoint inhibitor market is already a multibillion-dollar market, drugs that can be used to increase the clinical benefit of checkpoint inhibitors are attractive. Importantly, recent data shows that certain mutations in chromatin modifying complexes (e.g. mutations in the SWI/SNF complex) could increase tumor sensitivity to LSD1's immunomodulatory effects. Salarius is currently assessing the potential of Seclidemstat to be combined with checkpoint inhibitors through preclinical studies.

Cancer patients who harbor select tumor mutations (e.g., UTX, TET2) may be more susceptible to LSD1 inhibition. As such, identifying patients with these types of mutations could allow Salarius to enrich for patients that have an increased chance of benefitting from SP-2577 treatment. Salarius is currently conducting preclinical work to identify mutations that may increase patient response to SP-2577's therapeutic effects.

Corporate Information

We were incorporated as Flex Pharma, Inc. ("Flex Pharma") in Delaware in February 2014. In July 2019, our wholly owned subsidiary, Falcon Acquisition Sub, LLC, merged with and into Salarius Pharmaceuticals, LLC ("Private Salarius"), with Private Salarius becoming our wholly owned subsidiary (the "Merger"), and we changed our named to Salarius Pharmaceuticals, Inc. Our principal executive offices are located at 2450 Holcombe Blvd., Suite J-608, Houston, TX 77021, and our telephone number is (346) 772-0346. Our website address is www.salariuspharma.com. We do not incorporate the information on, or accessible through, our website into this prospectus, and you should not consider any information on, or accessible through, our website as part of this prospectus.

The Merger is deemed to be a reverse acquisition under the guidance of ASC 805 and, as such, Private Salarius has been determined to be the accounting acquirer in the Merger, but not the legal acquirer. As a result, upon consummation of the Merger, the historical financial statements of Private Salarius became the historical financial statements of Salarius, the combined company.

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

We are an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"). For so long as we remain an emerging growth company ("EGC"), we are permitted and intend to take advantage of specified reduced reporting requirements that are applicable to public companies, including:

- being permitted to provide only two years of audited financial statements, in addition to any required unaudited interim financial statements, with correspondingly reduced "Management's Discussion and Analysis of Financial Condition and Results of Operations" disclosure;
- not being required to comply with the auditor attestation requirements in the assessment of our internal control over financial reporting;
- not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements;
- reduced disclosure obligations regarding executive compensation in our periodic reports, proxy statements and registration statements; and
- not being required to hold a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

We currently take advantage of some or all of these reporting exemptions and we may continue to do so until we are no longer an EGC. Accordingly, the information that we provide stockholders may be different than the information you receive from other public companies in which you hold stock. We will remain an EGC until the earlier of (1) December 31, 2020, (2) the last day of the fiscal year in which we have total annual gross revenue of at least $1.07 billion, (3) the last day of the fiscal year in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds $700 million as of June 30 of such fiscal year, and (4) the date on which we have issued more than $1.0 billion in non-convertible debt during the prior three-year period.

Under Section 107(b) of the JOBS Act, an EGC can delay adopting new or revised accounting standards until those standards apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards and, therefore, we are subject to the same new or revised accounting standards as other public companies that are not EGCs.

We are also a smaller reporting company as defined in the Securities Exchange Act of 1934, as amended (the "Exchange Act"). We may continue to be a smaller reporting company even after we are no longer an EGC. We may take advantage of certain of the scaled disclosures available to smaller reporting companies and will be able to take advantage of these scaled disclosures for so long as (i) our voting and non-voting common stock held by non-affiliates is less than $250 million as of June 30 of such fiscal year or (ii) our annual revenue is less than $100 million during the most recently completed fiscal year and our voting and non-voting common stock held by non-affiliates is less than $700 million measured as of June 30 of such fiscal year.

THE OFFERING	
Class A Units offered	We are offering 7,101,307 Class A Units. Each Class A Unit consists of one share of common stock and a warrant to purchase one share of our common stock (together with the shares of common stock underlying such warrants).
Public offering price per Class A Unit	$1.15 per Class A Unit.
Class B Units offered	We are also offering to those purchasers whose purchase of Class A Units in this offering would result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common stock following the consummation of this offering, the opportunity to purchase, in lieu of the number of Class A Units that would result in ownership in excess of 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common stock, 1,246,519 Class B Units. Each Class B Unit consists of one share of Series A Preferred Stock, par value $0.0001 per share, convertible into one share of common stock and a warrant to purchase one share of our common stock (together with the shares of our common stock underlying such shares of Series A Preferred Stock and warrants).
Public offering price per Class B Unit	$1.15 per Class B Unit.
Over-allotment option	The underwriter has the option to purchase up to 1,252,173 additional shares of common stock, and/or warrants to purchase shares of common stock solely to cover over-allotments, if any, at the price to the public less the underwriting discounts and commissions. The over-allotment option may be used to purchase shares of common stock, or warrants, or any combination thereof, as determined by the underwriter, but such purchases cannot exceed an aggregate of 15% of the number of shares of common stock (including the number of shares of common stock issuable upon conversion of shares of Series A Preferred Stock) and warrants sold in the primary offering. The over-allotment option is exercisable for 45 days from the date of this prospectus.
Warrants	The warrants will be exercisable beginning on the date of issuance and expire on the five (5) year anniversary of the date of issuance at an initial exercise price per share equal to $1.15, subject to appropriate adjustment in the event of recapitalization events, stock dividends, stock splits, stock combinations, reclassifications, reorganizations or similar events affecting our common stock.
Series A Preferred Stock	Each share of Series A Preferred Stock is convertible at any time at the holder’s option into one share of common stock. Notwithstanding the foregoing, we shall not effect any conversion of Series A Preferred Stock, with certain exceptions, to the extent that, after giving effect to an attempted conversion, the holder of shares of Series A Preferred Stock (together with such holder’s affiliates, and

	any persons acting as a group together with such holder or any of such holder's affiliates) would beneficially own a number of shares of our common stock in excess of 4.99% (or, at the election of the purchaser prior to the date of issuance, 9.99%) of the shares of our common stock then outstanding after giving effect to such conversion. For additional information, see "Description of Capital Stock — Series A Preferred Stock" for a discussion of the terms of the Series A Preferred.
Common stock outstanding before this offering	4,511,174 shares
Common stock to be outstanding immediately after this offering	12,859,000 shares, or 14,111,173 shares if the underwriter exercises in full its option to purchase additional shares of common stock (on an as-converted to common stock basis with respect to any shares of Series A Preferred Stock sold)
Series A Preferred Stock to be outstanding immediately after this offering	1,246,519 shares (assuming no conversion of Series A Preferred Stock)
Use of proceeds	We estimate that the net proceeds to us from this offering will be approximately $8.5 million, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us. We intend to use the net proceeds from this offering for general corporate purposes, including working capital. See "Use of Proceeds" for additional information.
Risk factors	This investment involves a high degree of risk. See "Risk Factors" beginning on page 11 of this prospectus and in Amendment No. 1 to our Current Report on Form 8-K filed with the SEC on September 18, 2019, for a discussion of factors you should consider carefully before buying our securities.
Nasdaq symbol	"SLRX."
No listing of Series A Preferred Stock or warrants	There is no established public trading market for the warrants or Series A Preferred Stock, and we do not expect an active trading market to develop. We do not intend to list the warrants or the Series A Preferred Stock on any securities exchange or other trading market. Without an active trading market, the liquidity of the warrants and the Series A Preferred Stock will be limited.
Registered Securities	This prospectus also relates to the offering of the shares issuable upon conversion of the Series A Preferred Stock and upon exercise of the warrants.
Insider Participation	Certain of our directors, including our chief executive officer, have agreed to purchase in the aggregate approximately $43,000 of shares of our common stock in this offering at the public offering price.

Unless otherwise indicated, the number of shares of common stock to be outstanding immediately after this offering is based on 4,511,174 shares outstanding as of January 2, 2020, and excludes:

- 8,361 shares of unvested restricted common stock subject to repurchase by us;
- 156,233 shares of common stock issuable upon the exercise of outstanding stock options as of January 2, 2020, with a weighted-average exercise price of $36.11 per share;

- 216,087 shares of common stock reserved for future issuance under our 2015 equity incentive plan;
- 81,022 shares of common stock reserved for future issuance under our 2015 employee stock purchase plan;
- 42,928 shares of common stock issuable upon exercise of a warrant to purchase common stock issued to Wedbush Securities Inc. ("Wedbush") outstanding as of January 2, 2020, with an exercise price of $18.90 per share;
- rights distributed to holders of Flex Pharma's common stock of record as of the closing of business on July 18, 2019, which will entitle such stockholders to receive warrants to purchase an aggregate of approximately 142,711 shares of our common stock on January 20, 2020 at an exercise price of $15.17 per share; and
- 12,376 shares of common stock to be issued pursuant to a professional relations and consulting agreement dated December 9, 2019.

Unless otherwise indicated, all information contained in this prospectus assumes:

- no exercise of the outstanding options described above;
- no exercise by the underwriter of its option to purchase additional shares of common stock and/or warrants to cover over-allotments, if any;
- a one-for-25 reverse stock split of our common stock, which became effective on July 19, 2019; and
- the filing of our amended and restated certificate of incorporation, which became effective on July 19, 2019, and the adoption of our amended and restated bylaws by our board of directors on July 19, 2019.

Summary Financial Data

We derived the consolidated statements of operations data presented below for the years ended December 31, 2017 and 2018 and the balance sheet data as of December 31, 2018 from our audited financial statements. The statement of operations data presented below for the nine months ended September 30, 2018 and 2019 and the balance sheet data as of September 30, 2019 have been derived from our unaudited interim consolidated financial statements. Our historical results are not necessarily indicative of the results that should be expected in the future and are not necessarily indicative of results to be expected for the full year ended December 31, 2019 or any other period. The following information should be read together with our consolidated financial statements and related notes incorporated by reference in this prospectus from our current report on Form 8-K/A filed on September 18, 2019 and our Quarterly Report on Form 10-Q for the quarter ended September 30, 2019.

The pro forma as adjusted balance sheet data as of September 30, 2019 reflects receipt of the estimated net proceeds from the sale of 8,347,826 Class A Units and Class B Units at a public offering price of 1.15 per share, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, as if our receipt of the estimated net proceeds from this offering had occurred as of September 30, 2019. The actual offering price per share will be as determined between us and the underwriters as the time of pricing. The pro forma as adjusted summary financial data are not necessarily indicative of what our financial position would have been if this offering had been completed as of the date indicated, nor are these data necessarily indicative of our financial position for any future date or period.

	Year Ended December 31		Nine Months Ended September 30,	
	2017	2018	2018	2019
			(Unaudited)	
Revenue:				
Grant revenue	$ 1,851,892	$ 1,951,351	$ 1,312,752	$ 2,426,362
Operating expenses:				
Research and development	2,129,672	1,287,621	803,846	2,680,982
General and administrative	1,471,067	2,348,361	1,093,596	5,950,431
Total operating expenses	3,600,739	3,635,982	1,897,442	8,631,413
Loss before other income (expense)	(1,748,847)	(1,684,631)	(584,690)	(6,205,051)
Change in fair value of warrant liability	—	—	—	1,130,848
Interest income (expense), net	1,512	14,994	6,924	18,413
Loss from continuing operations	—	—	(577,766)	(5,055,790)
Income from discontinued operations	—	—	—	2,348
Net loss	$(1,747,335)	$(1,669,637)	$ (577,766)	$(5,053,442)
Loss from continuing operations	$(1,747,335)	$(1,669,637)	$ (577,766)	$(5,055,790)
Preferred dividends	(92,774)	(123,727)	(88,015)	—
Loss from continuing operations attributable to common stockholders	$(1,840,109)	$(1,793,364)	$ (665,781)	$(5,055,790)
Loss per common share — basic and diluted				
Continuing operations	$ (1.60)	$ (1.16)	$ (0.47)	$ (1.68)
Discontinued operations	—	—	—	—
Total net loss per share	$ (1.60)	$ (1.16)	$ (0.47)	$ (1.68)
Weighted-average number of common shares outstanding — basic and diluted	1,147,491	1,539,388	1,407,062	3,002,736

	As of September 30, 2019	
	Actual	Pro Forma As Adjusted
Balance Sheet Data:		
Cash and cash equivalents	$ 3,999,676	$ 12,455,676
Working capital	518,471	8,974,471
Total assets	14,457,946	22,913,946
Total equity	9,737,033	18,193,033

RISK FACTORS

Investing in our securities involves a high degree of risk. This prospectus does not describe all of those risks. You should consider the risk factors described in this prospectus under the caption "Risks Related to This Offering and Our Securities" below, as well as the those described under the caption "Risk Factors" in the documents incorporated by reference herein, including our Amendment No. 1 to our Current Report on Form 8-K filed with the SEC on September 18, 2019, together with the other information contained or incorporated by reference in this prospectus, and in any free writing prospectus that we have authorized for use in connection with this offering, before making an investment decision. If any of these risks occur, our business, financial condition, results of operations, and future prospects would likely be materially and adversely affected. In these circumstances, the market price of our common stock and value of our other securities would likely decline and you may lose all or part of your investment. Share information set forth in these risk factors is as of the dates set forth herein or therein and unless otherwise indicated, does not give effect to the issuance of the securities in connection with this offering.

Risks Related to the Development of Salarius' Product Candidates

The approach Salarius is taking to discover and develop novel oncology therapeutics using epigenetic enzymes to moderate transcription factors and thereby control abnormal protein expression is unproven and may never lead to marketable products.

The scientific discoveries that form the basis for Salarius' efforts to discover and develop its current product candidates are relatively recent. To date, neither Salarius nor any other company has received regulatory approval to market therapeutics using epigenetic enzymes. The scientific evidence to support the feasibility of developing drugs based on these discoveries is both preliminary and limited. Successful development of therapeutic products by Salarius will require solving a number of issues. In addition, any product candidates that Salarius develops may not demonstrate in patients the chemical and pharmacological properties ascribed to them in laboratory and pre-clinical trials, and they may interact with human biological systems in unforeseen, ineffective, or even harmful ways. For instance, Salarius' clinical and pre-clinical data to date is not validated and Salarius has no way of knowing if after validation Salarius' clinical trial data will be complete and consistent. If Salarius does not successfully develop and commercialize product candidates based upon this technological approach, it may not become profitable and the value of its capital stock may decline.

Further, Salarius' focus on epigenetic enzyme technology for developing product candidates as opposed to multiple, more proven technologies for drug development increases the risk associated with its business. If Salarius is not successful in developing an approved product using its technology, it may not be able to identify and successfully implement an alternative product development strategy. In addition, work by other companies pursuing similar technologies may encounter setbacks and difficulties that regulators and investors may attribute to Salarius' product candidates, whether appropriate or not.

Clinical trials are costly, time consuming, and inherently risky, and Salarius may fail to demonstrate safety and efficacy to the satisfaction of applicable regulatory authorities.

Clinical development is expensive, time consuming, and involves significant risk. Salarius cannot guarantee that any clinical trials will be conducted as planned or completed on schedule, if at all. A failure of one or more clinical trials can occur at any stage of development. Events that may prevent successful or timely completion of clinical development include but are not limited to:

- inability to generate satisfactory pre-clinical, toxicology, or other in vivo or in vitro data or diagnostics to support the initiation or continuation of clinical trials;
- delays in reaching agreement on acceptable terms with clinical research organizations ("CROs"), and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and clinical trial sites;

- delays in obtaining required institutional review board ("IRB") approval at each clinical trial site;
- failure to permit the conduct of a clinical trial by regulatory authorities after review of an investigational new drug or equivalent foreign application or amendment;
- delays in recruiting qualified patients in its clinical trials;
- failure by clinical sites, CROs, or other third parties to adhere to clinical trial requirements;
- failure by Salarius clinical sites, CROs, or other third parties to perform in accordance with the good clinical practices requirements of the FDA, or applicable foreign regulatory guidelines;
- patients dropping out of Salarius' clinical trials;
- adverse events or tolerability or animal toxicology issues significant enough for the FDA or other regulatory agencies to put any or all clinical trials on hold;
- occurrence of adverse events associated with Salarius' product candidates;
- changes in regulatory requirements and guidance that require amending or submitting new clinical protocols;
- the cost of clinical trials of Salarius' product candidates;
- negative or inconclusive results from Salarius' clinical trials which may result in Salarius' deciding, or regulators requiring Salarius, to conduct additional clinical trials or abandon development programs in other ongoing or planned indications for a product candidate; and
- delays in reaching agreement on acceptable terms with third-party manufacturers and the time for manufacture of sufficient quantities of its product candidates for use in clinical trials.

Any inability to successfully complete clinical development and obtain regulatory approval for its product candidates could result in additional costs to Salarius or impair its ability to generate revenue. In addition, if Salarius makes manufacturing or formulation changes to its product candidates, Salarius may need to conduct additional pre-clinical trials or the results obtained from such new formulation may not be consistent with previous results obtained. Clinical trial delays could also shorten any periods during which its products have patent protection and may allow competitors to develop and bring products to market before Salarius does, which could impair its ability to successfully commercialize its product candidates and may harm its business and results of operations.

Salarius' therapeutic product candidates are based on a relatively novel technology, which makes it difficult to predict the timing and cost of development and of subsequently obtaining regulatory approval, if at all.

Salarius has concentrated its research and development efforts to date on a limited number of product candidates based on its epigenetic enzyme therapeutic platform and identifying its initial targeted disease indications. Salarius' future success depends on its successful development of viable product candidates. Currently, only one of its product candidates, Seclidemstat, a reversible LSD1 inhibitor, is in Phase 1/2 clinical development, and the remainder of its product candidates are in pre-clinical development. There can be no assurance that Salarius will not experience problems or delays in developing its product candidates and that such problems or delays will not cause unanticipated costs, or that any such development problems can be solved.

The clinical trial and manufacturing requirements of the FDA, the European Medicines Agency, ("EMA"), and other regulatory authorities, and the criteria these regulators use to determine the safety and efficacy of a product candidate, vary substantially according to the type, complexity, novelty, and intended use and market of the product candidate. The regulatory approval process for novel product candidates such as epigenetic enzyme therapeutics can be more expensive and take longer than for other, better known, or more extensively studied product candidates. It is difficult to determine how long it will take or how much it will cost to obtain regulatory

approvals for Salarius' product candidates in either the United States or the European Union or how long it will take to commercialize its product candidates, even if approved for marketing. Approvals by the European Commission may not be indicative of what the FDA may require for approval and vice versa, and different or additional pre-clinical trials or clinical trials may be required to support regulatory approval in each respective jurisdiction. Delay or failure to obtain, or unexpected costs in obtaining, the regulatory approval necessary to bring a potential product candidate to market could decrease Salarius' ability to generate sufficient product revenue, and Salarius' business, financial condition, results of operations, and prospects may be harmed.

Salarius' product candidates may cause undesirable side effects or have other properties that could delay or prevent their regulatory approval, limit the commercial viability of an approved label, or result in significant negative consequences following marketing approval, if any.

Undesirable side effects caused by its product candidates could cause Salarius or regulatory authorities to interrupt, delay, or terminate clinical trials or even if approved, result in a restrictive label or delay regulatory approval by the FDA or comparable foreign authorities.

In addition, to date Salarius' product candidates have been studied in only a very limited number of patients. Salarius may experience a high rates or severity of adverse events and comparable or high rates of discontinuation in testing in its future clinical trials. There is no guarantee that severe side effects will not be identified through ongoing clinical trials of Salarius' product candidates for current and other indications. Undesirable side effects and negative results for other indications may negatively impact the development and potential for approval of Salarius' product candidates for their proposed indications. Specifically, as a result of concerns regarding the potential teratogenic and abortifacient effects of SP-2577, pregnant women were excluded from the conducted studies.

Additionally, even if one or more of its product candidates receives marketing approval, and Salarius or others later identify undesirable side effects caused by such products, potentially significant negative consequences could result, including but not limited to:

- regulatory authorities may withdraw approvals of such products;
- regulatory authorities may require additional warnings on the label;
- Salarius may be required to create a Risk Evaluation and Mitigation Strategy ("REMS") plan, which could include a medication guide outlining the risks of such side effects for distribution to patients, a communication plan for healthcare providers, and/or other elements to assure safe use;
- Salarius could be sued and held liable for harm caused to patients; and
- its reputation may suffer.

Any of these events could prevent Salarius from achieving or maintaining market acceptance of a product candidate, even if approved, and could significantly harm or cause the complete failure of its business, results of operations, and prospects.

Salarius' product development program may not uncover all possible adverse events that patients who take its product candidates may experience. The number of subjects exposed to Seclidemstat or its other product candidates and the average exposure time in the clinical development program may be inadequate to detect rare adverse events, or chance findings, that may only be detected once the product is administered to more patients and for greater periods of time.

Clinical trials by their nature use a sample of the potential patient population. However, with a limited number of subjects and limited duration of exposure, Salarius cannot be fully assured that rare and severe side effects of Seclidemstat or its other product candidates will be uncovered. Such rare and severe side effects may only be

uncovered with a significantly larger number of patients exposed to the drug. If such safety problems occur or are identified after Seclidemstat or another product candidate reaches the market, the FDA may require that Salarius amend the labeling of the product or recall the product, or may even withdraw approval for the product.

Some of Salarius' product candidates may produce results in pre-clinical or clinical settings for indications other than those for which Salarius contemplates conducting development and seeking FDA approval, and Salarius cannot give any assurance that it will generate data for any of its product candidates sufficient to receive regulatory approval in its planned indications, which will be required before they can be commercialized.

Salarius currently has one product candidate in Phase 1/2 clinical trials for advanced solid tumors - Seclidemstat. This is only one of the multiple indications for which Salarius plans to develop this product candidate. There can be no assurance that the data that Salarius develops for its product candidates in its planned indications will be sufficient to obtain regulatory approval.

In addition, none of its product candidates have advanced into a pivotal clinical trial for Salarius' proposed indications and it may be years before any such clinical trial is initiated and completed, if at all. Salarius is not permitted to market or promote any of its product candidates before it receives regulatory approval from the FDA or comparable foreign regulatory authorities, and Salarius may never receive such regulatory approval for any of its product candidates. Salarius cannot be certain that any of its product candidates will be successful in clinical trials or receive regulatory approval. Further, its product candidates may not receive regulatory approval even if they are successful in clinical trials. If Salarius does not receive regulatory approvals for its product candidates, Salarius may not be able to continue its operations.

Product development involves a lengthy and expensive process with an uncertain outcome, and results of earlier pre-clinical and clinical trials may not be predictive of future clinical trial results.

Clinical testing is expensive and generally takes many years to complete, and the outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. The results of pre-clinical trials and early clinical trials of Salarius' product candidates may not be predictive of the results of larger, later-stage controlled clinical trials. Product candidates that have shown promising results in early-stage clinical trials may still suffer significant setbacks in subsequent clinical trials. Salarius' clinical trials to date have been conducted on a small number of patients in limited numbers of clinical sites for a limited number of indications. Salarius will have to conduct larger, well-controlled trials in its proposed indications to verify the results obtained to date and to support any regulatory submissions for further clinical development. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles despite promising results in earlier, smaller clinical trials. Moreover, clinical data are often susceptible to varying interpretations and analyses. Salarius does not know whether any Phase 1/2, Phase 2, Phase 3, or other clinical trials Salarius may conduct will demonstrate consistent or adequate efficacy and safety with respect to the proposed indication for use sufficient to receive regulatory approval or market its drug candidates.

Salarius may use its financial and human resources to pursue a particular research and/or development program or product candidate and fail to capitalize on programs or product candidates that may be more profitable or for which there is a greater likelihood of success.

Because Salarius has limited financial and human resources, it may forego or delay pursuit of opportunities with some programs or product candidates or for other indications that later prove to have greater commercial potential. Salarius' resource allocation decisions may cause it to fail to capitalize on viable commercial products or more profitable market opportunities. Salarius' spending on current and future research and development programs and future product candidates for specific indications may not yield any commercially viable products. Salarius may also enter into additional strategic collaboration agreements to develop and commercialize some of

its programs and potential product candidates in indications with potentially large commercial markets. If Salarius does not accurately evaluate the commercial potential or target market for a particular product candidate, it may relinquish valuable rights to that product candidate through strategic collaborations, licensing, or other royalty arrangements in cases in which it would have been more advantageous for Salarius to retain sole development and commercialization rights to such product candidate, or Salarius may allocate internal resources to a product candidate in a therapeutic area in which it would have been more advantageous to enter into a partnering arrangement.

Salarius may find it difficult to enroll patients in its clinical trials given the limited number of patients who have the diseases for which its product candidates are being studied. Difficulty in enrolling patients is a common hurdle faced by early stage biotechnology companies and could, and often does, delay or prevent clinical trials of product candidates.

Identifying and qualifying patients to participate in clinical trials of Salarius' product candidates is essential to its success. The timing of Salarius' clinical trials depends in part on the rate at which Salarius can recruit patients to participate in clinical trials of its product candidates, and Salarius may experience delays in its clinical trials if Salarius encounters difficulties in enrollment, which is inherently difficult, and often time consuming.

The eligibility criteria of Salarius' planned clinical trials may further limit the available eligible trial participants as Salarius expects to require that patients have specific characteristics that Salarius can measure or meet the criteria to assure their conditions are appropriate for inclusion in its clinical trials. Salarius may not be able to identify, recruit, and enroll a sufficient number of patients to complete its clinical trials in a timely manner because of the perceived risks and benefits of the product candidate under study, the availability and efficacy of competing therapies and clinical trials, and the willingness of physicians to participate in its planned clinical trials. If patients are unwilling to participate in Salarius' clinical trials for any reason, the timeline for conducting trials and obtaining regulatory approval of its product candidates may be delayed.

If Salarius experiences delays in the completion of, or termination of, any clinical trials of its product candidates, the commercial prospects of its product candidates could be harmed, and its ability to generate product revenue from any of these product candidates could be delayed or prevented. In addition, any delays in completing its clinical trials would likely increase its overall costs, impair product candidate development, and jeopardize its ability to obtain regulatory approval relative to its current plans. Any of these occurrences may harm its business, financial condition, and prospects significantly.

Salarius may face potential product liability, and if successful claims are brought against it, Salarius may incur substantial liability and costs which could be greater than its insurance coverage or overall resources. If the use or misuse of Salarius' product candidates harms patients, or is perceived to harm patients even when such harm is unrelated to its product candidates, Salarius' regulatory approvals, if any, could be revoked or otherwise negatively impacted, and Salarius could be subject to costly and damaging product liability claims. If Salarius is unable to obtain adequate insurance or is required to pay for liabilities resulting from a claim excluded from, or beyond the limits of, its insurance coverage, a material liability claim could adversely affect its financial condition.

The use or misuse of Salarius' product candidates in clinical trials and the sale of any products for which Salarius may obtain marketing approval exposes Salarius to the risk of potential product liability claims. Product liability claims might be brought against Salarius by consumers, healthcare providers, pharmaceutical companies, or others selling or otherwise coming into contact with its product candidates and approved products, if any. There is a risk that Salarius' product candidates may induce adverse events. If Salarius cannot successfully defend against product liability claims, it could incur substantial liability and costs. Patients with the diseases targeted by Salarius' product candidates may already be in severe and advanced stages of disease and have both known and unknown significant preexisting and potentially life-threatening health risks. During the course of treatment, patients may suffer adverse events, including death, for reasons that may be related to Salarius' product

candidates. Such events could subject Salarius to costly litigation, require it to pay substantial amounts of money to injured patients, delay, negatively impact, or end its opportunity to receive or maintain regulatory approval to market its products, or require Salarius to suspend or abandon its commercialization efforts. Even in a circumstance in which an adverse event is unrelated to Salarius' product candidates, the investigation into the circumstance may be time-consuming or inconclusive. These investigations may delay Salarius' regulatory approval process or impact and limit the type of regulatory approvals its product candidates receive or maintain. As a result of these factors, a product liability claim, even if successfully defended, could have a material adverse effect on Salarius' business, financial condition, or results of operations.

Although Salarius has product liability insurance, which covers its clinical trials in the United States, for up to $2.0 million per occurrence, up to an aggregate limit of $5.0 million, its insurance may be insufficient to reimburse it for any expenses or losses Salarius may suffer. Salarius will also likely be required to increase its product liability insurance coverage for the advanced clinical trials that it plans to initiate. If Salarius obtains marketing approval for any of its product candidates, it will need to expand its insurance coverage to include the sale of commercial products. There is no way to know if Salarius will be able to continue to obtain product liability coverage, and obtain expanded coverage if it requires it, in sufficient amounts to protect it against losses due to liability, on acceptable terms, or at all. Salarius may not have sufficient resources to pay for any liabilities resulting from a claim excluded from, or beyond the limits of, its insurance coverage. Where Salarius has provided indemnities in favor of third parties under its agreements with them, there is also a risk that these third parties could incur liability and bring a claim under such indemnities. An individual may bring a product liability claim against Salarius alleging that one of its product candidates causes, or is claimed to have caused, an injury or is found to be unsuitable for consumer use. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product, negligence, strict liability, and a breach of warranties. Claims could also be asserted under state consumer protection acts. Any product liability claim brought against Salarius, with or without merit, could result in:

- withdrawal of clinical trial volunteers, investigators, patients or trial sites, or limitations on approved indications;
- the inability to commercialize, or if commercialized, decreased demand for, its product candidates;
- if commercialized, product recalls, withdrawals of labeling, marketing or promotional restrictions, or the need for product modification;
- initiation of investigations by regulators;
- loss of revenues;
- substantial costs of litigation, including monetary awards to patients or other claimants;
- liabilities that substantially exceed Salarius' product liability insurance, which Salarius would then be required to pay itself;
- an increase in Salarius' product liability insurance rates or the inability to maintain insurance coverage in the future on acceptable terms, if at all;
- the diversion of management's attention from Salarius' business; and
- damage to Salarius' reputation and the reputation of its products and its technology.

Product liability claims may subject Salarius to the foregoing and other risks, which could have a material adverse effect on its business, financial condition or results of operations.

Risks Related to Our Financial Condition and Capital Requirements

We have incurred losses since its inception, have a limited operating history on which to assess our business, and anticipate that we will continue to incur significant losses for the foreseeable future. These conditions raise substantial doubt about our ability to continue as a going concern, and we may not be able to continue as a going concern.

Salarius is a clinical development-stage biopharmaceutical company with a limited operating history. Salarius has no products approved for commercial sale and has not generated any revenue from product sales. From its inception to September 30, 2019, Salarius raised net cash proceeds of approximately $8.3 million from the sale of membership units and received $9.6 million in a grant from CPRIT. Salarius has never been profitable and has incurred operating losses in each year since inception. Salarius' net losses were $1.7 million for each of the years ended December 31, 2018 and 2017, and $5.1 million for the nine months ended September 30, 2019. These conditions raise substantial doubt as to our ability to continue as a going concern. Substantial doubt about Salarius' ability to continue as a going concern may create negative reactions to the price of the common shares of its stock and Salarius may have a more difficult time obtaining financing. Salarius has prepared its financial statements on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities and commitments in the normal course of business. The financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or amounts of liabilities that might be necessary should Salarius be unable to continue in existence.

As of September 30, 2019, Salarius had an accumulated deficit of $10.2 million and cash and cash equivalents of $4.0 million, which includes $2.0 million for funds received from CPRIT. These funds are to be used for allowable expenses, primarily research and development expenses. The grant has a mandatory fund matching requirement. As of September 30, 2019, CPRIT fund matching requirements had not been fully met.

Salarius will continue to require substantial additional capital to continue its clinical development and potential commercialization activities. Accordingly, Salarius will need to raise substantial additional capital to continue to fund its operations. The amount and timing of its future funding requirements will depend on many factors, including the pace and results of its clinical development efforts. Failure to raise capital as and when needed, on favorable terms or at all, would have a negative impact on its financial condition and its ability to develop its product candidates.

Salarius has devoted substantially all of its financial resources to identify, acquire, and develop its product candidates, including conducting clinical trials and providing general and administrative support for its operations. To date, Salarius has financed its operations primarily through the sale of privately-placed equity securities. The amount of its future net losses will depend, in part, on the rate of its future expenditures and its ability to obtain funding through equity or debt financings, strategic collaborations, or grants. Biopharmaceutical product development is a highly speculative and competitive undertaking and involves a substantial degree of risk. Salarius expects losses to increase as it completes Phase 1/2 development and advances into Phase 2 development of its lead product candidates. It may be several years, if ever, before Salarius completes pivotal clinical trials and has a product candidate approved for commercialization. Salarius expects to invest significant funds into the research and development of its current product candidates to determine the potential to advance these product candidates to regulatory approval. Large sums of money will be expected before Salarius knows if it has a clinically successful product candidate.

If Salarius obtains regulatory approval to market a product candidate, its future revenue will depend upon the size of any markets in which its product candidates may receive approval, and its ability to achieve sufficient market acceptance, pricing, reimbursement from third-party payors, and adequate market share for its product candidates in those markets. Even if Salarius obtains adequate market share for its product candidates, because the potential markets in which its product candidates may ultimately receive regulatory approval could be very small, Salarius may never become profitable despite obtaining such market share and acceptance of its products.

Salarius expects to continue to incur significant expenses and increasing operating losses for the foreseeable future and its expenses will increase substantially if and as Salarius:

- continues the clinical development of its product candidates;
- continues efforts to discover new product candidates;
- undertakes the manufacturing of its product candidates or increases volumes manufactured by third parties;
- advances its programs into larger, more expensive clinical trials;
- initiates additional pre-clinical, clinical, or other trials or studies for its product candidates;
- seeks regulatory and marketing approvals and reimbursement for its product candidates;
- establishes a sales, marketing, and distribution infrastructure to commercialize any products for which Salarius may obtain marketing approval and market for itself;
- seeks to identify, assess, acquire, and/or develop other product candidates;
- makes milestone, royalty or other payments under third-party license agreements;
- seeks to maintain, protect, and expand its intellectual property portfolio;
- seeks to attract and retain skilled personnel; and
- experiences any delays or encounters issues with the development and potential for regulatory approval of its clinical candidates such as safety issues, clinical trial accrual delays, longer follow-up for planned studies, additional major studies, or supportive studies necessary to support marketing approval.

Further, the net losses Salarius incurs may fluctuate significantly from quarter to quarter and year to year, such that a period-to-period comparison of its results of operations may not be a good indication of its future performance.

Salarius has never generated any revenue from product sales and may never generate revenue or be profitable.

Salarius has no products approved for commercialization and has never generated any revenue. Salarius' ability to generate revenue and achieve profitability depends on its ability, alone or with strategic collaborators, to successfully complete the development of, and obtain the regulatory and marketing approvals necessary to commercialize, one or more of its product candidates. Salarius does not anticipate generating revenue from product sales for the foreseeable future. Salarius' ability to generate future revenue from product sales depends heavily on its success in many areas, including but not limited to:

- completing research and development of its product candidates;
- obtaining regulatory and marketing approvals for its product candidates;
- manufacturing product candidates and establishing and maintaining supply and manufacturing relationships with third parties that are commercially feasible, and meet regulatory requirements and Salarius' supply needs in sufficient quantities to meet market demand for its product candidates, if approved;
- marketing, launching, and commercializing product candidates for which Salarius obtains regulatory and marketing approval, either directly or with a collaborator or distributor;
- gaining market acceptance of its product candidates as treatment options;
- addressing any competing products;

- protecting and enforcing its intellectual property rights, including patents, trade secrets, and know-how;
- negotiating favorable terms in any collaboration, licensing, or other arrangements into which Salarius may enter;
- obtaining reimbursement or pricing for its product candidates that supports profitability; and
- attracting, hiring, and retaining qualified personnel.
- Even if one or more of the product candidates that Salarius develops is approved for commercial sale, Salarius anticipates incurring significant costs associated with commercializing any approved product candidate. Portions of its current pipeline of product candidates have been in-licensed from third parties, which make the commercial sale of such in-licensed products potentially subject to additional royalty and milestone payments to such third parties. Salarius will also have to develop, contract for, or acquire manufacturing capabilities to continue development and potential commercialization of its product candidates. Salarius will need to develop or procure its drug product in a commercially feasible manner in order to successfully commercialize any future approved product; if any. Additionally, if Salarius is not able to generate revenue from the sale of any approved products, Salarius may never become profitable.

Raising additional capital may cause dilution to Salarius' stockholders, restrict its operations, or require Salarius to relinquish rights.

To the extent that Salarius raises additional capital through the sale of equity, convertible debt, or other securities convertible into equity, the ownership interest of Salarius' stockholders will be diluted, and the terms of these new securities may include liquidation or other preferences that adversely affect rights of Salarius' equity holders. Debt financing, if available at all, would likely involve agreements that include covenants limiting or restricting Salarius' ability to take specific actions, such as incurring additional debt, making capital expenditures, making additional product acquisitions, or declaring dividends. If Salarius raises additional funds through strategic collaborations or licensing arrangements with third parties, Salarius may have to relinquish valuable rights to its product candidates or future revenue streams or grant licenses on terms that are not favorable to Salarius. Salarius cannot be assured that it will be able to obtain additional funding if and when necessary to fund its entire portfolio of product candidates to meet its projected plans. If Salarius is unable to obtain funding on a timely basis, Salarius may be required to delay or discontinue one or more of its development programs or the commercialization of any product candidates or be unable to expand its operations or otherwise capitalize on potential business opportunities, which could materially harm Salarius' business, financial condition, and results of operations.

Salarius has also historically received funds from state and federal government grants for research and development, including CPRIT. The grants have been, and any future government grants and contracts Salarius may receive may be, subject to the risks and contingencies set forth below under the risk factor titled "*Reliance on government funding for Salarius' programs may add uncertainty to its research and commercialization efforts with respect to those programs that are tied to such funding and may impose requirements that limit its ability to take specified actions, increase the costs of commercialization and production of product candidates developed under those programs, and subject it to potential financial penalties, which could materially and adversely affect its business, financial condition, and results of operations.*" Although Salarius might apply for government contracts and grants in the future, it cannot assure you that it will be successful in obtaining additional grants for any product candidates or programs. Failure to receive additional government grants in the future may substantially harm Salarius' business.

Risks Related to Regulatory Approval of Salarius' Product Candidates and Other Legal Compliance Matters

Salarius may seek breakthrough therapy designation by the FDA for one or more of its product candidates, but it might not receive such designation.

Salarius may seek a breakthrough therapy designation from the FDA for some of its product candidates that reach the regulatory review process. A breakthrough therapy is defined as a drug or biological product that is intended,

alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the drug or biological product may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. For drugs or biological products that have been designated as breakthrough therapies, interaction and communication between the FDA and the sponsor of the trial can help to identify the most efficient path for clinical development while minimizing the number of patients placed in ineffective control regimens. Drugs designated as breakthrough therapies by the FDA could also be eligible for accelerated approval.

Designation as a breakthrough therapy is within the discretion of the FDA. Accordingly, even if Salarius believes one of its product candidates meets the criteria for designation as a breakthrough therapy, the FDA may disagree and instead determine not to make such designation.

A potential breakthrough therapy designation by the FDA for Salarius' product candidates may not lead to a faster development or regulatory review or approval process, and it does not increase the likelihood that Salarius' product candidates will receive marketing approval.

The receipt of a breakthrough therapy designation for a product candidate may not result in a faster development process, review, or approval compared to drugs considered for approval under conventional FDA procedures and does not assure ultimate approval by the FDA. In addition, even if one or more of Salarius' product candidates qualify and are designated as breakthrough therapies, the FDA may later decide that the drugs or biological products no longer meet the conditions for designation and the designation may be rescinded.

Salarius may seek Fast Track designation for one or more of its product candidates, but it might not receive such designation, and even if Salarius does, such designation may not actually lead to a faster development or regulatory review or approval process.

If a product candidate is intended for the treatment of a serious condition and nonclinical or clinical data demonstrate the potential to address unmet medical need for this condition, a product sponsor may apply for FDA Fast Track designation. If Salarius seeks Fast Track designation for a product candidate, Salarius may not receive it from the FDA. However, even if Salarius receives Fast Track designation, Fast Track designation does not ensure that Salarius will receive marketing approval or that approval will be granted within any particular timeframe. Salarius may not experience a faster development or regulatory review or approval process with Fast Track designation compared to conventional FDA procedures. In addition, the FDA may withdraw Fast Track designation if it believes that the designation is no longer supported by data from Salarius' clinical development program. Fast Track designation alone does not guarantee qualification for the FDA's priority review procedures.

Even if Salarius obtains regulatory approval for a product, Salarius will remain subject to ongoing regulatory requirements.

If any of Salarius' product candidates are approved, Salarius will be subject to ongoing regulatory requirements with respect to manufacturing, labeling, packaging, storage, marketing, advertising, promotion, sampling, record-keeping, conduct of post-marketing clinical trials, and submission of safety, efficacy, and other post-approval information, including both federal and state requirements in the United States and requirements of comparable foreign regulatory authorities.

Manufacturers and manufacturers' facilities are required to continuously comply with FDA and comparable foreign regulatory authority requirements, including ensuring that quality control and manufacturing procedures conform to current Good Manufacturing Practices ("cGMP"), regulations and corresponding foreign regulatory manufacturing requirements. As such, Salarius and its contract manufacturers will be subject to continual review and inspections to assess compliance with cGMP and adherence to commitments made in any new drug application ("NDA") or marketing authorization application.

Any regulatory approvals that Salarius receives for its product candidates may be subject to limitations on the approved indicated uses for which the product candidate may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase 4 clinical trials, and surveillance to monitor the safety and efficacy of the product candidate. Salarius will be required to report adverse reactions and production problems, if any, to the FDA and comparable foreign regulatory authorities. Any new legislation addressing drug safety issues could result in delays in product development or commercialization, or increased costs to assure compliance. If its original marketing approval for a product candidate was obtained through an accelerated approval pathway, Salarius could be required to conduct a successful post-marketing clinical trial in order to confirm the clinical benefit for its products. An unsuccessful post-marketing clinical trial or failure to complete such a trial could result in the withdrawal of marketing approval.

If a regulatory agency discovers previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with the facility where the product is manufactured, or disagrees with the promotion, marketing, or labeling of a product, the regulatory agency may impose restrictions on that product or Salarius, including requiring withdrawal of the product from the market. If Salarius fails to comply with applicable regulatory requirements, a regulatory agency or enforcement authority may, among other things:

- issue warning letters;
- impose civil or criminal penalties;
- suspend or withdraw regulatory approval;
- suspend any of Salarius' ongoing clinical trials;
- refuse to approve pending applications or supplements to approved applications submitted by Salarius;
- impose restrictions on Salarius' operations, including closing its contract manufacturers' facilities; or
- require a product recall.

Any government investigation of alleged violations of law would be expected to require Salarius to expend significant time and resources in response and could generate adverse publicity. Any failure to comply with ongoing regulatory requirements may significantly and adversely affect its ability to develop and commercialize its products and the value of Salarius and its operating results would be adversely affected.

Healthcare legislative reform measures may have a material adverse effect on Salarius' business, financial condition or results of operations.

In the United States, there have been and continue to be a number of legislative initiatives to contain healthcare costs or otherwise change or reform the provision of healthcare products and services to the patient population. For example, in March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act (the "Health Care Reform Law"), was passed, which substantially changes the way health care is financed by both governmental and private insurers, and significantly impacts the U.S. pharmaceutical industry. The Health Care Reform Law, among other things, addresses a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted, or injected, increases the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program and extends the rebate program to individuals enrolled in Medicaid managed care organizations, establishes annual fees and taxes on manufacturers of specified branded prescription drugs, and promotes a new Medicare Part D coverage gap discount program.

In addition, other legislative changes have been proposed and adopted in the United States since the Health Care Reform Law was enacted and Salarius expects that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand or lower pricing for its product candidates, or additional pricing pressures.

Salarius may be subject, directly or indirectly, to federal and state healthcare fraud and abuse laws, false claims laws, and health information privacy and security laws. If Salarius is unable to comply, or has not fully complied, with such laws, it could face substantial penalties.

If Salarius obtains FDA approval for any of its product candidates and begins commercializing those products in the United States, its operations may be subject to various federal and state fraud and abuse laws, including, without limitation, the federal Anti-Kickback Statute, the federal False Claims Act, and physician sunshine laws and regulations. These laws may impact, among other things, its proposed sales, marketing, and education programs. In addition, Salarius may be subject to patient privacy regulation by both the federal government and the states in which Salarius conducts its business. The laws that may affect its ability to operate include:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, receiving, offering, or paying remuneration, directly or indirectly, to induce, or in return for, the purchase or recommendation of an item or service reimbursable under a federal healthcare program, such as the Medicare and Medicaid programs;
- federal civil and criminal false claims laws and civil monetary penalty laws, which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid, or other third-party payors that are false or fraudulent;
- HIPAA, which created new federal criminal statutes that prohibit executing a scheme to defraud any healthcare benefit program and making false statements relating to healthcare matters;
- HIPAA, as amended by the Health Information Technology and Clinical Health Act, and its implementing regulations, which imposes specified requirements relating to the privacy, security, and transmission of individually identifiable health information;
- the federal physician sunshine requirements under the Health Care Reform Laws, which requires manufacturers of drugs, devices, biologics, and medical supplies to report annually to the U.S. Department of Health and Human Services information related to payments and other transfers of value to physicians, other healthcare providers, and teaching hospitals, and ownership and investment interests held by physicians and other healthcare providers and their immediate family members and applicable group purchasing organizations; and
- state law equivalents of each of the above federal laws, such as anti-kickback and false claims laws that may apply to items or services reimbursed by any third-party payor, including governmental and private payors, to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government, or otherwise restrict payments that may be made to healthcare providers and other potential referral sources; state laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures, and state laws governing the privacy and security of health information in specified circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

Because of the breadth of these laws and the narrowness of the statutory exceptions and safe harbors available, it is possible that some of Salarius' business activities could be subject to challenge under one or more of such laws. In addition, recent health care reform legislation has strengthened these laws. For example, the Health Care Reform Law, among other things, amends the intent requirement of the federal anti-kickback and criminal healthcare fraud statutes. A person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it. Moreover, the Health Care Reform Law provides that the government may assert that a claim including items or services resulting from a violation of the federal anti-kickback statute constitutes a false or fraudulent claim for purposes of the False Claims Act.

If Salarius' operations are found to be in violation of any of the laws described above or any other governmental regulations that apply to Salarius, Salarius may be subject to penalties, including civil and criminal penalties,

damages, fines, exclusion from participation in government health care programs, such as Medicare and Medicaid, imprisonment, and the curtailment or restructuring of its operations, any of which could adversely affect its ability to operate Salarius' business and its results of operations.

Reliance on government funding for Salarius' programs may add uncertainty to its research and commercialization efforts with respect to those programs that are tied to such funding and may impose requirements that limit its ability to take specified actions, increase the costs of commercialization and production of product candidates developed under those programs, and subject Salarius to potential financial penalties, which could materially and adversely affect its business, financial condition, and results of operations.

During the course of Salarius' development of its product candidates, it has been funded in part through federal and state grants, including but not limited to the funding it received from CPRIT. If CPRIT terminates the agreement prior to the expiration due to an event of default or if Private Salarius terminates the agreement, CPRIT may require Private Salarius to repay some or all of the disbursed grant.

In addition to the funding Salarius has received to date, it intends to continue to apply for federal and state grants to receive additional funding in the future. Contracts and grants funded by the U.S. government, state governments, and their related agencies include provisions that reflect the government's substantial rights and remedies, many of which are not typically found in commercial contracts, including powers of the government to:

- require repayment of all or a portion of the grant proceeds, in specified cases with interest, in the event Salarius violates specified covenants pertaining to various matters that include a failure to achieve specified milestones or to comply with terms relating to use of grant proceeds, or failure to comply with specified laws;
- terminate agreements, in whole or in part, for any reason or no reason;
- reduce or modify the government's obligations under such agreements without the consent of the other party;
- claim rights, including intellectual property rights, in products and data developed under such agreements;
- audit contract related costs and fees, including allocated indirect costs;
- suspend the contractor or grantee from receiving new contracts pending resolution of alleged violations of procurement laws or regulations;
- impose U.S. manufacturing requirements for products that embody inventions conceived or first reduced to practice under such agreements;
- impose qualifications for the engagement of manufacturers, suppliers and other contractors as well as other criteria for reimbursements;
- suspend or debar the contractor or grantee from doing future business with the government;
- control and potentially prohibit the export of products;
- pursue criminal or civil remedies under the False Claims Act, False Statements Act and similar remedy provisions specific to government agreements; and
- limit the government's financial liability to amounts appropriated by the U.S. Congress on a fiscal year basis, thereby leaving some uncertainty about the future availability of funding for a program even after it has been funded for an initial period.

In addition to those powers set forth above, the government funding Salarius may receive could also impose requirements to make payments based upon sales of its products, if any, in the future.

Salarius may not have the right to prohibit the U.S. government from using specified technologies developed by it, and Salarius may not be able to prohibit third-party companies, including its competitors, from using those technologies in providing products and services to the U.S. government. The U.S. government generally takes the position that it has the right to royalty-free use of technologies that are developed under U.S. government contracts. These and other provisions of government grants may also apply to intellectual property Salarius licenses now or in the future.

In addition, government contracts and grants normally contain additional requirements that may increase Salarius' costs of doing business, reduce its profits, and expose it to liability for failure to comply with these terms and conditions. These requirements include, for example:

- specialized accounting systems unique to government contracts and grants;
- mandatory financial audits and potential liability for price adjustments or recoupment of government funds after such funds have been spent;
- public disclosures of some contract and grant information, which may enable competitors to gain insights into Salarius' research program; and
- mandatory socioeconomic compliance requirements, including labor standards, non-discrimination and affirmative action programs and environmental compliance requirements.

If Salarius fails to maintain compliance with any such requirements that may apply to it now or in the future, Salarius may be subject to potential liability and to termination of Salarius' contracts.

If Salarius fails to comply with environmental, health and safety laws and regulations, Salarius could become subject to fines or penalties or incur costs and liabilities that could have a material adverse effect on its business, financial condition, or results of operations.

Salarius' research and development activities and its third-party manufacturers' and suppliers' activities involve the controlled storage, use, and disposal of hazardous materials, including the components of its product candidates and other hazardous compounds. Salarius and its manufacturers and suppliers are subject to laws and regulations governing the use, manufacture, storage, handling, and disposal of these hazardous materials. In some cases, these hazardous materials and various wastes resulting from their use are stored at Salarius' and its manufacturers' facilities pending their use and disposal. Salarius cannot eliminate the risk of contamination, which could cause an interruption of its commercialization efforts, research and development efforts and business operations, environmental damage resulting in costly clean-up and liabilities under applicable laws and regulations governing the use, storage, handling, and disposal of these materials and specified waste products. Although Salarius believes that the safety procedures utilized by it and its third-party manufacturers for handling and disposing of these materials generally comply with the standards prescribed by these laws and regulations, Salarius cannot guarantee that this is the case or eliminate the risk of accidental contamination or injury from these materials. In such an event, Salarius may be held liable for any resulting damages and such liability could exceed its resources and state or federal or other applicable authorities may curtail Salarius' use of specified materials and/or interrupt its business operations. Furthermore, environmental laws and regulations are complex, change frequently, and have tended to become more stringent. Salarius cannot predict the impact of such changes and cannot be certain of its future compliance. Salarius does not currently carry biological or hazardous waste insurance coverage.

Risks Related to Salarius' Intellectual Property

Salarius may not be successful in obtaining or maintaining necessary rights to its targets, product compounds and processes for its development pipeline through acquisitions and in-licenses.

Presently, Salarius has rights to the intellectual property, through licenses from third parties and under patents and patent applications that Salarius owns, to modulate only a subset of the known epigenetic enzyme targets.

Because Salarius' programs may involve a range of targets, including targets that require the use of proprietary rights held by third parties, the growth of its business may depend in part on Salarius' ability to acquire, in-license or use these proprietary rights. In addition, Salarius' product candidates may require specific formulations to work effectively and efficiently and these rights may be held by others. Salarius may be unable to acquire or in-license any compositions, methods of use, processes or other third-party intellectual property rights from third parties that it identifies. The licensing and acquisition of third-party intellectual property rights is a competitive area, and a number of more established companies are also pursuing strategies to license or acquire third-party intellectual property rights that Salarius may consider attractive. These established companies may have a competitive advantage over Salarius due to their size, cash resources and greater clinical development and commercialization capabilities.

For example, Salarius has previously and may continue to collaborate with academic institutions worldwide to accelerate its pre-clinical and clinical research or development under written agreements with these institutions. Typically, these institutions provide an option to negotiate a license to any of the institution's rights in technology resulting from the collaboration. Regardless of such right of first negotiation for intellectual property, Salarius may be unable to negotiate a license within the specified time frame or under terms that are acceptable to it. If Salarius is unable to do so, the institution may offer the intellectual property rights to other parties, potentially blocking Salarius' ability to pursue its program.

In addition, companies that perceive Salarius to be a competitor may be unwilling to assign or license rights to it. Salarius also may be unable to license or acquire third-party intellectual property rights on terms that would allow it to make an appropriate return on its investment. If Salarius is unable to successfully obtain rights to third-party intellectual property rights, its business, financial condition, and prospects for growth could suffer.

Salarius intends to rely on patent rights for its product candidates and any future product candidates. If Salarius is unable to obtain or maintain exclusivity from the combination of these approaches, Salarius may not be able to compete effectively in its markets.

Salarius relies or will rely upon a combination of patents, trade secret protection, and confidentiality agreements to protect the intellectual property related to its technologies and product candidates. Its success depends in large part on its and its licensors' ability to obtain regulatory exclusivity and maintain patent and other intellectual property protection in the United States and in other countries with respect to its proprietary technology and products.

Salarius has sought to protect its proprietary position by filing patent applications in the United States and abroad related to its product candidates that are important to its business. This process is expensive and time consuming, and Salarius may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that Salarius will fail to identify patentable aspects of its research and development output before it is too late to obtain patent protection.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain and involves complex legal and factual questions for which legal principles remain unresolved. The patent applications that Salarius owns or in-licenses may fail to result in issued patents with claims that cover its product candidates in the United States or in other foreign countries. There is no assurance that all potentially relevant prior art relating to its patents and patent applications has been found, which can invalidate a patent or prevent a patent from issuing from a pending patent application. Even if patents do successfully issue, and even if such patents cover Salarius' product candidates, third parties may challenge their validity, enforceability, or scope, which may result in such patents being narrowed, found unenforceable, or invalidated. Furthermore, even if they are unchallenged, Salarius' patents and patent applications may not adequately protect its intellectual property, provide exclusivity for its product candidates, or prevent others from designing around Salarius claims. Any of these outcomes could impair Salarius' ability to prevent competition from third parties, which may have an adverse impact on its business.

Salarius, independently or together with its licensors, has filed several patent applications covering various aspects of its product candidates. Salarius cannot offer any assurances about which, if any, patents will issue, the breadth of any such patent or whether any issued patents will be found invalid and unenforceable or will be threatened by third parties. Any successful opposition to these patents or any other patents owned by or licensed to Salarius after patent issuance could deprive Salarius of rights necessary for the successful commercialization of any product candidates that Salarius may develop. Further, if Salarius encounters delays in regulatory approvals, the period of time during which Salarius could market a product candidate under patent protection could be reduced.

If Salarius cannot obtain and maintain effective protection of exclusivity from its regulatory efforts and intellectual property rights, including patent protection or data exclusivity, for its product candidates, Salarius may not be able to compete effectively and its business and results of operations would be harmed.

Salarius may not have sufficient patent term protections for its product candidates to effectively protect its business.

Patents have a limited term. In the United States, the statutory expiration of a patent is generally 20 years after it is filed. Although various extensions may be available, the life of a patent, and the protection it affords, is limited. Even if patents covering its product candidates are obtained, once the patent life has expired for a product candidate, Salarius may be open to competition from generic medications. In addition, upon issuance in the United States any patent term can be adjusted based on specified delays caused by the applicant(s) or the U.S. Patent and Trademark Office (“USPTO”).

Patent term extensions under the Hatch-Waxman Act in the United States and under supplementary protection certificates in Europe may be available to extend the patent or data exclusivity terms of Salarius’ product candidates. Salarius will likely rely on patent term extensions, and Salarius cannot provide any assurances that any such patent term extensions will be obtained and, if so, for how long. As a result, Salarius may not be able to maintain exclusivity for its product candidates for an extended period after regulatory approval, if any, which would negatively impact its business, financial condition, results of operations, and prospects. If Salarius does not have sufficient patent terms or regulatory exclusivity to protect its product candidates, its business, and results of operations will be adversely affected.

Changes in U.S. patent law could diminish the value of patents in general, thereby impairing Salarius’ ability to protect its products, and recent patent reform legislation could increase the uncertainties and costs surrounding the prosecution of its patent applications and the enforcement or defense of its issued patents.

As is the case with other biotechnology companies, Salarius’ success is heavily dependent on patents and the ability to enforce and protect these patients. Obtaining and enforcing patents in the biotechnology industry involve both technological and legal complexity, and is therefore costly, time-consuming, and inherently uncertain. In addition, the United States has recently enacted and is currently implementing wide-ranging patent reform legislation. Recent U.S. Supreme Court rulings have narrowed the scope of patent protection available in specified circumstances and weakened the rights of patent owners in specified situations. In addition to increasing uncertainty with regard to Salarius’ 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 Salarius’ ability to obtain new patents or to enforce Salarius’ existing patents and patents that it might obtain in the future. Some of Salarius’ patent claims may be affected by the recent U.S. Supreme Court decision in Association for Molecular Pathology v. Myriad Genetics. In Myriad, the Supreme Court held that unmodified isolated fragments of genomic sequences, such as the DNA constituting the BRCA1 and BRCA2 genes, are not eligible for patent protection because they constitute a product of nature. The exact boundaries of the Supreme Court’s decision remain unclear as the Supreme Court did not address other types of nucleic acids.

On December 16, 2014, the USPTO issued guidance to patent examiners titled 2014 Interim Guidance on Patent Subject Matter Eligibility (Fed. Reg. 79 (241): 74618-33. These guidelines instruct USPTO examiners on the ramifications of the Prometheus and Myriad rulings and apply the Myriad ruling to natural products and principles including all naturally occurring nucleic acids. In addition, the USPTO continues to provide updates to its guidance and this is a developing area. The recent USPTO guidance could make it impossible for Salarius to pursue similar patent claims in patent applications Salarius may prosecute in the future.

Salarius' patent portfolio contains claims of various types and scope, including chemically modified mimics, as well as methods of medical treatment. The presence of varying claims in Salarius' patent portfolio significantly reduces, but may not eliminate, its exposure to potential validity challenges under Myriad or future judicial decisions. However, it is not yet clear what, if any, impact this recent Supreme Court decision or future decisions will have on the operation of Salarius' business.

For Salarius' U.S. patent applications containing a claim not entitled to priority before March 16, 2013, there is a greater level of uncertainty in the patent law. On September 16, 2011, the Leahy-Smith America Invents Act (the "Leahy-Smith Act") was signed into law. The Leahy-Smith Act includes a number of significant changes to U.S. patent law. These include provisions that affect the way patent applications will be prosecuted and may also affect patent litigation. The USPTO has promulgated regulations and developed procedures to govern administration of the Leahy-Smith Act, and many of the substantive changes to patent law associated with the Leahy-Smith Act, and in particular, the first to file provisions, did not come into effect until March 16, 2013. Accordingly, it is not yet clear what, if any, impact the Leahy-Smith Act will have on the operation of Salarius' business. However, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of its patent applications and the enforcement or defense of its issued patents, all of which could have a material adverse effect on Salarius' business, financial condition or results of operations.

An important change introduced by the Leahy-Smith Act is that, as of March 16, 2013, the United States transitioned to a "first-to-file" system for deciding which party should be granted a patent when two or more patent applications are filed by different parties claiming the same invention. A third party that files a patent application in the USPTO after that date but before Salarius could therefore be awarded a patent covering an invention of Salarius' even if Salarius had made the invention before it was made by the third party. This will require Salarius to be cognizant going forward of the time from invention to filing of a patent application. Furthermore, Salarius' ability to obtain and maintain valid and enforceable patents depends on whether the differences between its technology and the prior art allow its technology to be patentable over the prior art. Since patent applications in the United States and most other countries are confidential for a period of time after filing, Salarius cannot be certain that it was the first to either (i) file any patent application related to its product candidates or (ii) invent any of the inventions claimed in its patents or patent applications.

Among some of the other changes introduced by the Leahy-Smith Act are changes that limit where a patentee may file a patent infringement suit and new procedures providing opportunities for third parties to challenge any issued patent in the USPTO. Included in these new procedures is a process known as Inter Partes Review ("IPR"), which has been generally used by many third parties over the past two years to invalidate patents. The IPR process is not limited to patents filed after the Leahy-Smith Act was enacted, and would therefore be available to a third party seeking to invalidate any of Salarius' U.S. patents, even those issued before March 16, 2013. Because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standard in U.S. federal court necessary to invalidate a patent claim, a third party could potentially provide evidence in a USPTO proceeding sufficient for the USPTO to hold a claim invalid even though the same evidence would be insufficient to invalidate the claim if first presented in a district court action. Accordingly, a third party may attempt to use the USPTO procedures to invalidate Salarius' patent claims that would not have been invalidated if first challenged by the third party as a defendant in a district court action.

If Salarius is unable to maintain effective proprietary rights for its product candidates or any future product candidates, Salarius may not be able to compete effectively in its proposed markets.

In addition to the protection afforded by patents, Salarius relies on trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable or that Salarius elects not to patent, processes for which patents are difficult to enforce and any other elements of its product candidate discovery and development processes that involve proprietary know-how, information or technology that is not covered by patents. However, trade secrets can be difficult to protect. Salarius seeks to protect its proprietary technology and processes, in part, by entering into confidentiality agreements with its employees, consultants, scientific advisors, and contractors. Salarius also seeks to preserve the integrity and confidentiality of its data and trade secrets by maintaining physical security of its premises and physical and electronic security of its information technology systems. While Salarius has confidence in these individuals, organizations and systems, agreements or security measures may be breached, and Salarius may not have adequate remedies for any breach. In addition, its trade secrets may otherwise become known or be independently discovered by competitors.

Although Salarius expects all of its employees and consultants to assign their inventions to Salarius, and all of its employees, consultants, advisors, and any third parties who have access to its proprietary know- how, information, or technology to enter into confidentiality agreements, Salarius cannot provide any assurances that all such agreements have been duly executed or that its trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to its trade secrets or independently develop substantially equivalent information and techniques. Misappropriation or unauthorized disclosure of Salarius' trade secrets could impair its competitive position and may have a material adverse effect on its business, financial condition, or results of operations. Additionally, if the steps taken to maintain its trade secrets are deemed inadequate, Salarius may have insufficient recourse against third parties for misappropriating the trade secret.

Third-party claims of intellectual property infringement may prevent or delay Salarius' development and commercialization efforts.

Salarius' commercial success depends in part on its ability to develop, manufacture, market, and sell its product candidates and use its proprietary technology without infringing the patent rights of third parties.

Numerous third-party U.S. and non-U.S. issued patents and pending applications exist in the area of epigenetic enzyme inhibitors and related technologies. Salarius is aware of U.S. and foreign patents and pending patent applications owned by third parties that cover therapeutic uses of epigenetic inhibitors. Salarius is currently monitoring these patents and patent applications. Salarius may in the future pursue available proceedings in the U.S. and foreign patent offices to challenge the validity of these patents and patent applications. In addition, or alternatively, Salarius may consider whether to seek to negotiate a license of rights to technology covered by one or more of such patents and patent applications. If any patents or patent applications cover its product candidates or technologies, Salarius may not be free to manufacture or market its product candidates, as planned, absent such a license, which may not be available to Salarius on commercially reasonable terms, or at all.

It is also possible that Salarius has failed to identify relevant third-party patents or applications. For example, applications filed before November 29, 2000 and applications filed after that date that will not be filed outside the United States remain confidential until patents issue. Moreover, it is difficult for industry participants, including Salarius, to identify all third-party patent rights that may be relevant to its product candidates and technologies because patent searching is imperfect due to differences in terminology among patents, incomplete databases, and the difficulty in assessing the meaning of patent claims. Salarius may fail to identify relevant patents or patent applications or may identify pending patent applications of potential interest but incorrectly predict the likelihood that such patent applications may issue with claims of relevance to its technology. In addition, Salarius may be unaware of one or more issued patents that would be infringed by the manufacture, sale, or use of a current or future product candidate, or Salarius may incorrectly conclude that a third-party patent

is invalid, unenforceable or not infringed by its activities. Additionally, pending patent applications that have been published can, subject to specified limitations, be later amended in a manner that could cover Salarius' technologies, its product candidates, or the use of its product candidates.

There have been many lawsuits and other proceedings involving patent and other intellectual property rights in the biotechnology and pharmaceutical industries, including patent infringement lawsuits, interferences, oppositions, and reexamination proceedings before the USPTO and corresponding foreign patent offices. Numerous U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which Salarius is developing product candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that its product candidates may be subject to claims of infringement of the patent rights of third parties.

Parties making claims against Salarius may obtain injunctive or other equitable relief, which could effectively block its ability to further develop and commercialize one or more of its product candidates. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from its business. In the event of a successful claim of infringement against Salarius, Salarius may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, pay royalties, redesign its infringing products, or obtain one or more licenses from third parties, which may be impossible or require substantial time and monetary expenditure.

Salarius may not be successful in meeting its obligations under its existing license agreements necessary to maintain its product candidate licenses in effect. In addition, if required in order to commercialize its product candidates, Salarius may be unsuccessful in obtaining or maintaining necessary rights to its product candidates through acquisitions and in-licenses.

Salarius currently has rights to the intellectual property, through licenses from third parties and under patents that Salarius does not own, to develop and commercialize its product candidates. Because its programs may require the use of proprietary rights held by third parties, the growth of its business will likely depend in part on its ability to maintain in effect these proprietary rights. Any termination of license agreements with third parties with respect to its product candidates would be expected to negatively impact its business prospects.

Salarius may be unable to acquire or in-license any compositions, methods of use, processes, or other third-party intellectual property rights from third parties that Salarius identifies as necessary for its product candidates.

The licensing and acquisition of third-party intellectual property rights is a competitive area, and a number of more established companies are also pursuing strategies to license or acquire third-party intellectual property rights that Salarius may consider attractive. These established companies may have a competitive advantage over Salarius due to their size, cash resources, and greater clinical development and commercialization capabilities. In addition, companies that perceive Salarius to be a competitor may be unwilling to assign or license rights to Salarius. Even if Salarius is able to license or acquire third-party intellectual property rights that are necessary for its product candidates, there can be no assurance that they will be available on favorable terms.

Salarius collaborates with academic institutions worldwide to identify product candidates, accelerate its research, and conduct development. Typically, these institutions have provided Salarius with an option to negotiate an exclusive license to any of the institution's rights in the patents or other intellectual property resulting from the collaboration. Regardless of such option, Salarius may be unable to negotiate a license within the specified timeframe or under terms that are acceptable to Salarius. If Salarius is unable to do so, the institution may offer the intellectual property rights to other parties, potentially blocking its ability to pursue a program of interest to Salarius.

If Salarius is unable to successfully obtain and maintain rights to required third-party intellectual property, Salarius may have to abandon development of that product candidate or pay additional amounts to the third-party, and its business and financial condition could suffer.

The patent protection and patent prosecution for some of Salarius' product candidates is dependent on third parties.

While Salarius normally seeks and gains the right to fully prosecute the patents relating to its product candidates, there may be times when patents relating to its product candidates are controlled by its licensors. If future licensors fail to appropriately and broadly prosecute and maintain patent protection for patents covering any of its product candidates, its ability to develop and commercialize those product candidates may be adversely affected, and Salarius may not be able to prevent competitors from making, using, importing, and selling competing products. In addition, even where Salarius now has the right to control patent prosecution of patents and patent applications Salarius has licensed from third parties, Salarius may still be adversely affected or prejudiced by actions or inactions of its licensors in effect from actions prior to Salarius assuming control over patent prosecution.

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

Salarius is a party to intellectual property licenses and supply agreements that are important to its business and may enter into additional license agreements in the future. Salarius' existing agreements impose, and Salarius expects that future license agreements will impose, various diligence, milestone payment, royalty, purchasing, and other obligations on it. If Salarius fails to comply with its obligations under these agreements, or Salarius is subject to a bankruptcy, its agreements may be subject to termination by the licensor, in which event Salarius would not be able to develop, manufacture, or market products covered by the license or subject to supply commitments.

Salarius may be involved in lawsuits to protect or enforce its patents or the patents of its licensors, which could be expensive, time consuming, and unsuccessful.

Competitors may infringe Salarius' patents or the patents of its licensors. If Salarius or one of its licensing partners were to initiate legal proceedings against a third party to enforce a patent covering one of its product candidates, the defendant could counterclaim that the patent covering its product candidate is invalid and/or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness, written description, clarity, or non-enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO, or made a misleading statement, during prosecution. The outcome following legal assertions of invalidity and unenforceability is unpredictable.

Interference proceedings provoked by third parties or brought by Salarius or declared by the USPTO may be necessary to determine the priority of inventions with respect to Salarius' patents or patent applications or those of its licensors. An unfavorable outcome could require Salarius to cease using the related technology or to attempt to license rights to it from the prevailing party. Salarius' business could be harmed if the prevailing party does not offer Salarius a license on commercially reasonable terms. Its defense of litigation or interference proceedings may fail and, even if successful, may result in substantial costs and distract its management and other employees. In addition, the uncertainties associated with litigation could have a material adverse effect on its ability to raise the funds necessary to continue its clinical trials, continue its research programs, license necessary technology from third parties, or enter into development partnerships that would help Salarius bring its product candidates to market.

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

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

Salarius employs individuals who were previously employed at universities or other biotechnology or pharmaceutical companies, including Salarius' competitors or potential competitors. Although Salarius has written agreements and makes every effort to ensure that its employees, consultants, and independent contractors do not use the proprietary information or intellectual property rights of others in their work for Salarius, Salarius may in the future be subject to any claims that its employees, consultants, or independent contractors have wrongfully used or disclosed confidential information of third parties. Litigation may be necessary to defend against these claims. If Salarius fails in defending any such claims, in addition to paying monetary damages, Salarius may lose valuable intellectual property rights or personnel, which could adversely impact its business. Even if Salarius is successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

Salarius may not be able to protect its intellectual property rights throughout the world.

Filing, prosecuting, and defending patents on product candidates in all countries throughout the world would be prohibitively expensive, and its intellectual property rights in some countries outside the United States can be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Competitors may use Salarius' technologies in jurisdictions where Salarius has not obtained patent protection to develop its own products and may also export infringing products to territories where Salarius has patent protection, but enforcement is not as strong as that in the United States. These products may compete with its products and its patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of some countries, particularly some developing countries, do not favor the enforcement of patents, trade secrets, and other intellectual property protection, particularly those relating to biotechnology products, which could make it difficult for Salarius to stop the infringement of its patents or marketing of competing products in violation of its proprietary rights generally. Proceedings to enforce Salarius' patent rights in foreign jurisdictions, whether or not successful, could result in substantial costs and divert Salarius' efforts and attention from other aspects of its business, could put Salarius' patents at risk of being invalidated or interpreted narrowly, and its patent applications at risk of not issuing and could provoke third parties to assert claims against Salarius. Salarius may not prevail in any lawsuits that Salarius initiates and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, its efforts to enforce its intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that Salarius develops or licenses.

Risks Related to Salarius' Reliance on Third Parties

Salarius relies on or will rely on third parties to conduct its clinical trials, manufacture its product candidates and perform other services. If these third parties do not successfully perform and comply with regulatory requirements, Salarius may not be able to successfully complete clinical development, obtain regulatory approval or commercialize its product candidates and its business could be substantially harmed.

Salarius has relied upon and plans to continue to rely upon third-parties such as CROs, hospitals, etc. to conduct, monitor, and manage its ongoing clinical programs. Salarius relies on these parties for execution of clinical trials and manages and controls only some aspects of their activities. Salarius remains responsible for ensuring that each of its trials is conducted in accordance with the applicable protocol, legal, regulatory, and scientific standards and its reliance on these third parties does not relieve Salarius of its regulatory responsibilities. Salarius and its CROs and other vendors are required to comply with all applicable laws, regulations, and guidelines,

including those required by the FDA and comparable foreign regulatory authorities for all of its product candidates in clinical development. If Salarius or any of its CROs or vendors fail to comply with applicable laws, regulations, and guidelines, the results generated in its clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require Salarius to perform additional clinical trials before approving its marketing applications. Salarius cannot be assured that its CROs and other vendors will meet these requirements, or that upon inspection by any regulatory authority, such regulatory authority will determine that efforts, including any of its clinical trials, comply with applicable requirements. Its failure to comply with these laws, regulations, and guidelines may require Salarius to repeat clinical trials, which would be costly and delay the regulatory approval process.

If any of Salarius' relationships with these third-parties terminate, Salarius may not be able to enter into arrangements with alternative third parties in a timely manner or do so on commercially reasonable terms. In addition, third parties may not prioritize Salarius' clinical trials relative to those of other customers and any turnover in personnel or delays in the allocation of third party employees may negatively affect its clinical trials. If third parties do not successfully carry out their contractual duties or obligations or meet expected deadlines, Salarius' clinical trials may be delayed or terminated and Salarius may not be able to meet its current plans with respect to its product candidates. CROs, in particular, may also involve higher costs than anticipated, which could negatively affect Salarius' financial condition and operations.

In addition, Salarius does not currently have, nor does Salarius currently plan to establish the capability to manufacture product candidates for use in the conduct of its clinical trials, and Salarius lacks the resources and the capability to manufacture any of its product candidates on a clinical or commercial scale without the use of third- party manufacturers. Salarius plans to rely on third-party manufacturers and their responsibilities will include purchasing from third-party suppliers the materials necessary to produce its product candidates for its clinical trials and regulatory approval. There are expected to be a limited number of suppliers for the active ingredients and other materials that Salarius expects to use to manufacture its product candidates, and Salarius may not be able to identify alternative suppliers to prevent a possible disruption of the manufacture of its product candidates for its clinical trials, and, if approved, ultimately for commercial sale. Although Salarius generally does not expect to begin a clinical trial unless Salarius believes it has a sufficient supply of a product candidate to complete the trial, any significant delay or discontinuity in the supply of a product candidate, or the active ingredient or other material components in the manufacture of the product candidate could delay completion of its clinical trials and potential timing for regulatory approval of its product candidates, which would harm its business and results of operations.

Salarius expects to rely on third parties to manufacture its clinical product supplies, and Salarius intends to rely on third parties to produce and process its product candidates, if approved, and Salarius' commercialization of any of its product candidates could be stopped, delayed, or made less profitable if those third parties fail to obtain approval of government regulators, fail to provide Salarius with sufficient quantities of drug product, or fail to do so at acceptable quality levels or prices.

Salarius does not currently have nor does it currently plan to develop the infrastructure or capability internally to manufacture its clinical supplies for use in the conduct of Salarius' clinical trials, and Salarius lacks the resources and the capability to manufacture any of its product candidates on a clinical or commercial scale. Salarius currently relies on outside vendors to manufacture its clinical supplies of its product candidates and plans to continue relying on third parties to manufacture its product candidates on a commercial scale, if approved.

Salarius does not yet have sufficient information to reliably estimate the cost of the commercial manufacturing of its product candidates and its current costs to manufacture its drug products is not commercially feasible, and the actual cost to manufacture its product candidates could materially and adversely affect the commercial viability of its product candidates. As a result, Salarius may never be able to develop a commercially viable product.

In addition, Salarius' reliance on third-party manufacturers exposes Salarius to the following additional risks:

- Salarius may be unable to identify manufacturers on acceptable terms or at all.
- Salarius' third-party manufacturers might be unable to timely formulate and manufacture Salarius' product or produce the quantity and quality required to meet Salarius' clinical and commercial needs, if any.
- Contract manufacturers may not be able to execute Salarius' manufacturing procedures appropriately.
- Salarius' future third-party manufacturers may not perform as agreed or may not remain in the contract manufacturing business for the time required to supply its clinical trials or to successfully produce, store, and distribute its products.
- Manufacturers are subject to ongoing periodic unannounced inspection by the FDA and corresponding state agencies to ensure strict compliance with cGMPs and other government regulations and corresponding foreign standards. Salarius does not have control over third-party manufacturers' compliance with these regulations and standards.
- Salarius may not own, or may have to share, the intellectual property rights to any improvements made by Salarius' third-party manufacturers in the manufacturing process for its product candidates.
- Salarius' third-party manufacturers could breach or terminate their agreement with Salarius.

Each of these risks could delay Salarius' clinical trials, the approval, if any of its product candidates by the FDA or the commercialization of its product candidates or result in higher costs or deprive Salarius of potential product revenue. In addition, Salarius relies on third parties to perform release testing on its product candidates prior to delivery to patients. If these tests are not appropriately conducted and test data are not reliable, patients could be put at risk of serious harm and could result in product liability suits.

The manufacture of medical products is complex and requires significant expertise and capital investment, including the development of advanced manufacturing techniques and process controls. Manufacturers of medical products often encounter difficulties in production, particularly in scaling up and validating initial production and absence of contamination. These problems include difficulties with production costs and yields, quality control, including stability of the product, quality assurance testing, operator error, shortages of qualified personnel, as well as compliance with strictly enforced federal, state and foreign regulations. Furthermore, if contaminants are discovered in Salarius' supply of its product candidates or in the manufacturing facilities, such manufacturing facilities may need to be closed for an extended period of time to investigate and remedy the contamination. Salarius cannot be assured that any stability or other issues relating to the manufacture of its product candidates will not occur in the future. Additionally, Salarius' manufacturers may experience manufacturing difficulties due to resource constraints or as a result of labor disputes or unstable political environments. If Salarius' manufacturers were to encounter any of these difficulties, or otherwise fail to comply with their contractual obligations, Salarius' ability to provide its product candidates to patients in clinical trials would be jeopardized. Any delay or interruption in the supply of clinical trial supplies could delay the completion of clinical trials, increase the costs associated with maintaining clinical trial programs and, depending upon the period of delay, require Salarius to commence new clinical trials at additional expense or terminate clinical trials completely.

Salarius may be unable to realize the potential benefits of any current or future collaboration.

Salarius has entered into strategic collaborations and license agreements with the University of Utah, HLBLS, and CPRIT. While Salarius may seek to enter into future collaborations for the development and commercialization of its product candidates, there can be no assurance that it will be able to do so. Even if Salarius is successful in entering into a collaboration with respect to the development and/or commercialization of one or more product candidates, there is no guarantee that the collaboration will be successful and Salarius may be unable to realize in full or in part the potential benefits of any of its current collaborations.

Collaborations may pose a number of risks, including:

- collaborators often have significant discretion in determining the efforts and resources that they will apply to the collaboration, and may not commit sufficient resources to the development, marketing or commercialization of the product or products that are subject to the collaboration;
- collaborators may not perform their obligations as expected;
- any such collaboration may significantly limit Salarius' share of potential future profits from the associated program, and may require it to relinquish potentially valuable rights to its current product candidates, potential products or proprietary technologies or grant licenses on terms that are not favorable to Salarius;
- collaborators may cease to devote resources to the development or commercialization of Salarius' product candidates if the collaborators view its product candidates as competitive with their own products or product candidates;
- disagreements with collaborators, including disagreements over proprietary rights, contract interpretation, or the course of development, might cause delays or termination of the development or commercialization of product candidates, and might result in legal proceedings, which would be time consuming, distracting and expensive;
- collaborators may be impacted by changes in their strategic focus or available funding, or business combinations involving them, which could cause them to divert resources away from the collaboration;
- collaborators may infringe the intellectual property rights of third parties, which may expose Salarius to litigation and potential liability;
- the collaborations may not result in Salarius achieving revenues to justify such transactions; and
- collaborations may be terminated and, if terminated, may result in a need for Salarius to raise additional capital to pursue further development or commercialization of the applicable product candidate.

As a result, a collaboration may not result in the successful development or commercialization of Salarius' product candidates.

Salarius enters into various contracts in the normal course of its business in which Salarius indemnifies the other party to the contract. In the event Salarius has to perform under these indemnification provisions, it could have a material adverse effect on its business, financial condition and results of operations.

In the normal course of business, Salarius periodically enters into academic, commercial, service, collaboration, licensing, consulting, and other agreements that contain indemnification provisions. With respect to Salarius' academic and other research agreements, Salarius typically indemnifies the institution and related parties from losses arising from claims relating to the products, processes, or services made, used, sold, or performed pursuant to the agreements for which Salarius has secured licenses, and from claims arising from Salarius' or its sublicensees' exercise of rights under the agreement. With respect to Salarius' collaboration agreements, Salarius indemnifies its collaborators from any third-party product liability claims that could result from the production, use, or consumption of the product, as well as for alleged infringements of any patent or other intellectual property right by a third party. With respect to consultants, Salarius indemnifies them from claims arising from the good faith performance of their services.

Should Salarius' obligation under an indemnification provision exceed applicable insurance coverage or if Salarius were denied insurance coverage, Salarius' business, financial condition, and results of operations could be adversely affected. Similarly, if Salarius is relying on a collaborator to indemnify Salarius and the collaborator is denied insurance coverage or the indemnification obligation exceeds the applicable insurance coverage, and if the collaborator does not have other assets available to indemnify Salarius, its business, financial condition, and results of operations could be adversely affected.

Risks Related to Commercialization of Salarius' Product Candidates

Salarius currently has very limited marketing and sales experience. If Salarius is unable to establish sales and marketing capabilities or enter into agreements with third parties to market and sell its product candidates, Salarius may be unable to generate any revenue.

Although some of its employees may have marketed, launched, and sold other pharmaceutical products in the past while employed at other companies, Salarius has no experience selling and marketing its product candidates and Salarius currently has no marketing or sales organization. To successfully commercialize any products that may result from its development programs, Salarius will need to find one or more collaborators to commercialize its products or invest in and develop these capabilities, either on its own or with others, which would be expensive, difficult, and time consuming. Any failure or delay in the timely development of Salarius' internal commercialization capabilities could adversely impact the potential for success of its products.

If commercialization collaborators do not commit sufficient resources to commercialize its future products and Salarius is unable to develop the necessary marketing and sales capabilities on its own, Salarius will be unable to generate sufficient product revenue to sustain or grow its business. Salarius may be competing with companies that currently have extensive and well-funded marketing and sales operations, particularly in the markets its product candidates are intended to address. Without appropriate capabilities, whether directly or through third-party collaborators, Salarius may be unable to compete successfully against these more established companies.

Salarius may attempt to form collaborations in the future with respect to its product candidates, but it may not be able to do so, which may cause it to alter its development and commercialization plans.

Salarius may attempt to form strategic collaborations, create joint ventures, or enter into licensing arrangements with third parties with respect to its programs that it believes will complement or augment its existing business. Salarius may face significant competition in seeking appropriate strategic collaborators, and the negotiation process to secure appropriate terms is time consuming and complex. Salarius may not be successful in its efforts to establish such a strategic collaboration for any product candidates and programs on terms that are acceptable to it, or at all. This may be because Salarius' product candidates and programs may be deemed to be at too early of a stage of development for collaborative effort, its research and development pipeline may be viewed as insufficient, the competitive or intellectual property landscape may be viewed as too intense or risky, and/or third parties may not view its product candidates and programs as having sufficient potential for commercialization, including the likelihood of an adequate safety and efficacy profile.

Any delays in identifying suitable collaborators and entering into agreements to develop and/or commercialize Salarius' product candidates could delay the development or commercialization of its product candidates, which may reduce their competitiveness even if they reach the market. Absent a strategic collaborator, Salarius would need to undertake development and/or commercialization activities at its own expense. If Salarius elects to fund and undertake development and/or commercialization activities on its own, it may need to obtain additional expertise and additional capital, which may not be available to it on acceptable terms or at all. If Salarius is unable to do so, it may not be able to develop its product candidates or bring them to market and its business may be materially and adversely affected.

If the market opportunities for its product candidates are smaller than Salarius believes they are, Salarius may not meet its future revenue expectations and its business may suffer.

Given the small number of patients who have the diseases that Salarius is targeting, its eligible patient population and pricing estimates may differ significantly from the actual market addressable by its product candidates. For example, based off data from the National Institute of Health (NIH) and physician collaborators, Salarius believes that there are approximately 500 Ewing sarcoma patients diagnosed annually in the United States. Because the patient populations in the market for its product candidates may be small, Salarius must be able to successfully identify patients and acquire a significant market share to achieve profitability and growth, and the failure to do so would negatively affect its revenue and operating results.

Salarius faces substantial competition and its competitors may discover, develop, or commercialize products faster or more successfully than Salarius.

The development and commercialization of new drug products is highly competitive. Salarius faces competition from major pharmaceutical companies, specialty pharmaceutical companies, biotechnology companies, universities, and other research institutions worldwide with respect to oncology therapies and the other product candidates that it may seek to develop or commercialize in the future. The list of companies working on some form of cancer treatment is almost limitless with big and small companies working on every aspect of oncology therapies worldwide.

If Salarius' competitors obtain marketing approval from the FDA or comparable foreign regulatory authorities for their product candidates more rapidly than Salarius, it could result in its competitors establishing a strong market position before Salarius is able to enter the market.

Many of Salarius' competitors have materially greater name recognition and financial, manufacturing, marketing, research, and drug development resources than it does. Additional mergers and acquisitions in the biotechnology and pharmaceutical industries may result in even more resources being concentrated in its competitors. Large pharmaceutical companies in particular have extensive expertise in pre-clinical and clinical testing and in obtaining regulatory approvals for drugs. In addition, academic institutions, government agencies, and other public and private organizations conducting research may seek patent protection with respect to potentially competitive products or technologies. These organizations may also establish exclusive collaborative or licensing relationships with Salarius' competitors. Failure of Seclidemstat or other product candidates to effectively compete against established treatment options or in the future with new products currently in development would harm Salarius' business, financial condition, results of operations, and prospects.

The commercial success of any of Salarius' current or future product candidates will depend upon the degree of market acceptance by physicians, patients, third-party payors, and others in the medical community.

Even if Salarius obtains the necessary approvals from the FDA and comparable foreign regulatory authorities, the commercial success of Salarius' products will depend in part on the health care providers, patients, and third-party payors accepting its product candidates as medically useful, cost-effective, and safe. Any product that Salarius brings to the market may not gain market acceptance by physicians, patients, and third-party payors. The degree of market acceptance of any of Salarius' products will depend on a number of factors, including but not limited to:

- the efficacy of the product as demonstrated in clinical trials and potential advantages over competing treatments;
- the prevalence and severity of the disease and any side effects;
- the clinical indications for which approval is granted, including any limitations or warnings contained in a product's approved labeling;
- the convenience and ease of administration;
- the cost of treatment;
- the willingness of the patients and physicians to accept these therapies;
- the perceived ratio of risk and benefit of these therapies by physicians and the willingness of physicians to recommend these therapies to patients based on such risks and benefits;
- the marketing, sales, and distribution support for the product;
- the publicity concerning its products or competing products and treatments; and
- the pricing and availability of third-party insurance coverage and reimbursement.

Even if a product displays a favorable efficacy and safety profile upon approval, market acceptance of the product remains uncertain. Efforts to educate the medical community and third-party payors on the benefits of the products may require significant investment and resources and may never be successful. If its products fail to achieve an adequate level of acceptance by physicians, patients, third-party payors, and other health care providers, Salarius will not be able to generate sufficient revenue to become or remain profitable.

Salarius may not be successful in any efforts to identify, license, discover, develop, or commercialize additional product candidates.

Although a substantial amount of Salarius' effort will focus on the continued clinical testing, potential approval, and commercialization of its existing product candidates, the success of Salarius' business is also expected to depend in part upon its ability to identify, license, discover, develop, or commercialize additional product candidates. Research programs to identify new product candidates require substantial technical, financial, and human resources. Salarius may focus its efforts and resources on potential programs or product candidates that ultimately prove to be unsuccessful. Salarius' research programs or licensing efforts may fail to yield additional product candidates for clinical development and commercialization for a number of reasons, including but not limited to the following:

- Salarius' research or business development methodology or search criteria and process may be unsuccessful in identifying potential product candidates;
- Salarius may not be able or willing to assemble sufficient resources to acquire or discover additional product candidates;
- its product candidates may not succeed in pre-clinical or clinical testing;
- its potential product candidates may be shown to have harmful side effects or may have other characteristics that may make the products unmarketable or unlikely to receive marketing approval;
- competitors may develop alternatives that render Salarius' product candidates obsolete or less attractive;
- product candidates Salarius develops may be covered by third parties' patents or other exclusive rights;
- the market for a product candidate may change during Salarius' program so that such a product may become unreasonable to continue to develop;
- a product candidate may not be capable of being produced in commercial quantities at an acceptable cost, or at all; and
- a product candidate may not be accepted as safe and effective by patients, the medical community, or third-party payors.

If any of these events occur, Salarius may be forced to abandon its development efforts for a program or programs, or Salarius may not be able to identify, license, discover, develop, or commercialize additional product candidates, which would have a material adverse effect on its business, financial condition, or results of operations and could potentially cause Salarius to cease operations.

Failure to obtain or maintain adequate reimbursement or insurance coverage for products when approved to market, if any, could limit Salarius' ability to market those products and decrease its ability to generate revenue.

The pricing, coverage, and reimbursement of Salarius' approved products, if any, must be sufficient to support its commercial efforts and other development programs and the availability and adequacy of coverage and reimbursement by third-party payors, including governmental and private insurers, are essential for most patients to be able to afford expensive treatments. Sales of Salarius' approved products, if any, will depend substantially,

both domestically and abroad, on the extent to which the costs of its approved products, if any, will be paid for or reimbursed by health maintenance, managed care, pharmacy benefit, and similar healthcare management organizations, or government payors and private payors. If coverage and reimbursement are not available, or are available only in limited amounts, Salarius may have to subsidize or provide products for free or Salarius may not be able to successfully commercialize its products.

In addition, there is significant uncertainty related to the insurance coverage and reimbursement for newly approved products. In the United States, the principal decisions about coverage and reimbursement for new drugs are typically made by Centers for Medicare and Medicaid Services, ("CMS"), an agency within the U.S. Department of Health and Human Services, as CMS decides whether and to what extent a new drug will be covered and reimbursed under Medicare. Private payors tend to follow the coverage reimbursement policies established by CMS to a substantial degree. It is difficult to predict what CMS will decide with respect to reimbursement for novel product candidates such as Salarius' and what reimbursement codes its product candidates may receive if approved.

Outside the United States, international operations are generally subject to extensive governmental price controls and other price-restrictive regulations, and Salarius believes the increasing emphasis on cost-containment initiatives in Europe, Canada, and other countries has and will continue to put pressure on the pricing and usage of products. In many countries, the prices of products are subject to varying price control mechanisms as part of national health systems. Price controls or other changes in pricing regulation could restrict the amount that Salarius is able to charge for its products, if any. Accordingly, in markets outside the United States, the potential revenue may be insufficient to generate commercially reasonable revenue and profits.

Moreover, increasing efforts by governmental and private payors in the United States and abroad to limit or reduce healthcare costs may result in restrictions on coverage and the level of reimbursement for new products and, as a result, they may not cover or provide adequate payment for its products. Salarius expects to experience pricing pressures in connection with products due to the increasing trend toward managed healthcare, including the increasing influence of health maintenance organizations and additional legislative changes. The downward pressure on healthcare costs in general, particularly prescription drugs has and is expected to continue to increase in the future. As a result, profitability of Salarius' products, if any, may be more difficult to achieve even if they receive regulatory approval.

Risks Related to Salarius' Business Operations

Salarius' future success depends in part on its ability to retain its president and chief executive officer and to attract, retain, and, motivate other qualified personnel.

Salarius is a small company with a limited number of employees performing multiple tasks each. Salarius is highly dependent on David J. Arthur, its president and chief executive officer, the loss of whose services may adversely impact the achievement of its objectives. Although Mr. Arthur's employment agreement contains a non-compete provision for a period of one year following the termination of his employment agreement, he could leave Salarius' employment at any time, as he is an "at will" employee. Recruiting and retaining other qualified employees, consultants, and advisors for Salarius' business, including scientific and technical personnel, will also be critical to Salarius success. There is currently a shortage of highly qualified personnel in Salarius' industry, which is likely to continue. Additionally, this shortage of highly qualified personnel is particularly acute in the area where Salarius is located. As a result, competition for personnel is intense and the turnover rate can be high. Salarius may not be able to attract and retain personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for individuals with similar skill sets. In addition, failure to succeed in development and commercialization of Salarius' product candidates may make it more challenging to recruit and retain qualified personnel. The inability to recruit and retain qualified personnel, or the loss of the services of Mr. Arthur may impede the progress of Salarius' research, development, and commercialization objectives and would negatively impact Salarius' ability to succeed in its product development strategy.

Salarius will need to expand its organization and Salarius may experience difficulties in managing this growth, which could disrupt its operations.

As of December 26, 2019, Salarius had six full-time employees and two part-time employees. As Salarius' development and commercialization plans and strategies develop, Salarius expects to need additional managerial, operational, sales, marketing, financial, legal, and other resources. Its management may need to divert a disproportionate amount of its attention away from its day-to-day activities and devote a substantial amount of time to managing these growth activities. Salarius may not be able to effectively manage the expansion of its operations, which may result in weaknesses in its infrastructure, operational mistakes, loss of business opportunities, loss of employees, and reduced productivity among remaining employees. Salarius' expected growth could require significant capital expenditures and may divert financial resources from other projects, such as the development of additional product candidates. If its management is unable to effectively manage its growth, its expenses may increase more than expected, its ability to generate and/or grow revenue could be reduced and Salarius may not be able to implement its business strategy. Salarius' future financial performance and its ability to commercialize product candidates and compete effectively will depend, in part, on its ability to effectively manage any future growth.

Failure in Salarius' information technology and storage systems could significantly disrupt the operation of Salarius' business and/or lead to potential large liabilities.

Salarius' ability to execute its business plan and maintain operations depends on the continued and uninterrupted performance of its information technology systems. Information technology systems are vulnerable to risks and damages from a variety of sources, including telecommunications or network failures, malicious human acts, and natural disasters. Moreover, despite network security and back-up measures, some of Salarius' and its vendors' servers are potentially vulnerable to physical or electronic break-ins, including cyber-attacks, computer viruses, and similar disruptive problems. These events could lead to the unauthorized access, disclosure, and use of non-public information which in turn could lead to operational difficulties and liabilities.

A security breach or privacy violation that leads to disclosure of consumer, customer, supplier, partner, or employee information (including personally identifiable information or protected health information) could harm Salarius' reputation, compel Salarius to comply with disparate state and foreign breach notification laws, and otherwise subject it to liability under laws that protect personal data, resulting in increased costs or loss of revenue.

The techniques used by criminal elements to attack computer systems are sophisticated, change frequently and may originate from less regulated and remote areas of the world. As a result, Salarius may not be able to address these techniques proactively or implement adequate preventative measures. If its computer systems are compromised, it could be subject to fines, damages, litigation, and enforcement actions, and it could lose trade secrets, the occurrence of which could harm its business. Despite precautionary measures to prevent unanticipated problems that could affect its information technology systems, sustained or repeated system failures that interrupt Salarius' ability to generate and maintain data could adversely affect its ability to operate its business. In addition, a data security breach could distract management or other key personnel from performing their primary operational duties.

The interpretation and application of consumer and data protection laws in the United States, Europe, and elsewhere are often uncertain, contradictory and in flux. Among other things, foreign privacy laws impose significant obligations on U.S. companies to protect the personal information of foreign citizens. It is possible that these laws may be interpreted and applied in a manner that is inconsistent with Salarius' data practices, which could have a material adverse effect on Salarius' business. Complying with these various laws could cause Salarius to incur substantial costs or require it to change its business practices in a manner adverse to its business.

Risks Related to This Offering and Our Securities

You will experience immediate and substantial dilution as a result of this offering and may experience additional dilution in the future.

You will incur immediate and substantial dilution as a result of this offering. After giving effect to the sale by us of units offered in this offering at a public offering price of $1.15 per unit, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us, investors in this offering can expect an immediate dilution of approximately $0.38 per unit. See "Dilution" for a more detailed discussion of the dilution you will incur if you purchase our common stock in the offering. In addition, the conversion of shares of Series A Preferred Stock and exercise of the warrants will result in the issuance of additional shares of common stock that will result in significant dilution to holders of our common stock.

The terms of the Series A Preferred Stock and the warrants could impede our ability to enter into certain transactions or obtain additional financing.

The terms of the Series A Preferred Stock and the warrants require us, upon the consummation of any "fundamental transaction" (as defined in the securities), to, among other obligations, cause any successor entity resulting from the fundamental transaction to assume all of our obligations under the Series A Preferred Stock and the warrants and the associated transaction documents. In addition, holders of Series A Preferred Stock and warrants are entitled to participate in any fundamental transaction on an as-converted or as-exercised basis, which could result in the holders of our common stock receiving a lesser portion of the consideration from a fundamental transaction. The terms of the Series A Preferred Stock and the warrants could also impede our ability to enter into certain transactions or obtain additional financing in the future.

Management will have broad discretion as to the use of the proceeds from this offering and may not use the proceeds effectively.

Our management will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that may not improve our results of operations or enhance the value of our common stock. Our failure to apply these funds effectively could have a material adverse effect on our business and cause the price of our common stock to decline.

The Series A Preferred Stock and warrants will not be listed on any securities exchange and as such there will not be a public market for such securities.

There is no established public trading market for the Series A Preferred Stock or warrants, and we do not expect a market to develop. In addition, we do not intend to apply for listing of the Series A Preferred Stock or warrants on any securities exchange or trading system. Without an active market, the liquidity of the Series A Preferred Stock and warrants will be limited, and investors may be unable to liquidate their investments in the Series A Preferred Stock and warrants.

The offering price will be set by our board of directors and does not necessarily indicate the actual or market value of our common stock.

Our board of directors (or a committee thereof) will approve the offering price and other terms of this offering after considering, among other things: the number of shares authorized in our certificate of incorporation; the current market price of our common stock; trading prices of our common stock over time; the volatility of our common stock; our current financial condition and the prospects for our future cash flows; the availability of and likely cost of capital of other potential sources of capital; and market and economic conditions at the time of the offering. The offering price is not intended to bear any relationship to the book value of our assets or our past operations, cash flows, losses, financial condition, net worth or any other established criteria used to value securities. The offering price may not be indicative of the fair value of the common stock.

The warrants may not have any value.

The warrants will be exercisable for five years from the date of issuance at an initial exercise price per share of $1.15. In the event that the price of a share of our common stock does not exceed the exercise price of the warrants during the period when the warrants are exercisable, the warrants may not have any value.

A warrant does not entitle the holder to any rights as common stockholders until the holder exercises the warrant for shares of our common stock.

Until you acquire shares of our common stock upon exercise of your warrants, the warrants will not provide you any rights as a common stockholder. Upon exercise of your warrants, you will be entitled to exercise the rights of a common stockholder only as to matters for which the record date occurs on or after the exercise date.

Future sales of a significant number of our shares of common stock in the public markets, or the perception that such sales could occur, could depress the market price of our shares of our common stock or cause our stock price to decline.

Sales of a substantial number of our shares of common stock in the public markets, or the perception that such sales could occur, including from the exercise of warrants or sales of common stock issuable thereunder, could cause the market price of our shares of common stock to decline and impair our ability to raise capital through the sale of additional equity securities. A substantial number of shares of common stock are being offered by this prospectus. We cannot predict the number of these shares that might be sold nor the effect that future sales of our shares of common stock, including shares issuable upon the exercise of warrants, would have on the market price of our shares of common stock.

As of January 20, 2020, holders of Flex Pharma's common stock of record as of the close of business on July 18, 2019 had rights to receive warrants exercisable for an aggregate of 142,711 shares of our common stock at an exercise price of $15.17 per share which warrants expire on January 20, 2025. We may, in our sole discretion, elect to deem such warrants exercised on a cashless basis at the closing of an issuance and sale of our common stock in an equity financing with gross proceeds of at least $10.0 million. We may or may not elect to deem such warrants exercised even if the gross proceeds of this offering exceeds $10.0 million. The number of common stock to be issued in connection with such cashless exercise will depend on the volume weighted average price of our common stock at the time of closing, and is approximately 627,171 shares based on an assumed closing date of February 6, 2020.

Terms of subsequent financings may adversely impact our stockholders.

To finance our future business plans and working capital needs, we will have to raise funds through the issuance of equity or debt securities in addition to this offering. Depending on the type and the terms of any financing we pursue, stockholders' rights and the value of their investment in our common stock and warrants could be reduced. A financing could involve one or more types of securities including common stock, convertible debt or warrants to acquire common stock. These securities could be issued at or below the then prevailing market price for our common stock. In addition, if we issue secured debt securities, the holders of the debt would have a claim to our assets that would be senior to the rights of stockholders until the debt is paid. Interest on these debt securities would increase costs and negatively impact operating results. If the issuance of new securities results in diminished rights to holders of our common stock, the market price of our common stock and the value of the warrants could be negatively impacted.

We do not currently intend to pay dividends on our common stock, and any return to investors is expected to come, if at all, only from potential increases in the price of our common stock.

At the present time, we intend to use available funds to finance our operations. Accordingly, while payment of dividends rests within the discretion of our board of directors, we have no intention of paying any such dividends in the foreseeable future. Any return to investors is expected to come, if at all, only from potential increases in the price of our common stock.

If we fail to comply with the continued listing standards of Nasdaq, our common stock may be delisted from Nasdaq. This in turn could result in significantly reduced trading liquidity, reduced trading volumes, and loss of research analyst coverage, among other consequences. These in turn could result in a further decline in the market price of common stock and would have a material adverse effect on our company.

We will be required to satisfy the continued listing requirements on Nasdaq to maintain the continued trading of our shares of common stock on Nasdaq. If we are unable to satisfy Nasdaq's continued listing requirements, Nasdaq may notify us that our shares of common stock will be delisted from Nasdaq. Upon a potential delisting from Nasdaq, if our common stock is not then eligible for quotation on another market or exchange, trading of the shares could be conducted in the over-the-counter market or on an electronic bulletin board established for unlisted securities such as the Pink Sheets or the OTC Bulletin Board. In such event, it is likely that there would be significantly less liquidity in the trading of our common stock; decreases in institutional and other investor demand for the shares, coverage by securities analysts, market making activity, and information available concerning trading prices and volume; and fewer broker dealers willing to execute trades in our common stock. Also, it may be difficult for us to raise additional capital if our common stock is not listed on a major exchange. The occurrence of any of these events could result in a further decline in the market price of common stock and could have a material adverse effect on us.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents we have filed with the SEC that are incorporated by reference in this prospectus contain forward-looking statements that involve risks and uncertainties. These statements relate to future periods, future events or our future operating or financial plans or performance. All statements other than statements of fact, including statements identified by words such as “believe,” “may,” “will,” “estimate,” “continue,” “anticipate,” “plan,” “intend,” “expect,” and similar expressions are forward-looking statements, and include but are not limited to the following:

- our ability to successfully initiate and complete clinical trials and regulatory submissions;
- expected dose escalation and dose expansion;
- expected number of additional clinical sites;
- expected cohort readouts;
- expected therapeutic options for SP-2577 and related effects;
- timing of development and future milestones;
- the development, expected timeline, and commercial potential of any product candidates;
- the effect of changes in macroeconomic factors beyond our control;
- competition in the markets in which we do business and our competitive advantages;
- our beliefs regarding our prospects for our business;
- the adequacy of our capital resources and our ability to raise additional financing and the effect of failing to obtain adequate funding;
- our ability to compete;
- our beliefs regarding the attributes and anticipated customer benefits of our products;
- our ability to hire additional personnel and retain key personnel;
- our ability to expand and improve our sales performance and marketing activities;
- our ability to manage our expenditures and estimate future expenses, revenue, and operational requirements;
- our use of proceeds;
- the effect of changes to management judgments and estimates;
- the impact of any modification to our pricing practices in the future;
- our beliefs regarding our international operations;
- our ability to take adequate precautions against claims or lawsuits made by third parties, including alleged infringement of proprietary rights;
- the potential impact of foreign currency exchange rate fluctuations;
- our expected quarterly cash expenditures;
- the impact of accounting pronouncements and our critical accounting policies, judgments, estimates, models, and assumptions on our financial results; and
- our expectations with respect to revenue, cost of revenue, expenses, and other financial metrics.

We have based these forward-looking statements on our current expectations and projections about future events and trends that we believe may affect our financial condition, results of operations, strategy, short- and long-term

business operations and objectives, and financial requirements. These statements are subject to known and unknown risks, uncertainties and assumptions that could cause actual results to differ materially from those projected or otherwise implied by the forward-looking statements, including the following: risks and uncertainties associated with our ability to manage our business plans, strategies, and outlooks and any business-related forecasts or projections; the availability of sufficient resources to meet our business objectives and operational requirements; the ability to project future cash utilization and reserves needed for contingent future liabilities and business operations; the fact that the results of earlier studies and trials may not be predictive of future clinical trial results; the ability to protect our intellectual property rights; risks related to the drug development and the regulatory approval process; and the impact of competitive products and technological changes; the impact of new legislation or regulations, or of judicial decisions, on our business; legal and regulatory uncertainties; our ability to compete against third parties; the economic environment; our ability to manage future growth; the market price of our common stock; and foreign currency exchange rate fluctuations. You should not place undue reliance on these forward-looking statements.

We discuss in greater detail, and incorporate by reference into this prospectus and the accompanying prospectus, many of these risks, uncertainties and assumptions under the heading “Risk Factors.” Additional cautionary statements or discussions of risks, uncertainties, and assumptions that could affect our results or the achievement of the expectations described in forward-looking statements are also contained in the documents we incorporate by reference into this prospectus. Any forward-looking statement made by us in this prospectus, or any of the documents incorporated by reference in this prospectus speaks only as of the date on which it was made. We expressly disclaim any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in our expectations with regard thereto or any change in events, conditions, or circumstances on which any such statement is based. You should, however, review additional disclosures we make in our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K filed with the SEC.

You should read this prospectus and the documents that we incorporated by reference in this prospectus completely and with the understanding that our actual future results, levels of activity, and performance as well as other events and circumstances may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

USE OF PROCEEDS

We estimate that the net proceeds from the sale of securities in this offering will be approximately $8.5 million, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us. If the underwriter exercises its over-allotment option in full, we estimate that our net proceeds will be approximately $9.8 million, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us. We will not receive any additional proceeds from any future conversions of the Series A Preferred Stock. We will only receive additional proceeds from the exercise of the warrants issuable in connection with this offering if the warrants are exercised and the holders of such warrants pay the exercise price in cash upon such exercise and do not utilize the cashless exercise provision of the warrants.

Our expected use of the net proceeds from this offering represents our current intentions based upon our present plans and business condition. As of the date of this prospectus, we cannot predict with certainty all of the particular uses for the net proceeds to be received upon completion of this offering, or the amounts that we will actually spend on the uses set forth above. However, we currently intend to use the net proceeds to us from this offering primarily for general corporate purposes, including working capital, research and development, and capital expenditures, although we do not currently have any specific or preliminary plans with respect to the use of proceeds for such purposes. Pending the uses described above, we intend to invest the net proceeds from this offering in short term, interest-bearing securities such as money market accounts, certificates of deposit, commercial paper, or direct or guaranteed obligations of the U.S. government.

The amounts and timing of our actual use of the net proceeds will vary depending on numerous factors, including our ability to gain access to additional financing and the relative success and cost of our research and development programs. As a result, our management will have broad discretion in the application of the net proceeds, and investors will be relying on our judgment regarding the application of the net proceeds of this offering. In addition, we might decide to postpone or not pursue certain development activities if the net proceeds from this offering and any other sources of cash are less than expected.

MARKET INFORMATION

Our common stock is listed on The Nasdaq Capital Market under the symbol “SLRX.” On February 6, 2020, the last reported sale price for our common stock on The Nasdaq Capital Market was $1.99 per share. As of December 26, 2019, we had approximately 167 stockholders of record.

DIVIDEND POLICY

We do not expect to pay any cash dividends to its stockholders in the foreseeable future. Payment of future cash dividends, if any, will be at the discretion of our board of directors and will depend on a number of factors, including our results of operations, financial condition, future prospects, contractual restrictions, restrictions imposed by applicable law, and other factors our board of directors deems relevant.

CAPITALIZATION

The following table sets forth our cash and cash equivalents and capitalization as of September 30, 2019 on:

- an actual basis; and
- a pro forma as adjusted basis, giving effect to the sale of 7,101,307 Class A Units, at a public offering price of $1.15 per Class A Unit and 1,246,519 Class B Units, at a public offering price of $1.15 per Class B Unit, assuming conversion of all shares of Series A Preferred Stock included in the Class B Units, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

You should read the following table in conjunction with our consolidated financial statements, including the related notes, and "Management's Discussion and Analysis of Financial Condition and Results of Operations" from our Current Report on Form 8-K/A filed on September 18, 2019 and our Quarterly Report on Form 10-Q for the quarter ended September 30, 2019, which are incorporated by reference into this prospectus.

	As of September 30, 2019 (unaudited)	
	Actual	Pro Forma as Adjusted
Cash and cash equivalents	$ 3,999,676	$ 12,455,676
Stockholders' equity:		
Preferred stock, $0.0001 par value, 10,000,000 shares authorized and none issued and outstanding, actual; 1,246,519 shares of Series A Preferred Stock issued and outstanding, pro forma as adjusted	—	125
Common stock, $0.0001 par value; 100,000,000 shares authorized and 3,756,184 shares issued and outstanding, actual; 100,000,000 shares authorized and 10,857,491 shares issued and outstanding, pro forma as adjusted	3,756	4,466
Additional paid-in capital	19,927,156	28,382,321
Accumulated deficit	(10,193,879)	(10,193,879)
Total stockholders' equity	9,737,033	18,193,033
Total capitalization	$ 9,737,033	$ 18,193,033

The foregoing table and calculations are based on 3,756,184 shares of our common stock outstanding as of September 30, 2019, and excludes:

- 12,488 shares of unvested restricted common stock subject to repurchase by us;
- 191,361 shares of common stock issuable upon the exercise of outstanding stock options as of September 30, 2019, with a weighted-average exercise price of $52.45 per share;
- 17 shares of common stock reserved for future issuance under our 2015 equity incentive plan;
- 35,787 shares of common stock reserved for future issuance under our 2015 employee stock purchase plan;

- 42,928 shares of common stock issuable upon exercise of warrants to purchase common stock issued to Wedbush outstanding as of September 30, 2019, with an exercise price of $18.90 per share;
- rights distributed to holders of Flex Pharma's common stock of record as of the closing of business on July 18, 2019, which will entitle such stockholders to receive warrants to purchase an aggregate of approximately 142,711 shares of our common stock on January 20, 2020 at an exercise price of $15.17 per share; and
- 12,376 shares of common stock to be issued pursuant to a professional relations and consulting agreement dated December 9, 2019.

DILUTION

If you invest in our common stock, your interest will be diluted immediately to the extent of the difference between the public offering price and the adjusted net tangible book value per share of our common stock after this offering. Net tangible book value on September 30, 2019, was approximately $0.8 million, or $0.22 per share. “Net tangible book value” is total assets minus the sum of liabilities and intangible assets. “Net tangible book value per share” is net tangible book value divided by the total number of shares outstanding.

After giving effect to the sale by us in this offering of 7,101,307 Class A Units at a public offering price of $1.15 per Class A Unit and 1,246,519 Class B Units at a public offering price of $1.15 per Class B Unit, and assuming all shares of Series A Preferred Stock included in the Class B Units were converted to common stock, and after deducting the underwriting discounts and commissions and estimated offering expenses that we will pay, our net tangible book value as of September 30, 2019 would have been approximately $9.3 million, or $0.77 per share of common stock. This amount represents an immediate increase in net tangible book value of $0.55 per share to existing stockholders and an immediate dilution of $0.38 per share to purchasers in this offering.

Public offering price per Class A and B Unit		$1.15
Net tangible book value per share as of September 30, 2019	$ 0.22	
Increase in net tangible book value per share attributable to new investors in offering	0.55	
As adjusted net tangible book value per share after giving effect to the offering		0.77
Dilution per share to new investors		$0.38

The number of shares of common stock to be outstanding immediately after this offering is based on 3,756,184 shares outstanding as of September 30, 2019, and excludes:

- 12,488 shares of unvested restricted common stock subject to repurchase by us;
- 191,361 shares of common stock issuable upon the exercise of outstanding stock options as of September 30, 2019, with a weighted-average exercise price of $52.45 per share;
- 17 shares of common stock reserved for future issuance under our 2015 equity incentive plan;
- 35,787 shares of common stock reserved for future issuance under our 2015 employee stock purchase plan;
- 42,928 shares of common stock issuable upon exercise of warrants to purchase common stock issued to Wedbush outstanding as of September 30, 2019, with an exercise price of $18.90 per share;
- rights distributed to holders of Flex Pharma’s common stock of record as of the closing of business on July 18, 2019, which will entitle such stockholders to receive warrants to purchase an aggregate of approximately 142,711 shares of our common stock on January 20, 2020 at an exercise price of $15.17 per share; and
- 12,376 shares of common stock to be issued pursuant to a professional relations and consulting agreement dated December 9, 2019.

To the extent that outstanding options have been or may be exercised or other shares issued, investors in this offering may experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

EXECUTIVE AND DIRECTOR COMPENSATION

Executive Compensation

The following table sets forth compensation information for the fiscal years ended December 31, 2018 and December 31, 2019 for (i) David J. Arthur, Salarius' principal executive officer during 2018 and 2019, (ii) Mark J. Rosenblum, Salarius' Executive Vice President Finance and Chief Financial Officer since September 10, 2019, and a financial consultant to Salarius from February 2019 to September 2019, and (iii) Scott Jordan, Salarius' Chief Business Officer since September 10, 2019, and Chief Financial Officer from July 2016 through September 2019. Messrs. Arthur, Rosenblum, and Jordan are collectively referred to as the named executive officers of Salarius.

Summary Compensation Table

The following table provides information regarding the officers of Salarius for the fiscal years ended December 31, 2018 and December 31, 2019, as applicable. The compensation information below reflects compensation paid to those individuals in their capacities as executive officers of Salarius or Private Salarius, as applicable.

Name and Principal Position	Fiscal Year	Salary	Bonus	All Other Compensation	Total
David J. Arthur	2019	$315,000	—	$ 10,500(4)	$325,500
President and Chief Executive Officer	2018	257,615(1)	12,756(3)	4,777(4)	275,148
Mark J. Rosenblum					
Executive Vice President Finance and Chief Financial Officer	2019	81,708	—	215,160(5)	296,868
Scott Jordan		220,			
Chief Business Officer	2019	000	—	11,762(6)	231,762
	2018	136,458(2)	7,194(3)	14,395(6)	158,047

(1) Effective as of December 15, 2018, the board of managers of Private Salarius approved an increase in the annual base salary of Mr. Arthur from $255,120 to $315,000.
(2) Effective as of December 15, 2018, the board of managers of Private Salarius approved an increase in the annual base salary of Mr. Jordan from $185,000 to $220,000.
(3) One-time discretionary bonus awarded by the board of managers of Private Salarius.
(4) Amount shown represents matching contribution by Salarius to Salarius' 401(k) plan.
(5) Amount includes $191,917 in consulting fees, $21,476 in expense reimbursements, and $1,767 in matching contribution by Salarius to Salarius' 401(k) plan subsequent to Mr. Rosenblum's employment on September 10, 2019.
(6) Includes $3,738 and $5,133 in 2018 and 2019, respectively, matching contributions by Salarius in Salarius' 401(k) plan and $10,657 and $6,629 for temporary living expenses in 2018 and 2019, respectively.

Narrative Disclosure to Summary Compensation Table

Prior to the Merger, Private Salarius' board of managers reviewed compensation annually for all of its executive officers. Compensation awarded to named executive officers in 2018 consisted of base salary and a one-time cash bonus, awarded at the discretion of the board of managers of Private Salarius.

In setting executive compensation, Private Salarius' board of managers considered compensation for comparable positions in the market, the historical compensation levels of its executives, individual performance as compared to its expectations and objectives, the desire to motivate its employees to achieve short- and long-term results, and a long-term commitment to Private Salarius. Private Salarius did not target a specific competitive position or a specific mix of compensation among elements of compensation.

There were no changes to executive officer compensation following the Merger in July 2019.

In connection with the Merger, Salarius assumed Flex Pharma's 2014 Equity Incentive Plan, 2015 Equity Incentive Plan, and 2015 Employee Stock Purchase Plan. Following the completion of the Merger, Salarius is undertaking a comprehensive review of all elements of its executive compensation program.

Outstanding Equity Awards at Fiscal Year-End

Name	Fiscal Year	Number of Shares or Units that have not vested (#)(1)	Market value of Shares or Units that have not vested ($)(2)
David J. Arthur	2019	30,000	$ 192,738
	2018	157.5(3)	71,642
Mark J. Rosenblum	2019	19,008	122,119
Scott Jordan	2019	12,538(5)	73,840(5)
	2018	90.0(4)	39,807

(1) For 2018, represents the Profits Interest Common Units in Salarius under the Profits Interest Common Unit Program, which generally vest ratably in quarterly installments over four years after the vesting commencement date. For 2019, includes unvested stock options and unvested common shares.
(2) For 2018, based on the fair market value of $454.87 per unit for a Profits Interest Common Unit with a Threshold Value of $8,746,800 and $442.30 per unit for a Profits Interest Common Unit with a Threshold Value of $10,043,939, each as determined pursuant to an independent valuation as of September 30, 2018. For 2019, amounts represent unvested stock options, at fair value, on the grant date.
(3) Represents 157.5 Profits Interest Common Units with a Threshold Value of $8,746,800 which are scheduled to vest on September 30, 2019.
(4) Represents 90.0 Profits Interest Common Units with a Threshold Value of $10,043,939 which are scheduled to vest on June 30, 2020.
(5) Represents 10,000 stock options valued at grant date fair value and 2,538 unvested common shares valued at fair market value of $3.78 on December 31, 2019.

Profits Interest Common Unit Program

Private Salarius maintained a program of awarding restricted unit interests intended to constitute profits interests (the "Profits Interest Common Units" and the "Profits Interest Common Unit Program") with the goal of aligning the long-term interests of its employees and other service providers with that of its members. Each Profits Interest Common Unit generally enabled the holder to receive distributions from Private Salarius and participate in appreciation in the value of Private Salarius after the aggregate distributions made by Private Salarius to holders of other Units outstanding prior to the issuance of such Profits Interest Common Unit are at least equal to the fair market value of Private Salarius immediately prior to the issuance of such Profits Interest Common Unit (the "Threshold Value") as determined by the board of managers of Private Salarius. Profits Interests Common Units generally vest ratably in equal quarterly installments over the first three or four years following the vesting commencement date, subject to the holder's continued employment on each vesting date, and accelerate and vest in full in the event of a change in control of Private Salarius.

Upon completion of the Merger, each Profits Interest Common Unit, to the extent then outstanding, was converted into a number of Flex Pharma shares of common stock. The shares of common stock issued in exchange for such Profits Interest Unit is subject to the vesting schedule which applied to the Profits Interest Unit.

Employment Agreements and Potential Payments Upon Termination of Employment or Change in Control

Salarius and Private Salarius, as applicable, has entered into arrangements with each of its named executive officers described below, and standard confidential information and/or inventions assignment agreements, under which each of its named executive officers has agreed not to disclose Salarius' confidential information.

David J. Arthur. In February 2019, Private Salarius entered into an Amended and Restated Executive Employment Agreement with David J. Arthur, its Chief Executive Officer, which was assigned to Salarius effective as of the closing of the Merger. Under this employment agreement, Mr. Arthur is entitled to an annual base salary of $315,000, such salary which became effective on December 15, 2018. Mr. Arthur is also eligible to participate in, subject to applicable eligibility requirements, all of Salarius' benefits plans and fringe benefits and programs that may be provided to executives of Salarius from time to time. In the event Salarius relocates during Mr. Arthur's term as its chief executive officer, Salarius is obligated to reimburse him for relocation expenses of up to $100,000. Mr. Arthur's employment agreement also contains a non-compete provision for a period of one year following the termination of his employment agreement, under which Mr. Arthur may not perform services for another entity which has a similar business model with Private Salarius or recruit or solicit Salarius' employees or other service providers.

Mark J. Rosenblum. In September 2019, Mr. Rosenblum entered into an offer letter with Salarius, pursuant to which Mr. Rosenblum, its Executive Vice President Finance and Chief Financial Officer , will be entitled to receive an initial annual base salary of $265,000. Mr. Rosenblum is also entitled to receive a bonus of a minimum of $19,300 to be paid no later than March 1, 2020, and a minimum of $14,500 to be paid no later than May 1, 2020, which is contingent on his continued employment through March 31, 2020. In addition, Mr. Rosenblum may receive additional bonuses if Salarius implements a bonus program.

Scott Jordan. In February 2019, Private Salarius entered into a Second Amended and Restated Executive Employment Agreement with Scott Jordan, its Chief Business Officer, which was assigned to Salarius effective as of the closing of the Merger. Under this employment agreement, Mr. Jordan is entitled to an annual base salary of $220,000, such salary which became effective on December 15, 2018. Mr. Jordan is also eligible to participate in, subject to applicable eligibility requirements, all of Salarius' benefits plans and fringe benefits and programs that may be provided to executives of Salarius from time to time. In the event Salarius relocates during Mr. Jordan's term as its chief business officer, Salarius is obligated to reimburse him for relocation expenses of up to $10,000.

Severance and Change in Control Benefits

In the event of a Change of Control of Salarius, the profits interest common units held by Mr. Arthur and Mr. Jordan will accelerate and vest in full. Additionally, both the Amended and Restated Executive Employment Agreement with Mr. Arthur, and the Second Amended and Restated Executive Employment Agreement with Mr. Jordan, which Salarius refers to as the "Employment Agreements" or the "applicable Employment Agreement", provide that, so long as the applicable executive executes a release and settlement agreement with Salarius, and subject to applicable withholdings, the executive would be entitled to receive (a) cash severance in an amount equal to 12 months of his then-current base salary, and (b) in the event the executive elects continuation coverage under COBRA or state law equivalent or enrollment in an individual marketplace, an amount equal to the 12 months' worth of total premium payments (or until the date the executive secures reasonably comparable coverage with another employer, if sooner), upon the following termination events:

- In the event Salarius or a successor entity terminates the executive's employment for any reason other than a termination for Cause, or in connection with death, a permanent disability, or Salarius' dissolution;
- In the event that, within the 18-month period following a Change in Control of Salarius for Mr. Arthur, or within the 12-month period following a Change in Control of Salarius for Mr. Jordan, Salarius or a

successor entity terminates the executive's employment for any reason other than a termination for Cause or in connection with death, a permanent disability, or Salarius' dissolution, or if the executive terminates his employment for Good Reason.

The following definitions have been adopted in the Employment Agreements:

"for Cause" shall be determined by the board of managers by a majority vote (not including Mr. Arthur with respect to an event related to him) and shall mean:

- any material breach, which is not cured within 30 days after written notice thereof, of the terms of the applicable Employment Agreement by the executive, or the failure of the executive to diligently and properly perform his duties, or the executive's failure to achieve the objectives specified by the board of managers;
- the executive's misappropriation or unauthorized use of the tangible or intangible property of Salarius, or any other similar agreement regarding confidentiality, intellectual property rights, non-competition or non-solicitation;
- any material failure to comply with company policies or any other policies and/or directives of the board of managers, which failure is not cured within 30 days after written notice thereof, provided that no cure period is available for a failure to comply with policies related to harassment, unlawful discrimination, retaliation or workplace violence;
- the executive's use of illegal drugs or any illegal substance, or alcohol in any manner that materially interferes with the performance of his duties under the applicable Employment Agreement;
- any dishonest or illegal action (including, without limitation, embezzlement) or any other action by the executive which is materially detrimental to the interest and well-being of Salarius, including, without limitation, harm to its reputation;
- the executive's failure to fully disclose any material conflict of interest he may have with Salarius in a transaction between Salarius and any third party which is materially detrimental to the interest and well-being of Salarius; or
- any adverse action or omission by the executive which would be required to be disclosed pursuant to public securities laws or which would limit the ability of Salarius or its affiliates to sell securities under any Federal or state law or which would disqualify Salarius or its affiliates from any exemption otherwise available to it.

"Good Reason" means the occurrence of any of the following actions taken by Salarius without the executive's consent, but only if (a) the executive informs Salarius within 90 days of its occurrence that an event constituting Good Reason has occurred (b) Salarius fails to cure the event within 90 days of such notice, and (c) the executive terminates his employment within 6 months of the initial occurrence:

- as to Mr. Arthur only, for a period of twelve months immediately following a Change of Control, or the "Post-COC Period", his salary, bonus or equity are reduced or diminished, or his duties and responsibilities or position are reduced or diminished to less than an executive "C" level position (Chief Officer of the company in some significant policy making or implementing capacity); and as to Mr. Jordan, if at any time his salary, bonus or equity are reduced or diminished, or his duties and responsibilities or position are reduced or diminished to less than an executive "C" level position;
- as to Mr. Arthur only, any time after the Post-COC Period, the executive's salary, bonus or equity are reduced or diminished, or his duties and responsibilities or position are reduced when compared to his duties and responsibilities immediately prior to Change of Control;
- Salarius materially breaches its obligations under the applicable Employment Agreement; or
- the executive is required to relocate by more than 50 miles outside the extraterritorial jurisdiction of Houston, Texas.

"Change in Control" means (i) a financing transaction or any transaction designed to raise money for Salarius' continuing operations or any sale, exchange, transfer, or issuance, or related series of sales, exchanges, transfers, or issuances, of Salarius' equity units by Salarius or any holder thereof, in which the holders of Salarius equity units immediately prior to such transaction or event no longer hold beneficial ownership of at least fifty percent (50%) of Salarius' outstanding equity units immediately after any such transaction or event; or (ii) a significant transaction involving the out-licensing of Salarius' lead clinical asset, a sale of substantially all of the assets of Salarius, or a liquidation or dissolution of Salarius.

Compensation Risk Management

Salarius has considered the risk associated with its compensation policies and practices for all employees and believes it has designed its compensation policies and practices in a manner that does not create incentives that could lead to excessive risk taking that would have a material adverse effect on Salarius.

With respect to Flex Pharma, the information set forth in the section titled "Item 11. Executive Compensation" in Amendment No. 1 to Salarius' Annual Report on Form 10-K filed with the SEC on April 16, 2019 for the fiscal year ended December 31, 2018 (the "10-K Amendment") with respect to executive compensation is incorporated herein by reference.

Director Compensation

On September 10, 2019, our board of directors approved annual compensation for non-executive directors, including an annual cash compensation of $30,000 as well as options to purchase 6,000 shares of our common stock. Depending on each non-executive director's role on our board of directors, which committee they serve on and whether they are a chair of a committee, the directors will receive additional cash compensation ranging from $4,000 to $25,000. In addition, Salarius provides for reimbursement of reasonable travel expenses for its directors to attend in-person meetings of our board of directors. The compensation committee of our board of directors is responsible for reviewing the compensation of our non-employee directors and making recommendations to our board of directors about any changes to such compensation.

The following table sets forth in summary form information concerning the compensation that was paid during fiscal year ended December 31, 2019 to each of our non-employee directors, who each began serving on our board of directors beginning on July 19, 2019. The Company also recorded unpaid director fees for the fourth quarter of the year 2019 for $70,375, which represent the director fees earned but not yet distributed to the directors as of December 31, 2019.

Name	Fees Paid in Cash	Option Awards	Total
Jonathan P. Northrup	$ 13,750	$ 18,253	$32,003
Tess Burleson	11,250	18,253	29,503
Arnold Hanish	12,500	18,253	30,753
Paul Lammers	13,500	18,253	31,753
Bruce J. McCreedy	11,875	18,253	30,128
William K. McVicar	7,500	18,253	25,753

With respect to Flex Pharma, the information set forth in the section titled "Item 11. Executive Compensation" in the 10-K Amendment with respect to director compensation is incorporated herein by reference.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Since January 1, 2017, there have been no actual or currently proposed transactions to which we were a party and in which the amount involved in the transaction exceeded the lesser of $120,000 or one percent of the average of our total assets at year-end for the last two completed fiscal years, and in which any of our directors, executive officers or, to our knowledge, beneficial owners of more than 5% of our capital stock or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest, other than equity and other compensation, termination, change of control, and other arrangements described under “Executive and Director Compensation—Executive Compensation” in our Proxy Statement filed on September 18, 2019 and which is incorporated herein by reference.

We adopted a written Related Person Transactions Policy that sets forth its policies and procedures regarding the identification, review, consideration, and oversight of “related person transactions.” For purposes of this policy only, a “related person transaction” is a transaction, arrangement, or relationship (or any series of similar transactions, arrangements or relationships) in which we or any of our subsidiaries are participants involving an amount that exceeds $120,000, in which any “related person” has a material interest.

Transactions involving compensation for services provided to Salarius as an employee, consultant, or director are not considered related person transactions under this policy. A related person is any executive officer, director, nominee to become a director, or a holder of more than 5% of any class of our voting securities (including its common stock), including any immediate family members and of affiliates, and entities owned or controlled by, such persons.

Under the policy, the related person in question or, in the case of transactions with a holder of more than 5% of any class of our voting securities, an officer with knowledge of the proposed transaction, must present information regarding the proposed related person transaction to our Audit Committee (or, where review by our Audit Committee would be inappropriate, to another independent body of our board of directors) for review. To identify related person transactions in advance, we rely on information supplied by our executive officers, directors, and certain significant stockholders. In considering related person transactions, our Audit Committee takes into account the relevant available facts and circumstances, which may include, but are not limited to:

- the risks, costs, and benefits to Salarius;
- the impact on a director’s independence in the event the related person is a director, immediate family member of a director or an entity with which a director, is affiliated;
- the terms of the transaction;
- the availability of other sources for comparable services or products; and
- the terms available to or from, as the case may be, unrelated third parties.

Our Audit Committee will approve only those transactions that it determines are fair to Salarius and in our best interests.

Certain of our directors, including our chief executive officer, have agreed to purchase in the aggregate approximately $43,000 of shares of our common stock in this offering at the public offering price.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information regarding beneficial ownership of Salarius common stock as of November 30, 2019 by:

- each person, or group of affiliated persons, known by us to beneficially own more than 5% of our common stock;
- each of our directors;
- each of our named executive officers; and
- all of our current executive officers and directors as a group.

Information with respect to beneficial ownership has been furnished by each director, officer, or beneficial owner of more than 5% of our common stock. We have determined beneficial ownership in accordance with the rules of the SEC. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting power or investment power with respect to those securities and include shares of common stock issuable pursuant to the exercise of stock options or warrants that are either immediately exercisable or exercisable within 60 days of January 2, 2020. These shares are deemed to be outstanding and beneficially owned by the person holding those options or warrants for the purpose of computing the percentage ownership of that person, but they are not treated as outstanding for the purpose of computing the percentage ownership of any other person. Unless otherwise indicated, the persons or entities identified in this table have sole voting and investment power with respect to all shares shown as beneficially owned by them, subject to applicable community property laws. Percentage of beneficial ownership is based on 4,511,174 shares of common stock outstanding as of January 2, 2020. Except as otherwise noted below, the address for each person or entity listed in the table is c/o Salarius, 2450 Holcombe Blvd., Suite J-608, Houston, TX 77021. Certain of our directors, including our chief executive officer, have agreed to purchase in the aggregate approximately $43,000 of shares of our common stock in this offering at the public offering price, which is not reflected in the table below.

Name	Number of Shares Beneficially Owned	Percentage Beneficially Owned
5% and Greater Stockholders:		
Salarius 4-18 Investment, LLC(1)	273,746	6.07%
Sunil Sharma, M.D.(2)	347,348	7.70%
Named Executive Officers and Directors:		
David J. Arthur(3)	79,371	1.76%
Mark J. Rosenblum	—	*
Scott Jordan(4)	17,771	*
Jonathan P. Northrup(5)	347,013	7.69%
Tess Burleson(6).	3,000	*
Arnold Hanish(7)	6,000	*
Paul Lammers(8)	9,974	*
Bruce J. McCreedy(6)	3,000	*
William K. McVicar(9)	37,385	*
All current directors and executive officers as a group (9 persons)(10)	503,514	11.03%

* Less than 1%

(1) Consists of 273,746 shares of common stock. Green Park & Golf Ventures II, LLC is the managing member of Salarius 4-18 Investment, LLC. Clay M. Heighten, Carl D. Soderstrom and Gilbert G. Garcia II, the managers of Green Park and Golf Ventures II, LLC, share voting and dispositive power with respect to the common stock held by Salarius 4-18 Investment, LLC. The mailing address of Salarius 4-18 Investment, LLC is 5910 N. Central Expressway, Suite 1400 Dallas, Texas 75206.

(2) Consists of 347,348 shares of common stock.

(3) Consists of 79,371 shares of common stock.
(4) Consists of 17,771 shares of common stock.
(5) Consists of 344,013 shares of common stock and 3,000 vested options.
(6) Consists of 3,000 vested options.
(7) Consists of 3,000 shares of common stock and 3,000 vested options.
(8) Consists of 6,974 shares of common stock and 3,000 vested options.
(9) Consists of 37,385 vested options.
(10) Consists of 451,129 shares of common stock, 52,385 vested options.

DESCRIPTION OF SECURITIES

The following description summarizes the material terms and provisions of our common stock and preferred stock. The following description of our capital stock does not purport to be complete and is subject to, and qualified in its entirety by, our amended and restated certificate of incorporation, which is referred to in this section as the certificate of incorporation, and our amended and restated bylaws, as may be amended, which is referred to in this section as the bylaws. The terms of our common stock and preferred stock may also be affected by Delaware law.

Authorized Capital Stock

Our authorized capital stock consists of 100,000,000 shares of common stock, $0.0001 par value per share, and 10,000,000 shares of preferred stock, $0.0001 par value per share. As of January 2, 2020, Salarius had 4,511,174 shares of common stock outstanding and no shares of preferred stock outstanding.

Common Stock

Holders of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of stockholders. The holders of our common stock do not have any cumulative voting rights. Holders of our common stock are entitled to receive ratably any dividends declared by our board of directors out of funds legally available for that purpose, subject to any preferential dividend rights of any outstanding preferred stock. Our common stock has no preemptive rights, conversion rights, or other subscription rights or redemption or sinking fund provisions. In the event of a liquidation, dissolution, or winding up of Salarius, holders of our common stock will be entitled to share ratably in all assets remaining after payment of all debts and other liabilities and any liquidation preference of any outstanding preferred stock.

Listing. Our common stock is listed on The Nasdaq Capital Market under the symbol “SLRX.” On February 6, 2020, the last reported sale price for our common stock on The Nasdaq Capital Market was $1.99 per share. As of December 26, 2019, we had approximately 167 stockholders of record.

Transfer Agent. The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC.

Preferred Stock

Our board of directors currently has the authority, without further action by our stockholders, to issue up to 10,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges, and restrictions thereof. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms, and the number of shares constituting, or the designation of, such series, any or all of which may be greater than the rights of common stock. The issuance of preferred stock by us could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon a liquidation of Salarius. In addition, the issuance of preferred stock could have the effect of delaying, deferring, or preventing a change in control of Salarius or other corporate action, or make the removal of management more difficult. No shares of preferred stock are outstanding, and we have no present plans to issue any shares of preferred stock. Additionally, the issuance of preferred stock may have the effect of decreasing the market price of the common stock.

Our board of directors will fix the designations, voting powers, and other rights, preferences, and privileges, as well as the qualifications, limitations and other restrictions, of the preferred stock of each series in the certificate of designation relating to that series. We will file as an exhibit 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 any

certificate of designation that describes the terms of the series of preferred stock we are offering before the issuance of that series of preferred stock. This description will include:

- the title and stated value;
- the number of shares;
- the liquidation preference per share;
- the purchase price per share;
- the dividend rate per share, dividend period and payment dates and method of calculation for dividends;
- whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
- our right, if any, to defer payment of dividends and the maximum length of any such deferral period;
- the procedures for any auction and remarketing, if any;
- the provisions for a sinking fund, if any;
- the provisions for redemption or repurchase, if applicable, and any restrictions on our ability to exercise those redemption and repurchase rights;
- any listing of the preferred stock on any securities exchange or market;
- whether the preferred stock will be convertible into our common stock or other securities of ours, including depositary shares and warrants, and, if applicable, the conversion period, the conversion price, or how it will be calculated, and under what circumstances it may be adjusted;
- whether the preferred stock will be exchangeable into debt securities, and, if applicable, the exchange period, the exchange price, or how it will be calculated, and under what circumstances it may be adjusted;
- voting rights, if any, of the preferred stock;
- preemption rights, if any;
- restrictions on transfer, sale or other assignment, if any;
- whether interests in the preferred stock will be represented by depositary shares;
- a discussion of any material or special U.S. federal income tax considerations applicable to the preferred stock;
- the relative ranking and preferences of the preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs;
- any limitations on issuances of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock being issued as to dividend rights and rights if we liquidate, dissolve or wind up our affairs; and
- any other specific terms, rights, preferences, privileges, qualifications or restrictions of the preferred stock.

The Delaware General Corporation Law, or DGCL, which is the law of the state of our incorporation, provides that the holders of preferred stock will have the right to vote separately as a class (or, in some cases, as a series) on an amendment to our certificate of incorporation if the amendment would change the par value, the powers, preferences or special rights of the class or series so as to adversely affect the class or series, as the case may be, or, unless the certificate of incorporation provided otherwise, the number of authorized shares of the class. This right is in addition to any voting rights that may be provided for in the applicable certificate of designation.

Warrants

As of January 20, 2020, holders of Flex Pharma's common stock of record as of the close of business on July 18, 2019 had rights to receive warrants exercisable for an aggregate of 142,711 shares of our common stock at an exercise price of $15.17 per share which warrants expire on January 20, 2025. We may, at our sole discretion, elect to deem such warrants exercised on a cashless basis at the closing of an issuance and sale of our common stock in an equity financing with gross proceeds of at least $10,000,000. See "Risk Factors - Future sales of a significant number of our shares of common stock in the public markets, or the perception that such sales could occur, could depress the market price of shares of our common stock or cause our stock price to decline."

Securities to be Issued in this Offering

Units

We are offering Class A Units, with each Class A Unit consisting of one share of common stock and a warrant to purchase one share of our common stock at an exercise price per share of $1.15, together with the shares of common stock underlying such warrants, at a public offering price of $1.15 per Class A Unit. The Class A Units will not be certificated and the shares of common stock and warrants constituting such units are immediately separable and will be issued separately in this offering.

We are also offering to those purchasers whose purchase of Class A Units in this offering would result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common stock following the consummation of this offering, the opportunity to purchase, in lieu of the number of Class A Units that would result in ownership in excess of 4.99% (or, at the election of the purchaser, 9.99%), Class B Units. Each Class B Unit will consist of one share of Series A Preferred Stock, par value $0.0001 per share, convertible into one share of common stock and a warrant to purchase one share of our common stock at an exercise price per share of $1.15, together with the shares of common stock underlying such shares of Series A Preferred Stock and warrants, at a public offering price of $1.15 per Class B Unit. The Class B Units will not be certificated and the shares of Series A Preferred Stock and the warrants constituting such units are immediately separable and will be issued separately in this offering.

Series A Preferred Stock

General. In connection with this offering, our board of directors will designate shares of our preferred stock as Series A Preferred Stock. The preferences and rights of the Series A Preferred Stock will be as set forth in a Certificate of Designation (the "Series A Certificate of Designation") to be filed as an exhibit to the registration statement of which this prospectus is a part.

Conversion. Each share of Series A Preferred Stock will be convertible at any time at the holder's option into one share of common stock, which conversion ratio will be subject to adjustment for stock splits, stock dividends, distributions, subdivisions and combinations. Notwithstanding the foregoing, the Series A Certificate of Designation will further provide that we shall not effect any conversion of the Series A Preferred Stock, with certain exceptions, to the extent that, after giving effect to an attempted conversion, the holder of Series A Preferred Stock (together with such holder's affiliates, and any persons acting as a group together with such holder or any of such holder's affiliates) would beneficially own a number of shares of Common Stock in excess of 4.99% (or, at the election of the purchaser prior to the date of issuance, 9.99%) of the shares of our common stock then outstanding after giving effect to such exercise (the "Series A Preferred Stock Beneficial Ownership Limitation").

Liquidation Preference. In the event of a liquidation, the holders of Series A Preferred Stock will be entitled to participate on an as-converted-to-common-stock basis with holders of the common stock in any distribution of assets of the Company to the holders of the common stock.

Voting Rights. With certain exceptions, as described in the Series A Certificate of Designation, the Series A Preferred Stock will have no voting rights. However, as long as any shares of Series A Preferred Stock remain outstanding, the Series A Certificate of Designation will provide that we shall not, without the affirmative vote of holders of a majority of the then-outstanding shares of Series A Preferred Stock: (a) alter or change adversely the powers, preferences or rights given to the Series A Preferred Stock or alter or amend the Series A Certificate of Designation, (b) increase the number of authorized shares of Series A Preferred Stock or (c) effect a stock split or reverse stock split of the Series A Preferred Stock or any like event.

Dividends. The Series A Certificate of Designation will provide, among other things, that we shall not pay any dividends on shares of common stock (other than dividends in the form of common stock) unless and until such time as we pay dividends on each share of Series A Preferred Stock on an as-converted basis. Other than as set forth in the previous sentence, the Series A Certificate of Designation will provide that no other dividends shall be paid on shares of Series A Preferred Stock and that we shall pay no dividends (other than dividends in the form of common stock) on shares of common stock unless we simultaneously comply with the previous sentence.

Repurchase Restrictions. The Series A Certificate of Designation will not provide for any restriction on the repurchase of Series A Preferred Stock by us while there is any arrearage in the payment of dividends on the Series A Preferred Stock. There will be no sinking fund provisions applicable to the Series A Preferred Stock.

Redemption. We will not be obligated to redeem or repurchase any shares of Series A Preferred Stock. Shares of Series A Preferred Stock will not otherwise be entitled to any redemption rights or mandatory sinking fund or analogous fund provisions. Furthermore, Series A Preferred Stock does not have a termination date and can therefore be held perpetually.

Exchange Listing. We do not intend to apply for listing of the Series A Preferred Stock on any securities exchange or other trading system.

Warrants

General. The material terms and provisions of the warrants being offered pursuant to this prospectus are summarized below. This summary of some provisions of the warrants is not complete. For the complete terms of the warrants, you should refer to the form of warrant to be filed as an exhibit to the registration statement of which this prospectus is a part. The warrants will be issued in book-entry form and shall initially be represented only by one or more global warrants deposited with the warrant agent, as custodian on behalf of The Depository Trust Company, or DTC, and registered in the name of Cede & Co., a nominee of DTC, or as otherwise directed by DTC.

Exercise of Warrants. Each Class A Unit and each Class B Unit includes a warrant to purchase one share of our common stock, with an exercise price equal to $1.15 per share at any time for up to five (5) years from the date of issuance of the warrants. Each warrant is exercisable into one share of common stock. The warrants issued in this offering will be governed by the terms of a global warrant held in book-entry form. The holder of a warrant will not be deemed a holder of our underlying common stock until the warrant is exercised. No fractional shares of common stock will be issued in connection with the exercise of a warrant. Instead, for any such fractional share that would have otherwise been issued upon exercise of warrants, we will round such fraction down to the next whole share.

Subject to certain limitations as described below the warrants are immediately exercisable upon issuance and expire on the five (5) year anniversary of the issuance date. Subject to limited exceptions, a holder of warrants will not have the right to exercise any portion of its warrants if the holder (together with such holder’s affiliates, and any persons acting as a group together with such holder or any of such holder’s affiliates) would beneficially own a number of shares of common stock in excess of 4.99% (or, at the election of the purchaser prior to the date of issuance, 9.99%) of the shares of our common stock then outstanding after giving effect to such exercise.

The exercise price and the number of shares issuable upon exercise of the warrants is subject to appropriate adjustment in the event of recapitalization events, stock dividends, stock splits, stock combinations, reclassifications, reorganizations or similar events affecting our common stock. The warrant holders must pay the exercise price in cash upon exercise of the warrants, unless such warrant holders are utilizing the cashless exercise provision of the warrants.

Upon the holder's exercise of a warrant, we will issue the shares of common stock issuable upon exercise of the warrant within two trading days following our receipt of a notice of exercise, provided that payment of the exercise price has been made (unless exercised to the extent permitted via the "cashless" exercise provision). Prior to the exercise of any warrants to purchase common stock, holders of the warrants will not have any of the rights of holders of the common stock purchasable upon exercise, including the right to vote, except as set forth therein.

Warrant holders may exercise warrants only if the issuance of the shares of common stock upon exercise of the warrants is covered by an effective registration statement, or an exemption from registration is available under the Securities Act and the securities laws of the state in which the holder resides. We intend to use commercially reasonable efforts to have the registration statement, of which this prospectus forms a part, effective when the warrants are exercised. The warrant holders must pay the exercise price in cash upon exercise of the warrants unless there is not an effective registration statement or, if required, there is not an effective state law registration or exemption covering the issuance of the shares underlying the warrants (in which case, the warrants may only be exercised via a "cashless" exercise provision).

Fundamental Transaction. In the event we consummate a merger or consolidation with or into another person or other reorganization event in which our common stock are converted or exchanged for securities, cash or other property, or we sell, lease, license, assign, transfer, convey or otherwise dispose of all or substantially all of our assets or we or another person acquire 50% or more of our outstanding shares of common stock, then following such event, the holders of the warrants will be entitled to receive upon exercise of such warrants the same kind and amount of securities, cash or property which the holders would have received had they exercised their warrants immediately prior to such fundamental transaction. Any successor to us or surviving entity shall assume the obligations under the warrants. Additionally, as more fully described in the warrants, in the event of certain fundamental transactions, the holders of the warrants will be entitled to receive consideration in an amount equal to the Black Scholes value of the warrants on the date of consummation of such transaction.

Exchange Listing. We do not intend to apply for listing of the warrants on any securities exchange or other trading system.

Provisions of our Certificate of Incorporation and Bylaws and Delaware Anti-Takeover Law

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

Board Composition and Filling Vacancies

Our certificate of incorporation provides for the division of our board of directors into three classes serving staggered three-year terms, with one class being elected each year. Our certificate of incorporation also provides that directors may be removed only for cause and then only by the affirmative vote of the holders of 66.67% of the shares then entitled to vote at an election of directors. Furthermore, any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of our board, may only be filled by the affirmative vote of a majority of directors then in office even if less than a quorum. The classification of directors, together with the limitations on removal of directors and treatment of vacancies, has the effect of making it more difficult for stockholders to change the composition of our board of directors.

No Written Consent of Stockholders

Our certificate of incorporation provides that all stockholder actions are required to be taken by a vote of the stockholders at an annual or special meeting, and that stockholders may not take any action by written consent in lieu of a meeting. This limit may lengthen the amount of time required to take stockholder actions and would prevent the amendment of the bylaws or removal of directors by our stockholders without holding a meeting of stockholders.

Meetings of Stockholders

Our certificate of incorporation and bylaws provide that special meetings of stockholders may be called at the request of the Chairman of the Board or the Chief Executive Officer or by a majority of the members of our board of directors then in office, and only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders. Our bylaws limit the business that may be conducted at an annual meeting of stockholders to those matters properly brought before the meeting.

Advance Notice Requirements

Our bylaws establish advance notice procedures with regard to stockholder proposals relating to the nomination of candidates for election as directors or new business to be brought before meetings of our stockholders. These procedures provide that notice of stockholder proposals must be timely given in writing to our corporate secretary prior to the meeting at which the action is to be taken. Generally, to be timely, notice must be received at our principal executive offices not less than 90 days or more than 120 days prior to the first anniversary date of the annual meeting for the preceding year. Our bylaws specify the requirements as to form and content of all stockholders' notices. These requirements may preclude stockholders from bringing matters before the stockholders at an annual or special meeting.

Amendment to Certificate of Incorporation and Bylaws

We may amend our certificate of incorporation in the manner presently or hereafter prescribed by statute, except as provided as follows, and all rights conferred to the stockholders are subject to the following reservation. In addition to any affirmative vote of the holders of any particular class or series of our capital stock required by law or by the certificate of incorporation or any certificate of designation filed with respect to a series of preferred stock, the affirmative vote of the holders of at least 66.67% of the voting power of all of the then outstanding shares of capital stock entitled to vote generally in the election of directors is required to amend provisions relating to the management of the business, board of directors, director liability, indemnification and forum selection. Our bylaws may be amended by the affirmative vote of a majority of the authorized directors then in office, subject to the laws of the State of Delaware, and may also be amended by the affirmative vote of at least 66.67% of the outstanding shares entitled to vote generally in the election of directors, voting together as a single class, on the amendment.

Choice of Forum

Our certificate of incorporation and bylaws provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the exclusive forum for (A) any derivative action or proceeding brought on behalf of the Company; (B) any action asserting a claim of breach of a fiduciary duty owed by any director, officer, or other employee of Salarius to Salarius or our stockholders; (C) any action asserting a claim against Salarius arising pursuant to any provision of the DGCL, or the our certificate of incorporation or bylaws; or (D) any action asserting a claim against Salarius governed by the internal affairs doctrine. Nothing in our certificate of incorporation or bylaws preclude stockholders that assert claims to enforce a liability or duty created under the Securities Act or Exchange Act from bringing such claims in state or federal court, subject to applicable law. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and to have consented to these provisions in our certificate of incorporation.

Delaware Anti-Takeover Law

We are subject to the provisions of Section 203 of the DGCL. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a three-year period following the time that this stockholder becomes an interested stockholder, unless the business combination is approved in a prescribed manner. Under Section 203, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions:

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

Section 203 defines a business combination to include:

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

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

UNDERWRITING

We have entered into an underwriting agreement dated February 7, 2020 with Ladenburg Thalmann & Co. Inc. (“Ladenburg,” “underwriter,” or “representative”), as the representative of the underwriters (the “representative”) named below and the sole book-running manager of this offering. Subject to the terms and conditions of the underwriting agreement, Ladenburg has agreed to purchase the number of our securities set forth opposite its name below.

Underwriter	Class A Units	Class B Units
Ladenburg Thalmann & Co. Inc.	7,101,307	1,246,519
Total	7,101,307	1,246,519

A copy of the underwriting agreement has been filed as an exhibit to the registration statement of which this prospectus is a part.

We have been advised by the underwriter that it proposes to offer the units directly to the public at the public offering price set forth on the cover page of this prospectus. The underwriter may sell Class A Units or Class B Units separately to purchasers or may sell a combination of Class A Units and Class B Units to purchasers in any proportion. Any securities sold by the underwriter to securities dealers will be sold at the public offering price less a selling concession not in excess of $0.05472 per share and $0.00048 per warrant.

The underwriting agreement provides that subject to the satisfaction or waiver by the representative of the conditions contained in the underwriting agreement, Ladenburg is obligated to purchase and pay for all of the securities offered by this prospectus.

No action has been taken by us or the underwriter that would permit a public offering of the units, or the shares of common stock, warrants, or shares of Series A Preferred Stock, shares of common stock underlying the Series A Preferred Stock and warrants to purchase common stock included in the units, in any jurisdiction outside the United States where action for that purpose is required. None of our securities included in this offering may be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer and sales of any of the securities offered hereby be distributed or published in any jurisdiction except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons who receive this prospectus are advised to inform themselves about and to observe any restrictions relating to this offering of securities and the distribution of this prospectus. This prospectus is neither an offer to sell nor a solicitation of any offer to buy the securities in any jurisdiction where that would not be permitted or legal. The underwriter has advised us that it does not intend to confirm sales to any account over which it exercises discretionary authority.

Underwriting Discount and Expenses

The following table summarizes the underwriting discount and commission to be paid to the underwriter assuming no exercise of the over-allotment option and assuming the full exercise of the over-allotment option.

	Per Class A Unit(1)	Per Class B Unit(1)	Total With No Exercise of the Over-Allotment Option	Total With Full Exercise of the Over-Allotment Option
Public offering price	$ 1.15	$ 1.15	$9,600,000	$11,039,999
Underwriting discount to be paid to the underwriter by us(2)(3)	$ 0.095	$ 0.095	$ 794,000	$ 923,600
Proceeds to us (before expenses)	$ 1.055	$ 1.055	$8,806,000	$10,116,399

(1) The public offering price and underwriting discount corresponds to (x) in respect of the Class A Units (i) a public offering price per share of common stock of $1.14 and (ii) a public offering price per warrant of $0.01 and (y) in respect of the Class B Units (i) a public offering price per share of Series A Preferred Stock of $1.14 and (ii) a public offering price per warrant of $0.01.

(2) We have granted a 45-day option to the underwriter to purchase additional shares of common stock and/or warrants to purchase shares of common stock (up to 15% of the number of shares of common stock (including the number of shares of common stock issuable upon conversion of shares of Series A Preferred Stock) and the number of shares of common stock underlying the warrants sold in the primary offering) at the public offering price per share of common stock and the public offering price per warrant set forth above less the underwriting discounts and commissions, solely to cover over-allotments, if any.

(3) We have agreed to pay an underwriting discount equal to 8.0% of the aggregate gross proceeds raised in this offering. In addition, we have agreed to pay an additional 1% underwriting discount on gross proceeds in excess of $7.0 million.

We estimate the total expenses payable by us for this offering to be approximately $1.1 million, which amount includes (i) the underwriting discount of $794,000 ($923,600 if the over-allotment option is exercised in full) and (ii) reimbursement of the accountable expenses of the representative equal to $100,000 including the legal fees of the representative being paid by us and (iii) other estimated company expenses of approximately $250,000, which includes legal, accounting, printing costs and various fees associated with the registration and listing of our shares.

The securities we are offering are being offered by the underwriter subject to certain conditions specified in the underwriting agreement.

Over-allotment Option

We have granted the underwriter an option exercisable not later than 45 days after the date of this prospectus to purchase up to a number of additional shares of common stock and/or warrants to purchase shares of common stock not to exceed 15% of the number of shares of common stock sold in the primary offering (including the number of shares of common stock issuable upon conversion of shares of Series A Preferred Stock, but excluding shares of common stock underlying the warrants issued in this offering and any shares of common stock issued upon any exercise of the underwriter's over-allotment option) and/or 15% of the warrants sold in the primary offering at the public offering price per share of common stock and the public offering price per warrant set forth on the cover page hereto less the underwriting discounts and commissions. The underwriter may exercise the option solely to cover overallotments, if any, made in connection with this offering. If any additional shares of common stock and/or warrants are purchased pursuant to the over-allotment option, the underwriter will offer these shares of common stock and/or warrants on the same terms as those on which the other securities are being offered.

Determination of Offering Price

Our common stock is currently traded on The Nasdaq Capital Market under the ticker symbol "SLRX." On February 6, 2020 the closing price of our common stock was $1.99 per share. We do not intend to apply for listing of the Series A Preferred Stock or the warrants on any securities exchange or other trading system.

The public offering price of the securities offered by this prospectus was determined by negotiation between us and the underwriter. Among the factors considered in determining the public offering price of the common stock were:

- our history and our prospects;
- the industry in which we operate;
- our past and present operating results;
- the previous experience of our executive officers; and
- the general condition of the securities markets at the time of this offering.

The offering price stated on the cover page of this prospectus should not be considered an indication of the actual value of the shares of common stock sold in this offering. That price is subject to change as a result of market conditions and other factors, and we cannot assure you that the shares of common stock sold in this offering can be resold at or above the public offering price.

Lock-up Agreements

Our officers and directors have agreed with the representative to be subject to a lock-up period of 90 days following the date of this prospectus. This means that, during the applicable lock-up period, such persons may not offer for sale, contract to sell, distribute, grant any option, right or warrant to purchase, pledge, hypothecate, or otherwise dispose of, directly or indirectly, any shares of our common stock or any securities convertible into, or exercisable or exchangeable for, shares of our common stock. Certain limited transfers are permitted during the lock-up period if the transferee agrees to these lock-up restrictions. We have also agreed, in the underwriting agreement, to similar lock-up restrictions on the issuance and sale of our securities for 90 days following the effectiveness of the underwriting agreement, although we will be permitted to issue stock options or stock awards to directors, officers and employees under our existing plans. The representative may, without notice, waive the terms of any of these lock-up agreements.

Other Relationships

Subject to the satisfaction of certain conditions, we have granted the representative a right of first refusal to act as sole bookrunner or exclusive placement agent in connection with any subsequent public or private offering of equity securities or other capital markets financing by us. This right of first refusal extends for ten months from the closing date of this offering. The terms of any such engagement of the representative will be determined by separate agreement.

Transfer Agent and Registrar

The transfer agent of our common stock is American Stock Transfer & Trust Company, LLC The transfer agent and registrar’s address is 6201 15th Avenue, Brooklyn, NY 11219, and the telephone number is (800) 937-5449.

Stabilization, Short Positions and Penalty Bids

The underwriter may engage in syndicate covering transactions, stabilizing transactions, and penalty bids or purchases for the purpose of pegging, fixing, or maintaining the price of our common stock:

- Syndicate covering transactions involve purchases of securities in the open market after the distribution has been completed in order to cover syndicate short positions. Such a naked short position would be closed out by buying securities in the open market. A naked short position is more likely to be created if the underwriter is concerned that there could be downward pressure on the price of the securities in the open market after pricing that could adversely affect investors who purchase in the offering.
- Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specific maximum and are engaged in for the purpose of preventing or retarding a decline in the market price of the shares of common stock while this offering is in progress.
- Penalty bids permit the underwriter to reclaim a selling concession from a syndicate member when the securities originally sold by the syndicate member are purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.

These syndicate covering transactions, stabilizing transactions, and penalty bids may have the effect of raising or maintaining the market prices of our securities or preventing or retarding a decline in the market prices of our securities. As a result, the price of our common stock may be higher than the price that might otherwise exist in

the open market. Neither we nor the underwriter make any representation or prediction as to the effect that the transactions described above may have on the price of our common stock. These transactions may be effected on The Nasdaq Capital Market, in the over-the-counter market or on any other trading market and, if commenced, may be discontinued at any time.

In connection with this offering, the underwriter also may engage in passive market making transactions in our common stock in accordance with Regulation M during a period before the commencement of offers or sales of shares of our common stock in this offering and extending through the completion of the distribution. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for that security. However, if all independent bids are lowered below the passive market maker's bid, that bid must then be lowered when specific 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.

Neither we, nor the underwriter make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the prices of our securities. In addition, neither we nor the underwriter make any representation that the underwriter will engage in these transactions or that any transactions, once commenced will not be discontinued without notice.

Indemnification

We have agreed to indemnify the underwriter against certain liabilities, including certain liabilities arising under the Securities Act, or to contribute to payments that the underwriter may be required to make for these liabilities.

LEGAL MATTERS

The validity of the shares of common stock and warrants being offered hereby will be passed upon for us by Pillsbury Winthrop Shaw Pittman LLP, Palo Alto, California. Certain legal matters in connection with this offering will be passed upon for the underwriter by Ellenoff Grossman & Schole LLP, New York, New York.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited the consolidated financial statements of Flex Pharma, Inc. included in the Annual Report on Form 10-K for the fiscal year ended December 31, 2018, as set forth in their report, which is incorporated by reference in this prospectus and elsewhere in the registration statement. Such financial statements are incorporated by reference in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

The financial statements of Salarius Pharmaceuticals, LLC, a Delaware limited liability company and our wholly owned subsidiary ("Private Salarius"), as of and for the years December 31, 2018 and 2017 have been audited by Weaver and Tidwell, L.L.P., independent registered public accounting firm, as stated in their report. Such financial statements are incorporated by reference in reliance upon the reports of Weaver and Tidwell, L.L.P., and upon the authority of such firm as experts in accounting and auditing.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

We have filed a registration statement on Form S-1 with the SEC under the Securities Act. This prospectus is a part of the registration statement, but the registration statement also includes and incorporates by reference additional information and exhibits. We file annual, quarterly, and current reports, proxy statements, and other information with the SEC. The SEC maintains a web site that contains reports, proxy, and information statements and other information regarding companies, such as ours, that file documents electronically with the SEC. The address of that site on the world wide web is http://www.sec.gov. The information on the SEC's web site is not part of this prospectus, and any references to this web site or any other web site are inactive textual references only.

The SEC permits us to "incorporate by reference" the information contained in documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents rather than by including them in this prospectus. Information that is incorporated by reference is considered to be part of this prospectus and you should read it with the same care that you read this prospectus. Later information that we file with the SEC will automatically update and supersede the information that is either contained, or incorporated by reference, in this prospectus, and will be considered to be a part of this prospectus from the date those documents are filed. We have filed with the SEC, and incorporate by reference in this prospectus:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2018;
- our Annual Report on Form 10K/A for the year ended December 31, 2018;
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2019, June 30, 2019, and September 30, 2019;
- our Current Reports on Form 8-K filed with the SEC on January 4, 2019, February 15, 2019, June 14, 2019, July 1, 2019, July 15, 2019, July 22, 2019 (as amended on September 18, 2019), July 24, 2019, September 16, 2019, October 22, 2019, and October 28, 2019;
- our definitive proxy statement on Schedule 14A, which was filed with the SEC on September 18, 2019; and

- the description of our common stock contained in our Registration Statement on Form 8-A filed on January 23, 2015, including any amendment or report filed for the purpose of updating such description.

In addition, we incorporate by reference all additional documents that we subsequently file with the SEC pursuant to Section 13(a), 13(c), 14, or 15(d) of the Exchange Act, as amended, that are made after the initial filing date of the registration statement of which this prospectus is a part and the effectiveness of the registration statement, as well as between the date of this prospectus and the termination of any offering of securities offered by this prospectus. We are not, however, incorporating, in each case, any documents or information that we are deemed to furnish and not file in accordance with SEC rules.

You may request a copy of any or all of the documents incorporated by reference but not delivered with this prospectus, at no cost, by writing or telephoning us at the following address and number: 2450 Holcombe Blvd., Suite J-608, Houston, TX 77021, and our telephone number is (346) 772-0346. We will not, however, send exhibits to those documents, unless the exhibits are specifically incorporated by reference in those documents.

We make available free of charge on our website our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports, as soon as reasonably practicable after we electronically file or furnish such materials to the SEC. You may obtain a free copy of these reports on the Investor Relations section of our website, www.salariuspharma.com.

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7,101,307 Class A Units consisting of shares of common stock and warrants and
1,246,519 Class B Units consisting of shares of Series A Preferred Stock and warrants
(and 8,347,826 shares of common stock underlying such warrants)

PROSPECTUS

Ladenburg Thalmann

February 7, 2020