Filed Pursuant to Rule 424(b)(3)
Registration No. 333-229609

PROSPECTUS

Sorrento Therapeutics, Inc.
9,890,998 Shares of Common Stock

This prospectus relates to the resale by the investors listed in the section of this prospectus entitled "Selling Stockholders," or the Selling Stockholders, of up to 9,890,998 shares, or the Shares, of our common stock, par value $0.0001 per share, or Common Stock. The 9,890,998 Shares consist of: (i) 1,795,011 shares of Common Stock, or the Virttu Shares, issued on April 27, 2018 pursuant to that certain Share Purchase Agreement, dated April 27, 2017, as amended effective April 27, 2018, or the Share Purchase Agreement, by and among us, TNK Therapeutics, Inc., or TNK, Virttu Biologics Limited, or Virttu, the shareholders of Virttu party thereto, or the Virttu Shareholders, and Dayspring Ventures Limited, as representative of the Virttu Shareholders, (ii) up to 5,397,325 shares of Common Stock, or the Note Shares, issuable upon conversion of outstanding Convertible Promissory Notes, or the Notes, issued by us pursuant to that certain Securities Purchase Agreement, dated as of March 26, 2018, as amended on June 13, 2018, or the Securities Purchase Agreement, by and among us and the purchasers identified in Schedule A thereto, or the Purchasers, and (iii) up to 2,698,662 shares of Common Stock, or the Warrant Shares, issuable upon exercise of outstanding warrants to purchase shares of Common Stock issued by us pursuant to the Securities Purchase Agreement, or the Warrants. The Warrants will become exercisable on December 11, 2018, have a term of five and a half years from the date of issuance and have an exercise price of $3.28 per share of Common Stock. We are registering the resale of the Virttu Shares as required by the Registration Rights Agreement, dated April 27, 2017, by and among us and the Virttu Shareholders, or the April Registration Rights Agreement. We are registering the resale of the Note Shares and the Warrant Shares as required by the Registration Rights Agreement, dated June 13, 2018, by and among us and the Purchasers, or the June Registration Rights Agreement.

Our registration of the Shares covered by this prospectus does not mean that the Selling Stockholders will offer or sell any of the Shares. The Selling Stockholders may sell the Shares covered by this prospectus in a number of different ways and at varying prices. For additional information on the possible methods of sale that may be used by the Selling Stockholders, you should refer to the section of this prospectus entitled "Plan of Distribution" beginning on page 14 of this prospectus. We will not receive any of the proceeds from the Shares sold by the Selling Stockholders, other than any proceeds from any cash exercise of the Warrants.

No underwriter or other person has been engaged to facilitate the sale of the Shares in this offering. The Selling Stockholders may be deemed underwriters of the Shares that they are offering pursuant to this prospectus. We will bear all costs, expenses and fees in connection with the registration of the Shares. The Selling Stockholders will bear all commissions and discounts, if any, attributable to their respective sales of the Shares.

You should read this prospectus, any applicable prospectus supplement and any related free writing prospectus carefully before you invest.

Investing in our Common Stock involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "Risk Factors" contained on page 4 of this prospectus, any applicable prospectus supplement and in any applicable free writing prospectuses, and under similar headings in the documents that are incorporated by reference into this prospectus.

Our Common Stock is currently listed on the Nasdaq Capital Market under the symbol "SRNE". On May 6, 2019, the last reported sales price for our Common Stock was $3.77 per share.

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

The date of this prospectus is May 7, 2019.

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ABOUT THIS PROSPECTUS

You should rely only on the information we have provided or incorporated by reference into this prospectus, any applicable prospectus supplement and any related free writing prospectus. We have not authorized anyone to provide you with information different from that contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus. You must not rely on any unauthorized information or representation. This prospectus is an offer to sell only the Shares offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. You should assume that the information in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate only as of the date on the front of the document and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any sale of a security.

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

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, under which the Selling Stockholders may offer from time to time up to an aggregate of 9,890,998 shares of our Common Stock in one or more offerings. If required, each time a Selling Stockholder offers Common Stock, in addition to this prospectus, we will provide you with a prospectus supplement that will contain specific information about the terms of that offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to that offering. We may also use a prospectus supplement and any related free writing prospectus to add, update or change any of the information contained in this prospectus or in documents we have incorporated by reference. This prospectus, together with any applicable prospectus supplements, any related free writing prospectuses and the documents incorporated by reference into this prospectus, includes all material information relating to this offering. To the extent that any statement that we make in a prospectus supplement is inconsistent with statements made in this prospectus, the statements made in this prospectus will be deemed modified or superseded by those made in a prospectus supplement. Please carefully read both this prospectus and any prospectus supplement together with the additional information described below under “Important Information Incorporated by Reference”.

SUMMARY

This summary highlights selected information contained elsewhere in this prospectus or incorporated by reference in this prospectus, and does not contain all of the information that you need to consider in making your investment decision. You should carefully read the entire prospectus, any applicable prospectus supplement and any related free writing prospectus, including the risks of investing in our Common Stock discussed under the heading "Risk Factors" contained in this prospectus, any applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus. You should also carefully read the information incorporated by reference into this prospectus, including our financial statements, and the exhibits to the registration statement of which this prospectus forms a part. Unless otherwise mentioned or unless the context requires otherwise, all references in this prospectus to "Sorrento", "the Company", "we", "us", "our" or similar references mean Sorrento Therapeutics, Inc. together with its consolidated subsidiaries.

Sorrento Therapeutics, Inc.

We are a clinical stage and commercial biopharma company focused on delivering innovative and clinically meaningful therapies to patients and their families, globally, to address unmet medical needs. We primarily focus on therapeutics areas in Immune-Oncology and Non-Opioid Pain Management. We also have programs assessing the use of our technologies and products in autoimmune, inflammatory and neurodegenerative diseases.

At our core, we are an antibody-centric company and leverage our proprietary G-MAB™ library and targeted delivery modalities to generate the next generation of cancer therapeutics. Our fully human antibodies include PD-1, PD-L1, CD38, CD123, CD47, c-MET, VEGFR2, CCR2 and CD137 among others.

Our vision is to leverage these antibodies in conjunction with proprietary targeted delivery modalities to generate the next generation of cancer therapeutics. These modalities include proprietary chimeric antigen receptor T-cell therapy, or CAR-T, dimeric antigen receptor T-cell therapy, antibody drug conjugates, as well as bispecific antibody approaches. Additionally, we acquired Sofusa®, a revolutionary drug delivery system, in July 2018, which delivers biologics directly into the lymphatic system to potentially achieve improved efficacy and fewer adverse effects than standard parenteral immunotherapy.

With each of our clinical and pre-clinical programs, we aim to tailor our therapies to treat specific stages in the evolution of cancer, from elimination, to equilibrium and escape. In addition, our objective is to focus on tumors that are resistant to current treatments and where we can design focused trials based on a genetic signature or biomarker to ensure patients have the best chance of a durable and significant response. We have several immuno-oncology programs that are in or near to entering the clinic. These include cellular therapies, an oncolytic virus and a palliative care program targeted to treat intractable cancer pain. Our cellular therapy programs focus on CAR-T for adoptive cellular immunotherapy to treat both solid and liquid tumors. We have reported early data from Phase I trials of our carcinoembryonic antigen, or CEA, -directed CAR-T program. We have treated five patients with stage 4, unresectable adenocarcinoma (four with pancreatic and one with colorectal cancer) and CEA-positive liver metastases with anti-CEA CAR-T and are currently expanding this study. We successfully submitted an Investigational New Drug application, or IND, for anti-CD38 CAR-T for the treatment of refractory or relapsed multiple myeloma and obtained approval from the U.S. Food and Drug Administration, or the FDA, to commence a human clinical trial for this indication in early 2018. We have dosed two patients and are continuing the enrollment of additional patients.

Broadly speaking, we are one of the world's leading CAR-T companies today due to our investments in technology and infrastructure, which have enabled significant progress in developing our next-generation non-viral, "off-the-shelf" allogeneic CAR-T solutions. With "off-the-shelf" solutions, CAR-T therapy can truly become a drug product rather than a treatment procedure. One of the approaches we have taken to develop the "off-the-shelf" allogeneic CAR-T solutions is through Celularity, our joint venture with Celgene, United Therapeutics and others. Celularity focuses on developing cell therapies with placenta-derived and cord blood T cells, which have natural allogeneic "off-the-shelf" characteristics. We are the single largest shareholder of Celularity with a stake of approximately 25%.

Outside of immune-oncology programs, as part of our global aim to provide a wide range of therapeutic products to meet underserved markets, we have made investments in non-opioid pain management. These include resiniferatoxin, or RTX, which is a non-opioid-based neurotoxin that specifically ablates nerves that conduct pain signals while leaving other nerve functions intact and is being studied for chronic pain treatment. RTX has been granted orphan drug status for the treatment of intractable pain with end-stage cancer and a Phase I trial with the National Institutes of Health is concluding. A Phase Ib trial studying tolerance and efficacy of RTX for the control of osteoarthritis knee pain was initiated in late 2018 and preliminary results have shown strong efficacy with no significant adverse effects. Other applications of RTX are expected to start Phase Ib trials in 2019.

Also in the area of non-opioid pain management, we have acquired proprietary technologies to responsibly develop next generation, branded pharmaceutical products to better manage patients' medical conditions and maximize the quality of life of patients and healthcare providers. The flagship product of our majority-owned subsidiary, Scilex Pharmaceuticals Inc., or Scilex, ZTlido® (lidocaine topical system 1.8%), is a next-generation lidocaine delivery system which was approved by the FDA for the treatment of postherpetic neuralgia, a severe neuropathic pain condition, in February 2018, and was commercially launched in late October 2018. Scilex now has built a full commercial organization, which includes sales, marketing, market access, and medical affairs. ZTlido® is positioned as a best-in-class product with superior adhesion compared to Lidoderm and is manufactured by our Japanese partner in their state-of-the-art manufacturing facility. For a complete description of our business, financial condition, results of operations and other important information, we refer you to our filings with the SEC that are incorporated by reference in this prospectus, including our Annual Report on Form 10-K for the year ended December 31, 2018, as amended. For instructions on how to find copies of these documents, see "Where You Can Find More Information".

On September 21, 2009, QuikByte Software, Inc., a Colorado corporation and shell company, or QuikByte, consummated its acquisition of Sorrento Therapeutics, Inc., a Delaware corporation and private concern, or STI, in a reverse merger, or the Merger. Pursuant to the Merger, all of the issued and outstanding shares of STI common stock were converted into an aggregate of 6,775,032 shares of QuikByte common stock and STI became a wholly owned subsidiary of QuikByte. The holders of QuikByte's common stock immediately prior to the Merger held an aggregate of 2,228,333 shares of QuikByte's common stock immediately following the Merger.

We were originally incorporated as San Diego Antibody Company in California in 2006 and were renamed "Sorrento Therapeutics, Inc." and reincorporated in Delaware in 2009, prior to the Merger. QuikByte was originally incorporated in Colorado in 1989. Following the Merger, on December 4, 2009, QuikByte reincorporated under the laws of the State of Delaware, or the Reincorporation. Immediately following the Reincorporation, on December 4, 2009, we merged with and into QuikByte, the separate corporate existence of STI ceased and QuikByte continued as the surviving corporation, or the Roll-Up Merger. Pursuant to the certificate of merger filed in connection with the Roll-Up Merger, QuikByte's name was changed from "QuikByte Software, Inc." to "Sorrento Therapeutics, Inc."

Recent Developments

On March 18, 2019, we, for limited purposes, entered into an Agreement and Plan of Merger, or the Merger Agreement, with Semnur Pharmaceuticals, Inc., a Delaware corporation, or Semnur, Scilex Holding Company, a Delaware corporation, or HoldCo, Sigma Merger Sub, Inc., a Delaware corporation and wholly owned subsidiary of HoldCo, or Merger Sub, and Fortis Advisors LLC, solely as representative of the holders of Semnur equity, or the Equityholders' Representative. Pursuant to the Merger Agreement, Merger Sub merged with and into Semnur, or the Merger, with Semnur surviving as a wholly owned subsidiary of HoldCo.

Concurrently with the execution of the Merger Agreement, we and each of the other holders of outstanding shares of capital stock of Scilex contributed each share of Scilex capital stock we or it owned to HoldCo in exchange for one share of HoldCo common stock, or the Contribution. As a result of the Contribution, and prior to the consummation of the Merger, Scilex became a wholly-owned subsidiary of HoldCo and we became the owner of approximately 77% of HoldCo's issued and outstanding capital stock.

Pursuant to the Merger Agreement, and upon the terms and subject to the conditions contained therein, following the closing of the Merger, or the Closing, HoldCo is required to pay to the holders of Semnur's capital stock and options to purchase Semnur's common stock, or collectively, the Semnur Equityholders, upfront consideration with a value of approximately $70.0 million plus the aggregate exercise price of outstanding options to purchase Semnur's common stock (which amount will be subsequently deducted from the amounts otherwise payable to the holders of such options), consisting of the following: (a) a cash payment of approximately $12.4 million, and (b) 47,392,287 shares of HoldCo common stock, or the Stock Consideration. A portion of the cash consideration otherwise payable to the Semnur Equityholders was set aside for expenses incurred by the Equityholders' Representative, and 4,749,095 shares of HoldCo common stock otherwise issuable to Semnur Equityholders were placed in escrow with a third party as security for the indemnification obligations of the Semnur Equityholders under the Merger Agreement, including in respect of breaches of representations and warranties of Semnur included in the Merger Agreement. The Semnur Equityholders that receive the Stock Consideration are required to sign an exchange and registration rights agreement with us, or the Exchange Agreement, which is further described below.

Following the issuance of the Stock Consideration, we are the owner of approximately 58% of HoldCo's issued and outstanding capital stock. Pursuant to the Merger Agreement, and upon the terms and subject to the conditions contained therein, HoldCo has also agreed to pay the Semnur Equityholders up to $280.0 million in aggregate contingent cash consideration based on the achievement of certain milestones, including obtaining the first approval of a New Drug Application of a Semnur product by the U.S. Food and Drug Administration and the achievement of certain amounts of net sales of Semnur products.

Pursuant to the Exchange Agreement, and upon the terms and subject to the conditions contained therein, if within 18 months following the Closing, 100% of the outstanding equity of HoldCo has not been acquired by a third party and HoldCo has not entered into a definitive agreement with respect to, or otherwise consummated, a firmly underwritten offering of HoldCo capital stock on a major stock exchange that meets certain requirements and includes the Stock Consideration, then holders of the Stock Consideration may collectively elect to exchange, during the 60-day period commencing the date that is the 18 month anniversary of the Closing, or the Share Exchange, the Stock Consideration for shares of our Common Stock with a value of $55.0 million based on a price per share of our Common Stock equal to the greater of (a) the 30-day trailing volume weighted average price of one share of our Common Stock as reported on Nasdaq as of the consummation of the Share Exchange and (b) $5.55 (subject to adjustment for any stock dividend, stock split, stock combination, reclassification or similar transaction).

Pursuant to the terms of the Exchange Agreement, and subject to the limitations contained therein, within 30 days following consummation of the Share Exchange (if it occurs at all), we have agreed to prepare and file with the SEC a registration statement to enable the public resale on a delayed or continuous basis of the shares of our Common Stock issued in the Share Exchange, or the Resale Registration Statement, and use its commercially reasonable efforts to maintain the effectiveness of such Resale Registration Statement for up to three years thereafter. In the Exchange Agreement, we have also agreed to indemnify the applicable Semnur Equityholders and their affiliates for certain liabilities related to such Resale Registration Statement, including certain liabilities arising under the Securities Act of 1933, as amended, and the Securities Exchange Act of 1934, as amended.

Mr. Shah, a member of our Board of Directors, was Semnur's Chief Executive Officer, a member of its Board of Directors and a stockholder of Semnur prior to the acquisition transaction.

Risk Factors

An investment in shares of our Common Stock involves a high degree of risk. You should consider carefully the risk factors beginning on page 4 of this prospectus before investing in our Common Stock.

Use of Proceeds

Although we will incur expenses in connection with the registration of the Shares covered by this prospectus, we will not receive any of the proceeds from the sale of the Shares by the Selling Stockholders.

Principal Executive Offices and Additional Information

Our principal executive offices are located at 4955 Directors Place, San Diego, CA 92121, and our telephone number at that address is (858) 203-4100. Our website is www.sorrentotherapeutics.com. Any information contained on, or that can be accessed through, our website is not incorporated by reference into, nor is it in any way part of this prospectus and should not be relied upon in connection with making any decision with respect to an investment in our securities. We are required to file annual, quarterly and current reports, proxy statements and other information with the SEC. You may obtain any of the documents filed by us with the SEC at no cost from the SEC's website at *http://www.sec.gov*.

RISK FACTORS

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

Risks Related to Our Financial Position and Capital Requirements

We are a clinical stage company subject to significant risks and uncertainties, including the risk that we or our partners may never develop, obtain regulatory approval or market any of our product candidates or generate product related revenues.

We are primarily a clinical stage biotechnology company that began operating and commenced research and development activities in 2009. Pharmaceutical product development is a highly speculative undertaking and involves a substantial degree of risk. There is no assurance that our libraries of fully-human mAbs or any of our other product candidates in development will be suitable for diagnostic or therapeutic use, or that we will be able to identify and isolate therapeutics product candidates, or develop, market and commercialize these candidates. We do not expect any of our product candidates in development, including, but not limited to, our fully-human mAbs, biosimilars/biobetters, fully human anti-PD-L1 and anti-PD-1 checkpoint inhibitors derived from our proprietary G-MAB™ library platform, antibody drug conjugates ("ADCs"), BsAbs, as well as Chimeric Antigen Receptor-T Cell ("CAR-T") for adoptive cellular immunotherapy, resiniferatoxin ("RTX") and non-opioid corticosteroid formulated as a viscous gel injection ("SP-102") to be commercially available for a few years, if at all. Even if we are able to commercialize our product candidates, there is no assurance that these candidates would generate revenues or that any revenues generated would be sufficient for us to become profitable or thereafter maintain profitability.

We will require substantial additional funding, which may not be available to us on acceptable terms, or at all. If we fail to raise the necessary additional capital, we may be unable to complete the development and commercialization of our product candidates or continue our development programs.

Our operations have consumed substantial amounts of cash since inception. We expect to significantly increase our spending to advance the preclinical and clinical development of our product candidates and launch and commercialize any product candidates for which we receive regulatory approval, including building our own commercial organization to address certain markets. We will require additional capital for the further development and commercialization of our product candidates, as well as to fund our other operating expenses and capital expenditures.

As a result of our recurring losses from operations, recurring negative cash flows from operations and substantial cumulative losses, there is uncertainty regarding our ability to maintain liquidity sufficient to operate our business effectively, which raises substantial doubt about our ability to continue as a going concern. If we are unsuccessful in our efforts to raise outside financing, we may be required to significantly reduce or cease operations. The report of our independent registered public accounting firm on our audited financial statements for the year ended December 31, 2018 included a "going concern" explanatory paragraph indicating that our recurring losses from operations, recurring negative cash flows from operations and substantial cumulative losses raise substantial doubt about our ability to continue as a going concern.

We cannot be certain that additional funding will be available on acceptable terms, or at all. If we are unable to raise additional capital in sufficient amounts or on terms acceptable to us we may have to significantly delay, scale back or discontinue the development or commercialization of one or more of our product candidates. We may also seek collaborators for one or more of our current or future product candidates at an earlier stage than otherwise would be desirable or on terms that are less favorable than might otherwise be available. Any of these events could significantly harm our business, financial condition and prospects.

Our future capital requirements will depend on many factors, including:

- the progress of the development of our fully-human mAbs, including biosimilars/biobetters, fully human anti-PD-L1 and anti-PD-1 checkpoint inhibitors derived from our proprietary G-MAB™ library platform, ADCs, BsAbs, as well as CAR-T for adoptive cellular immunotherapy, RTX and SP-102;
- the number of product candidates we pursue;
- the time and costs involved in obtaining regulatory approvals;
- the costs involved in filing and prosecuting patent applications and enforcing or defending patent claims;
- our plans to establish sales, marketing and/or manufacturing capabilities;
- the effect of competing technological and market developments;
- the terms and timing of any collaborative, licensing and other arrangements that we may establish;
- general market conditions for offerings from biopharmaceutical companies;
- our ability to establish, enforce and maintain selected strategic alliances and activities required for product commercialization; and
- our revenues, if any, from successful development and commercialization of our product candidates, including ZTlido® (lidocaine topical system 1.8%).

In order to carry out our business plan and implement our strategy, we anticipate that we will need to obtain additional financing from time to time and may choose to raise additional funds through strategic collaborations, licensing arrangements, joint ventures, public or private equity or debt financing, bank lines of credit, asset sales, government grants or other arrangements. We cannot be sure that any additional funding, if needed, will be available on terms favorable to us or at all. Furthermore, any additional equity or equity-related financing may be dilutive to our stockholders, and debt or equity financing, if available, may subject us to restrictive covenants and significant interest costs. If we obtain funding through a strategic collaboration or licensing arrangement, we may be required to relinquish our rights to certain of our product candidates or marketing territories.

Further, there is uncertainty related to future National Institutes of Health ("NIH") grant funding, and the NIH's plans for new grants or cooperative agreements may be re-scoped, delayed, or canceled depending on the nature of the work and the availability of resources. As a result, we cannot assure you that we will receive any additional funding under our existing NIH grants, and we may not be successful in securing additional grants from the NIH in the future.

Our inability to raise capital when needed would harm our business, financial condition and results of operations, and could cause our stock price to decline or require that we wind down our operations altogether.

Risks Related to Our Business and Industry

A fast track product designation or other designation to facilitate product candidate development may not lead to faster development or regulatory review or approval process, and it does not increase the likelihood that our product candidates will receive marketing approval.

A product sponsor may apply for fast track designation from the U.S. Food and Drug Administration ("FDA") if a product is intended for the treatment of a serious or life-threatening condition and preclinical or clinical data demonstrate the potential to address an unmet medical need for this condition ("Fast Track Designation"). The FDA has broad discretion whether or not to grant this designation. We have received Fast Track Designation for SP-102, which is in development for the treatment of lumbar radicular pain/sciatica. Even though SP-102 has received Fast Track Designation, we may not experience a faster process, review or approval compared to conventional FDA procedures. Fast Track Designation does not accelerate clinical trials, mean that regulatory requirements are less stringent or provide assurance of ultimate marketing approval by the FDA. Instead, Fast Track Designation provides opportunities for frequent interactions with FDA review staff, as well as eligibility for priority review, if relevant criteria are met, and rolling review. The FDA may rescind the fast track designation if it believes that the designation is no longer supported by data from our clinical development program. The FDA may also withdraw any fast track designation at any time.

Drug development involves a lengthy and expensive process with an uncertain outcome, and results of earlier studies and trials may not be predictive of future trial results.

Clinical testing is expensive and can take many years to complete, and its outcome is risky and uncertain. Failure can occur at any time during the clinical trial process. The results of preclinical studies and early clinical trials of our product candidates may not be predictive of the results of later-stage clinical trials. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy traits despite having progressed through preclinical studies and initial clinical trials. It is not uncommon for companies in the pharmaceutical industry to suffer significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier trials. Our future clinical trial results may not be successful.

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

Other than with respect to ZTlido® (lidocaine topical system 1.8%), we have not completed a corporate-sponsored clinical trial. Phase I trials are ongoing for RTX for knee osteoarthritis, RTX for cancer-related pain, anti-CD38 CAR-T for multiple myeloma and anti-CEA CAR-T for intrahepatic CEA positive metastases and for intraperitoneal tumor implantation (malignant ascites) and a Phase III trial is ongoing for SP-102 for lumbar radicular pain. Despite this, we may not have the necessary capabilities, including adequate staffing, to successfully manage the execution and completion of any clinical trials we initiate, including our planned clinical trials of RTX, clinical trials of SP-102, clinical trials of CAR-T including targeting CD38 using a CAR-T cell therapy, our biosimilar/biobetters antibodies and other product candidates, in a way that leads to our obtaining marketing approval for our product candidates in a timely manner, or at all.

In the event we are able to conduct a pivotal clinical trial of a product candidate, the results of such trial may not be adequate to support marketing approval. Because our product candidates are intended for use in life-threatening diseases, in some cases we ultimately intend to seek marketing approval for each product candidate based on the results of a single pivotal clinical trial. As a result, these trials may receive enhanced scrutiny from the FDA. For any such pivotal trial, if the FDA disagrees with our choice of primary endpoint or the results for the primary endpoint are not robust or significant relative to control, are subject to confounding factors, or are not adequately supported by other study endpoints, including possibly overall survival or complete response rate, the FDA may refuse to approve a New Drug Application, Biologics License Application or other application for marketing based on such pivotal trial. The FDA may require additional clinical trials as a condition for approving our product candidates.

We are involved, and may become involved in the future, in disputes and other legal or regulatory proceedings that, if adversely decided or settled, could materially and adversely affect our business, financial condition and results of operations.

We are, and may in the future become, party to litigation, regulatory proceedings or other disputes. For example, on April 3, 2019, we filed two legal actions against, among others, Patrick Soon-Shiong and entities controlled by him, asserting claims for, among other things, fraud and breach of contract, arising out of Soon-Shiong's purchase of the drug Cynviloq™ from our company in May 2015. The actions allege that Soon-Shiong and the other defendants, among other things, acquired the drug Cynviloq™ for the purpose of halting its progression to the market. In general, claims made by or against us in disputes and other legal or regulatory proceedings can be expensive and time consuming to bring or defend against, requiring us to expend significant resources and divert the efforts and attention of our management and other personnel from our business operations. Any failure to prevail in any claims made by us or any adverse determination against us in these proceedings, or even the allegations contained in the claims, regardless of whether they are ultimately found to be without merit, may also result in settlements, injunctions or damages that could have a material adverse effect on our business, financial condition and results of operations.

Risks Related to Acquisitions

We have and plan to continue to acquire businesses and technologies and may fail to realize the anticipated benefits of the acquisitions, and acquisitions can be costly and dilutive.

We have and plan to continue to expand our business and intellectual property portfolio through the acquisition of new businesses and technologies.

For example, in November 2016, we acquired a majority of the outstanding capital stock of Scilex, which was contributed to our majority-owned subsidiary Scilex Holding Company ("SHC") in connection with the acquisition of Semnur Pharmaceuticals, Inc. ("Semnur") by SHC in March 2019. We also acquired Virttu Biologics Limited in 2017 and Sofusa®, a revolutionary drug delivery system, in July 2018, and we are in the process of integrating this company and technology with ours.

The success of any acquisition depends on, among other things, our ability to combine our business with the acquired business in a manner that does not materially disrupt existing relationships and that allows us to achieve development and operational synergies. If we are unable to achieve these objectives, the anticipated benefits of the acquisition may not be realized fully or at all or may take longer to realize than expected. In particular, the acquisition may not be accretive to our stock value or development pipeline in the near or long term.

It is possible that the integration process could result in the loss of key employees; the disruption of our ongoing business or the ongoing business of the acquired companies; or inconsistencies in standards, controls, procedures or policies that could adversely affect our ability to maintain relationships with third parties and employees or to achieve the anticipated benefits of the acquisition. Integration efforts between us and the acquired company will also divert management's attention from our core business and other opportunities that could have been beneficial to our stockholders. An inability to realize the full extent of, or any of, the anticipated benefits of the acquisition, as well as any delays encountered in the integration process, could have an adverse effect on our business and results of operations, which may affect the value of the shares of our common stock after the completion of the acquisition. If we are unable to achieve these objectives, the anticipated benefits of the acquisition may not be realized fully or at all or may take longer to realize than expected. In particular, the acquisition may not be accretive to our stock value or development pipeline in the near or long term.

We expect to incur additional costs integrating the operations of any companies we acquire, higher development and regulatory costs, and personnel, which cannot be estimated accurately at this time. If the total costs of the integration of our companies and advancement of acquired product candidates and technologies exceed the anticipated benefits of the acquisition, our financial results could be adversely affected.

DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference into this prospectus may contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, about the Company and its subsidiaries. These forward-looking statements are intended to be covered by the safe harbor for forward-looking statements provided by the Private Securities Litigation Reform Act of 1995. Forward-looking statements are not statements of historical fact, and can be identified by the use of forward-looking terminology such as "believes", "expects", "may", "will", "could", "should", "projects", "plans", "goal", "targets", "potential", "estimates", "pro forma", "seeks", "intends" or "anticipates" or the negative thereof or comparable terminology. Forward-looking statements include discussions of strategy, financial projections, guidance and estimates (including their underlying assumptions), statements regarding plans, objectives, expectations or consequences of various transactions, and statements about the future performance, operations, products and services of the Company and its subsidiaries. We caution our stockholders and other readers not to place undue reliance on such statements.

You should read this prospectus and the documents incorporated by reference completely and with the understanding that our actual future results may be materially different from what we currently expect. Our business and operations are and will be subject to a variety of risks, uncertainties and other factors. Consequently, actual results and experience may materially differ from those contained in any forward-looking statements. Such risks, uncertainties and other factors that could cause actual results and experience to differ from those projected include, but are not limited to, the risk factors set forth in Part I - Item 1A, "Risk Factors", in our Annual Report on Form 10-K for the year ended December 31, 2018, as filed with the SEC on March 15, 2019, as amended, and elsewhere in the documents incorporated by reference into this prospectus.

You should assume that the information appearing in this prospectus, any accompanying prospectus supplement, any related free writing prospectus and any document incorporated herein by reference is accurate as of its date only. Because the risk factors referred to above could cause actual results or outcomes to differ materially from those expressed in any forward-looking statements made by us or on our behalf, you should not place undue reliance on any forward-looking statements. Further, any forward-looking statement speaks only as of the date on which it is made. New factors emerge from time to time, and it is not possible for us to predict which factors will arise. In addition, we cannot assess the impact of each factor on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. All written or oral forward-looking statements attributable to us or any person acting on our behalf made after the date of this prospectus are expressly qualified in their entirety by the risk factors and cautionary statements contained in and incorporated by reference into this prospectus. Unless legally required, we do not undertake any obligation to release publicly any revisions to such forward-looking statements to reflect events or circumstances after the date of this prospectus or to reflect the occurrence of unanticipated events.

USE OF PROCEEDS

We will receive no proceeds from the sale of the Shares by the Selling Stockholders. We may, however, receive cash proceeds equal to up to the total exercise price of the Warrants to the extent that the Warrants are exercised for cash. The exercise price of the Warrants is $3.28 per share of Common Stock. The exercise price and the number of shares of Common Stock issuable upon exercise of the Warrants may be adjusted in certain circumstances, including stock splits, dividends or distributions, or other similar transactions. However, the Warrants contain a "cashless exercise" feature that allows the holders to exercise the Warrants without making a cash payment to us in the event that there is no registration statement registering the Warrant Shares for resale. There can be no assurance that any of these Warrants will be exercised by the Selling Stockholders at all or that the Warrants will be exercised for cash rather than pursuant to the "cashless exercise" feature. To the extent we receive proceeds from the cash exercise of the Warrants, we intend to use such proceeds to provide capital support or for general corporate purposes, which may include, without limitation, supporting asset growth and engaging in acquisitions or other business combinations. We do not have any specific plans for acquisitions or other business combinations at this time. Our management will retain broad discretion in the allocation of the net proceeds from the exercise of the Warrants for cash.

The Selling Stockholders will pay any underwriting fees, discounts and commissions attributable to the sale of the Shares and any similar expenses they incur in disposing of the Shares. We will bear all other costs, fees and expenses incurred in effecting the registration of the Shares covered by this prospectus. These may include, without limitation, all registration and filing fees, printing fees and fees and expenses of our counsel and accountants and, solely with respect to the registration of the Virttu Shares, the actual, reasonable and documented fees and expenses of counsel for the Virttu Shareholders in an amount not to exceed $10,000, in each case, in connection with the registration of the Shares covered by this prospectus.

SELLING STOCKHOLDERS

Unless the context otherwise requires, as used in this prospectus, "Selling Stockholders" includes the selling stockholders listed below and donees, pledgees, permitted transferees or other successors-in-interest selling shares received after the date of this prospectus from a selling stockholder as a gift, pledge or other non-sale related transfer.

We have prepared this prospectus to allow the Selling Stockholders or their successors, assignees or other permitted transferees to sell or otherwise dispose of, from time to time, up to 9,890,998 shares of our Common Stock. The shares to be offered hereby were issued or are issuable to the Selling Stockholders in connection with (i) our acquisition of all of the outstanding ordinary shares of Virttu pursuant to the Share Purchase Agreement, (ii) the conversion of the Notes, and (iii) the exercise of the Warrants.

Pursuant to the terms of the Share Purchase Agreement, on April 27, 2018, we issued an aggregate total of 1,795,011 shares of Common Stock to the Virttu Shareholders and further agreed to register the 1,795,011 shares of our Common Stock pursuant to the April Registration Rights Agreement. As of the date hereof, the Notes are convertible at any time into an aggregate of 5,397,325 shares of Common Stock. The Warrants became exercisable on December 11, 2018, have a term of five and a half years from the date of issuance and have an exercise price of $3.28 per share of Common Stock, subject to adjustment for stock splits, reverse stock splits, stock dividends and similar transactions. Pursuant to the terms of the June Registration Rights Agreement, we agreed to register for resale the shares of Common Stock issuable upon conversion of the Notes and exercise of the Warrants. The Shares were issued or will be issuable to the Selling Stockholders in reliance on the exemption from securities registration in Section 4(a)(2) under the Securities Act and Rule 506 promulgated thereunder, as well as the safe harbor provided by Regulation S under the Securities Act.

The shares of Common Stock to be offered by the Selling Stockholders are "restricted" securities under applicable federal and state securities laws and are being registered under the Securities Act to give the Selling Stockholders the opportunity to sell these shares publicly. The registration of these shares does not require that any of the shares be offered or sold by the Selling Stockholders. Subject to these resale restrictions, the Selling Stockholders may from time to time offer and sell all or a portion of their shares indicated below in privately negotiated transactions or on the Nasdaq Capital Market or any other market on which our Common Stock may subsequently be listed or quoted.

The registered shares may be sold directly or through brokers or dealers, or in a distribution by one or more underwriters on a firm commitment or best effort basis. To the extent required, the names of any agent or broker-dealer and applicable commissions or discounts and any other required information with respect to any particular offering will be set forth in a prospectus supplement. See the section of this prospectus entitled "Plan of Distribution". The Selling Stockholders and any agents or broker-dealers that participate with the Selling Stockholders in the distribution of registered shares may be deemed to be "underwriters" within the meaning of the Securities Act, and any commissions received by them and any profit on the resale of the registered shares may be deemed to be underwriting commissions or discounts under the Securities Act.

No estimate can be given as to the amount or percentage of Common Stock that will be held by the Selling Stockholders after any sales made pursuant to this prospectus because the Selling Stockholders are not required to sell any of the Shares being registered under the registration statement of which this prospectus forms a part. The following table assumes that the Selling Stockholders will sell all of the Shares listed in this prospectus.

Unless otherwise indicated in the footnotes below, no Selling Stockholder has had any material relationship with us or any of our affiliates within the past three years other than as a security holder.

We have prepared this table based on written representations and information furnished to us by or on behalf of the Selling Stockholders. Since the date on which the Selling Stockholders provided this information, the Selling Stockholders may have sold, transferred or otherwise disposed of all or a portion of the shares of Common Stock in a transaction exempt from the registration requirements of the Securities Act. Unless otherwise indicated in the footnotes below, we believe that (1) none of the Selling Stockholders are broker-dealers or affiliates of broker-dealers, (2) no Selling Stockholder has direct or indirect agreements or understandings with any person to distribute their Shares, and (3) the Selling Stockholders have sole voting and investment power with respect to all shares beneficially owned, subject to applicable community property laws. To the extent any Selling Stockholder identified below is, or is affiliated with, a broker-dealer, it could be deemed to be, under SEC Staff interpretations, an "underwriter" within the meaning of the Securities Act. Information about the Selling Stockholders may change over time. Any changed information will be set forth in supplements to this prospectus, if required.

The following table sets forth information with respect to the beneficial ownership of our Common Stock held, as of April 15, 2019, by the Selling Stockholders and the number of Shares being offered hereby and information with respect to shares to be beneficially owned by the Selling Stockholders after completion of this offering. The percentages in the following table reflect the shares beneficially owned by the Selling Stockholders as a percentage of the total number of shares of Common Stock outstanding as of April 15, 2019. As of such date, 122,457,257 shares of Common Stock were outstanding.

Name	Shares Beneficially Owned Prior to the Offering[1] Number	Percentage	Maximum Number of Shares of Common Stock to be Offered Pursuant to this Prospectus	Shares Beneficially Owned After the Offering[1][2] Number	Percentage
Dayspring Ventures Limited	2,312,916[3]	1.9%	1,654,271	658,645	*
Cancer Research Technology Limited	27,798[4]	*	21,706	6,092	*
GU Holdings Limited	91,754[5]	*	71,646	20,108	*
Suzanne Moira Brown	61,235[6]	*	47,388	13,847	*
Asia Pacific MedTech (BVI) Limited	11,017,987[7]	8.9%	2,139,036[8]	8,878,951	7.2%
Famous Sino Limited	8,031,955[9]	6.4%	1,200,000[10]	6,831,955	5.5%
China In Shine Investment Limited	8,481,955[11]	6.7%	1,650,000[12]	6,831,955	5.5%
Himark Group (Holdings) Company Limited	1,500,000[13]	1.2%	1,500,000[13]	—	—
Success Indicator Investments Limited	1,500,000[14]	1.2%	1,500,000[14]	—	—
Pipeline Ventures, LLC	106,951[15]	*	106,951[15]	—	—
TOTAL	**33,132,551**	**—**	**9,890,998**	**23,241,553**	—

* Less than 1%.

(1) Beneficial ownership is determined in accordance with Rule 13d-3 under the Exchange Act. In computing the number of shares beneficially owned by a person and the percentage ownership of that person, shares of Common Stock subject to warrants, options and other convertible securities held by that person that are currently exercisable or exercisable within 60 days (of April 15, 2019) are deemed outstanding. Shares subject to warrants, options and other convertible securities, however, are not deemed outstanding for the purpose of computing the percentage ownership of any other person.

(2) Assumes that the Selling Stockholders dispose of all of the shares of Common Stock covered by this prospectus and do not acquire beneficial ownership of any additional shares. The registration of these shares does not necessarily mean that the Selling Stockholders will sell all or any portion of the shares covered by this prospectus.

(3) The address of the Selling Stockholder is 4 Bond Street, St Helier, Jersey JE2 3NP. Voting and dispositive power with respect to the 2,312,916 shares held by the Selling Stockholder is held by Daniel Young and Richard Joynt, who are Directors of the Selling Stockholder.

(4) The address of the Selling Stockholder is Angel Building, 407 St John Street, London EC1V 4AD. Voting and dispositive power with respect to the 27,798 shares held by the Selling Stockholder is held by Iain Foulkes, who is the Chief Executive Officer of the Selling Stockholder, Andrew Waldron, who is the Head of Legal and Company Secretary and Laura Fletcher, who is the Associate Director, Business Management of the Selling Stockholder.

(5) The address of the Selling Stockholder is 11 The Square, University Avenue, Glasgow, Lanarkshire, G12 8QQ. Voting and dispositive power with respect to the 91,754 shares held by the Selling Stockholder is held by Neal Peter Juster, who is the Director of the Selling Stockholder.

(6) The address of the Selling Stockholder is Kilure, The Steading, Croy Cunningham, Killearn, Glasgow, G63 9QY.

(7) Consists of (i) 8,617,513 shares held directly by the Selling Stockholder, (ii) 261,438 shares issuable to the Selling Stockholder upon exercise of a warrant held by the Selling Stockholder, (iii) 1,426,024 shares issuable to the Selling Stockholder upon conversion of the Note held by the Selling Stockholder, and (iv) 713,012 shares issuable to the Selling Stockholder upon exercise of the Warrant held by the Selling Stockholder. Nana Gu is the sole director and sole shareholder of the Selling Stockholder and may be deemed to have voting and dispositive power over the shares, the warrant and the Note held by the Selling Stockholder. The principal business address of the Selling Stockholder and Miss Gu is c/o Offshore Incorporations Limited, P.O. Box 957, Offshore Incorporations Centre, Road Town, Tortola, British Virgin Islands.

(8) Consists of: (i) 1,426,024 shares issuable to the Selling Stockholder upon conversion of the Note held by the Selling Stockholder, and (ii) 713,012 shares issuable to the Selling Stockholder upon exercise of the Warrant held by the Selling Stockholder. Nana Gu is the sole director and sole shareholder of the Selling Stockholder and may be deemed to have voting and dispositive power over the Warrant and the Note held by the Selling Stockholder.

(9) Consists of (i) 4,407,713 shares held directly by the Selling Stockholder, (ii) 2,424,242 shares issuable to the Selling Stockholder upon exercise of a warrant held by the Selling Stockholder, (iii) 800,000 shares issuable to the Selling Stockholder upon conversion of the Note held by the Selling Stockholder, and (iv) 400,000 shares issuable to the Selling Stockholder upon exercise of the Warrant held by the Selling Stockholder. Guangze Wu is the sole director of the Selling Stockholder and may be deemed to have voting and dispositive power over the shares, the warrant and the Note held by the Selling Stockholder. The principal business address of the Selling Stockholder is Flat B, 1/F, Tower 1, Dynasty Court, No. 23 Old Peak Road, Hong Kong.

(10) Consists of: (i) 800,000 shares issuable to the Selling Stockholder upon conversion of the Note held by the Selling Stockholder, and (ii) 400,000 shares issuable to the Selling Stockholder upon exercise of the Warrant held by the Selling Stockholder. Guangze Wu is the sole director of the Selling Stockholder and may be deemed to have voting and dispositive power over the Note and the Warrant held by the Selling Stockholder.

(11) Consists of (i) 4,407,713 shares held directly by the Selling Stockholder, (ii) 2,424,242 shares issuable to the Selling Stockholder upon exercise of a warrant held by the Selling Stockholder, (iii) 1,100,000 shares issuable to the Selling Stockholder upon conversion of the Note held by the Selling Stockholder and (iv) 550,000 shares issuable to the Selling Stockholder upon exercise of the Warrant held by the Selling Stockholder. Chit Fung is the sole director of the Selling Stockholder and may be deemed to have voting and dispositive power over the shares, the warrant and the Note held by the Selling Stockholder. The principal business address of the Selling Stockholder is 18/F, Des Voeux Road West, Hong Kong.

(12) Consists of: (i) 1,100,000 shares issuable to the Selling Stockholder upon conversion of the Note held by the Selling Stockholder, and (ii) 550,000 shares issuable to the Selling Stockholder upon exercise of the Warrant held by the Selling Stockholder. Chit Fung is the sole director of the Selling Stockholder and may be deemed to have voting and dispositive power over the Note and the Warrant held by the Selling Stockholder.

(13) Consists of: (i) 1,000,000 shares issuable to the Selling Stockholder upon conversion of the Note held by the Selling Stockholder, and (ii) 500,000 shares issuable to the Selling Stockholder upon exercise of the Warrant held by the Selling Stockholder. Na O is a Director of the Selling Stockholder and may be deemed to have voting and dispositive power over the Note held by the Selling Stockholder. The principal business address of the Selling Stockholder is Flat C, 7/F, One Island Place, 51 Tanner Road, North Point, Hong Kong.

(14) Consists of: (i) 1,000,000 shares issuable to the Selling Stockholder upon conversion of the Note held by the Selling Stockholder, and (ii) 500,000 shares issuable to the Selling Stockholder upon exercise of the Warrant held by the Selling Stockholder. Kang Li is a Director of the Selling Stockholder and may be deemed to have voting and dispositive power over the Note held by the Selling Stockholder. The principal business address of the Selling Stockholder is Unit A & B, 22nd Floor, Ford Glory Plaza, 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong.

(15) Consists of: (i) 71,301 shares issuable to the Selling Stockholder upon conversion of the Note held by the Selling Stockholder, and (ii) 35,650 shares issuable to the Selling Stockholder upon exercise of the Warrant held by the Selling Stockholder. Patrick Lin is a Partner of the Selling Stockholder and may be deemed to have voting and dispositive power over the Note held by the Selling Stockholder. The principal business address of the Selling Stockholder is 45 Coachwood Terrace, Orinda, CA 94563.

Indemnification

Under the April Registration Rights Agreement and the June Registration Rights Agreement, we have agreed to indemnify the Selling Stockholders, their affiliates and permitted transferees against certain losses, claims, damages, liabilities, settlement costs and expenses, including certain liabilities under the Securities Act and the Exchange Act.

PLAN OF DISTRIBUTION

We are registering the shares of Common Stock previously issued to certain of the Selling Stockholders pursuant to the Share Purchase Agreement, the shares of Common Stock issuable upon exercise of the Notes previously issued to the Selling Stockholders and the shares of Common Stock issuable upon conversion of the Warrants previously issued to the Selling Stockholders to permit the resale of these shares of Common Stock by the holders of the Common Stock, the Notes and the Warrants from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the Selling Stockholders of the shares of Common Stock. We will bear all fees and expenses incident to our obligation to register the shares of Common Stock.

The Selling Stockholders may sell all or a portion of the shares of Common Stock beneficially owned by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If the shares of Common Stock are sold through underwriters or broker-dealers, the Selling Stockholders will be responsible for underwriting fees, discounts or commissions or agent's commissions. The shares of Common Stock may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at negotiated prices. The Selling Stockholders will act independently of us in making decisions with respect to the timing, manner and size of each sale. These sales may be effected in transactions, which may involve cross or block transactions:

- on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;
- in the over-the-counter market;
- in transactions otherwise than on these exchanges or systems or in the over-the-counter market;
- through the writing of options, whether such options are listed on an options exchange or otherwise;
- in ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- in block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- through purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- in an exchange distribution in accordance with the rules of the applicable exchange;
- in privately negotiated transactions;
- in short sales;
- through the distribution of the Common Stock by any Selling Stockholder to its partners, members or stockholders;
- through one or more underwritten offerings on a firm commitment or best efforts basis;
- in sales pursuant to Rule 144;
- whereby broker-dealers may agree with the Selling Stockholders to sell a specified number of such shares at a stipulated price per share;
- in a combination of any such methods of sale; and
- in any other method permitted pursuant to applicable law.

If the Selling Stockholders effect such transactions by selling shares of Common Stock to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the Selling Stockholders or commissions from purchasers of the shares of Common Stock for whom they may act as agent or to whom they may sell as principal (which discounts, concessions or commissions as to particular underwriters, broker-dealers or agents may be in excess of those customary in the types of transactions involved). In connection with sales of the shares of Common Stock or otherwise, the Selling Stockholders may enter into hedging transactions with broker-dealers, which may in turn engage in short sales of the shares of Common Stock in the course of hedging in positions they assume. The Selling Stockholders may also sell shares of Common Stock short and deliver shares of Common Stock covered by this prospectus to close out short positions and to return borrowed shares in connection with such short sales. The Selling Stockholders may also loan or pledge shares of Common Stock to broker-dealers that in turn may sell such shares.

The Selling Stockholders may pledge or grant a security interest in some or all of the shares of Common Stock, the Notes or the Warrants owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of Common Stock from time to time pursuant to this prospectus or any amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending, if necessary, the list of Selling Stockholders to include the pledgee, transferee or other successors in interest as Selling Stockholders under this prospectus. The Selling Stockholders also may transfer and donate the shares of Common Stock in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

The Selling Stockholders, individually and not severally, and any broker-dealer participating in the distribution of the shares of Common Stock may be deemed to be "underwriters" within the meaning of the Securities Act, and any commission paid, or any discounts or concessions allowed to, any such broker-dealer may be deemed to be underwriting commissions or discounts under the Securities Act. At the time a particular offering of the shares of Common Stock is made, a prospectus supplement, if required, will be distributed which will set forth the aggregate amount of shares of Common Stock being offered and the terms of the offering, including the name or names of any broker-dealers or agents, any discounts, commissions and other terms constituting compensation from the Selling Stockholders and any discounts, commissions or concessions allowed or reallowed or paid to broker-dealers. The Selling Stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares of Common Stock against certain liabilities, including liabilities arising under the Securities Act.

Under the securities laws of some states, the shares of Common Stock may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the shares of Common Stock may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

There can be no assurance that any Selling Stockholder will sell any or all of the shares of Common Stock registered pursuant to the registration statement of which this prospectus forms a part.

The Selling Stockholders and any other person participating in such distribution will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including, without limitation, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the shares of Common Stock by the Selling Stockholders and any other participating person. Regulation M may also restrict the ability of any person engaged in the distribution of the shares of Common Stock to engage in market-making activities with respect to the shares of Common Stock. All of the foregoing may affect the marketability of the shares of Common Stock and the ability of any person or entity to engage in market-making activities with respect to the shares of Common Stock.

We will pay all expenses of the registration of the shares of Common Stock pursuant to the April Registration Rights Agreement and the June Registration Rights Agreement, estimated to be $152,542 in total, including, without limitation, SEC filing fees and expenses of compliance with state securities or "Blue Sky" laws; *provided*, *however*, that a Selling Stockholder will pay all underwriting fees, discounts and selling commissions, if any. We will indemnify the Selling Stockholders against certain liabilities, including certain liabilities arising under the Securities Act, or the Selling Stockholders will be entitled to contribution. We may be indemnified by the Selling Stockholders against certain liabilities, including certain liabilities under the Securities Act, that may arise from any written information furnished to us by the Selling Stockholder specifically for use in this prospectus, or we may be entitled to contribution in an amount not to exceed the amount by which the net proceeds received by such Selling Stockholder exceeds the amount of damages that such Selling Stockholder has otherwise been required to pay.

Once sold under the registration statement, of which this prospectus forms a part, the shares of Common Stock will be freely tradable in the hands of persons other than our affiliates.

DESCRIPTION OF CAPITAL STOCK

General Matters

As of April 15, 2019, our authorized capital stock consisted of 750,000,000 shares of Common Stock, $0.0001 par value per share, and 100,000,000 shares of preferred stock, $0.0001 par value per share. Our board of directors, or our Board, may establish the rights and preferences of the preferred stock from time to time. As of April 15, 2019, there were 122,457,257 shares of our Common Stock issued and outstanding and no shares of preferred stock issued and outstanding.

Common Stock

Holders of our Common Stock are entitled to one vote per share. Our Restated Certificate of Incorporation, as amended, or our Certificate of Incorporation, does not provide for cumulative voting. Holders of our Common Stock are entitled to receive ratably such dividends, if any, as may be declared by our Board out of legally available funds. However, the current policy of our Board is to retain earnings, if any, for our operations and potential expansion of our business. Upon liquidation, dissolution or winding-up, the holders of our Common Stock are entitled to share ratably in all of our assets which are legally available for distribution, after payment of or provision for all liabilities. The holders of our Common Stock have no preemptive, subscription, redemption or conversion rights.

Preferred Stock

As of the date of this prospectus, no shares of preferred stock are issued and outstanding. Our Certificate of Incorporation provides that our Board may by resolution, without further vote or action by the stockholders, establish one or more classes or series of preferred stock having the number of shares and relative voting rights, designation, dividend rates, liquidation, and other rights, preferences, and limitations as may be fixed by them without further stockholder approval. Once designated by our Board, each series of preferred stock will have specific financial and other terms that will be set forth in the applicable certificate of designation for the series. Prior to the issuance of shares of each series of preferred stock, our Board is required by the General Corporation Law of the State of Delaware, or the DGCL, and our Certificate of Incorporation to adopt resolutions and file a certificate of designation with the Secretary of State of the State of Delaware. The certificate of designation fixes for each class or series the designations, powers, preferences, rights, qualifications, limitations and restrictions, including, but not limited to, some or all of the following:

(a) The distinctive designation of such series and the number of shares which shall constitute such series, which number may be increased (except where otherwise provided by our Board in creating such series) or decreased (but not below the number of shares thereof then outstanding) from time to time by resolution of our Board;

(b) The rate and manner of payment of dividends payable on shares of such series, including the dividend rate, date of declaration and payment, whether dividends shall be cumulative, and the conditions upon which and the date from which such dividends shall be cumulative;

(c) Whether shares of such series shall be redeemable, the time or times when, and the price or prices at which, shares of such series shall be redeemable, the redemption price, the terms and conditions of redemption, and the sinking fund provisions, if any, for the purchase or redemption of such shares;

(d) The amount payable on shares of such series and the rights of holders of such shares in the event of any voluntary or involuntary liquidation, dissolution or winding up of the affairs of the Company;

(e) The rights, if any, of the holders of shares of such series to convert such shares into, or exchange such shares for, shares of Common Stock, other securities, or shares of any other class or series of preferred stock and the terms and conditions of such conversion or exchange;

(f) The voting rights, if any, and whether full or limited, of the shares of such series, which may include no voting rights, one vote per share, or such higher or lower number of votes per share as may be designated by our Board; and

(g) The preemptive or preferential rights, if any, of the holders of shares of such series to subscribe for, purchase, receive, or otherwise acquire any part of any new or additional issue of stock of any class, whether now or hereafter authorized, or of any bonds, debentures, notes, or any of our other securities, whether or not convertible into shares of our Common Stock.

In connection with the adoption of a rights agreement, dated November 7, 2013, we filed a Certificate of Designation, Preferences and Rights of Series A Junior Participating Preferred Stock, or the Certificate of Designation, with the Secretary of State of the State of Delaware, which designated 1,000,000 shares of Preferred Stock as Series A Junior Participating Preferred Stock. The rights, preferences and privileges of the Series A Junior Participating Preferred Stock are as set forth in the Certificate of Designation. The rights agreement was amended and restated in December 2015 and is described below under "—Anti-Takeover Effects of Certain Provisions of our Certificate of Incorporation, Bylaws and the DGCL—Stockholder Rights Agreement".

Anti-Takeover Effects of Certain Provisions of our Certificate of Incorporation, Bylaws and the DGCL

Certain provisions of our Certificate of Incorporation and Bylaws, which are summarized in the following paragraphs, may have the effect of discouraging potential acquisition proposals or tender offers or delaying or preventing a change in control, including changes a stockholder might consider favorable. Such provisions may also prevent or frustrate attempts by our stockholders to replace or remove our management. In particular, our Certificate of Incorporation and Bylaws and Delaware law, as applicable, among other things:

- provide our Board with the ability to alter our Bylaws without stockholder approval;
- place limitations on the removal of directors; and
- provide that vacancies on our Board may be filled by a majority of directors in office, although less than a quorum.

These provisions are expected to discourage certain types of coercive takeover practices and inadequate takeover bids and to encourage persons seeking to acquire control of our company to first negotiate with our Board. These provisions may delay or prevent someone from acquiring or merging with us, which may cause the market price of our Common Stock to decline.

Blank Check Preferred. Our Board is authorized to create and issue from time to time, without stockholder approval, up to an aggregate of 100,000,000 shares of preferred stock in one or more series and to establish the number of shares of any series of preferred stock and to fix the designations, powers, preferences and rights of the shares of each series and any qualifications, limitations or restrictions of the shares of each series.

The authority to designate preferred stock may be used to issue a series of preferred stock, or rights to acquire preferred stock, that could dilute the interest of, or impair the voting power of, holders of the Common Stock or could also be used as a method of determining, delaying or preventing a change of control.

Advance Notice Bylaws. The Bylaws contain an advance notice procedure for stockholder proposals to be brought before any meeting of stockholders, including proposed nominations of persons for election to our Board. Stockholders at any meeting will only be able to consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of our Board or by a stockholder who was a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has given the Company's corporate secretary timely written notice, in proper form, of the stockholder's intention to bring that business before the meeting. Although our Bylaws do not give our Board the power to approve or disapprove of stockholder nominations of candidates or proposals regarding other business to be conducted at a special or annual meeting, our Bylaws may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed or may discourage or deter a potential acquiror from conducting a solicitation of proxies to elect its own slate of directors or otherwise attempting to obtain control of the Company.

Interested Stockholder Transactions. We are subject to Section 203 of the DGCL, which prohibits "business combinations" between a publicly-held Delaware corporation and an "interested stockholder," which is generally defined as a stockholder who is a beneficial owner of 15% or more of a Delaware corporation's voting stock for a three-year period following the date that such stockholder became an interested stockholder, unless: (i) the transaction is approved by the board of directors before the date the interested stockholder attained that status; (ii) 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; or (iii) on or after the date of the transaction, the transaction is approved by the board of directors and authorized at a meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder. In general, the DGCL defines a business combination to include the following: (a) any merger or consolidation involving the corporation and the interested stockholder; (b) any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder; (c) subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder; (d) any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; or (e) 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.

Stockholder Rights Agreement. In December 2015, we entered into an Amended and Restated Rights Agreement, or the Amended Rights Agreement, with Philadelphia Stock Transfer, Inc., as Rights Agent. The Amended Rights Agreement provides that in the event of (i) an acquisition of 15% or more of our outstanding Common Stock by any person other than a beneficial owner of 15% of our outstanding Common Stock as of December 21, 2015, (ii) an acquisition of one or more shares of our Common Stock by any person who beneficially owned 15% or more of our outstanding Common Stock as of December 21, 2015, or (iii) an announcement of an intention to make a tender offer or exchange offer for 15% or more of our outstanding Common Stock, our stockholders, other than the potential acquiror, shall be granted rights enabling them to purchase additional shares of our Common Stock at a substantial discount to the then prevailing market price. The Amended Rights Agreement could significantly dilute such acquiror's ownership position in our shares, thereby making a takeover prohibitively expensive and encouraging such acquiror to negotiate with our Board. Therefore, the Amended Rights Agreement could make it more difficult for a third party to acquire control of us without the approval of our Board.

Warrants

As of April 15, 2019, in addition to the Warrants to purchase 2,698,662 shares of Common Stock issued to certain of the Selling Stockholders pursuant to the Securities Purchase Agreement, warrants to purchase 25,635,117 shares of Common Stock with a weighted-average exercise price of $3.91 per share were outstanding. The Warrants to purchase an aggregate of 2,698,662 shares of Common Stock became exercisable on December 11, 2018, have a term of five and a half years from the date of issuance and have an exercise price of $3.28 per share of Common Stock. We are registering the resale of the shares of Common Stock issuable upon exercise of the Warrants pursuant to the registration statement of which this prospectus forms a part. All of our other outstanding warrants are currently exercisable, except to the extent that certain of them may be subject to a blocker provision, which restricts the exercise of a warrant if, as a result of such exercise, the warrant holder, together with its affiliates and any other person whose beneficial ownership of Common Stock would be aggregated with the warrant holder's for purposes of Section 13(d) of the Exchange Act, would beneficially own in excess of 19.99% or 19.9% of our then issued and outstanding shares of Common Stock (including the shares of Common Stock issuable upon such exercise), as such percentage ownership is determined in accordance with the terms of such warrant. All of our outstanding warrants contain provisions for the adjustment of the exercise price in the event of stock dividends, stock splits or similar transactions. In addition, certain of the warrants contain a "cashless exercise" feature that allows the holders thereof to exercise the warrants without a cash payment to us under certain circumstances.

Convertible Promissory Notes

As of April 15, 2019, the aggregate outstanding principal amount under the Notes was $37,848,750. At any time and from time to time before the earlier to occur of the date that is five years from the date of issuance of the Notes and the date of the closing of a change of control of the Company, the holders of the Notes have the option to convert any portion of the outstanding principal amount of such Notes that is equal to or greater than the lesser of: (1) $4,000,000, and (2) the then-outstanding principal amount of the Note being converted into shares of Common Stock at a price per share of $7.0125, subject to adjustment for stock splits, reverse stock splits, stock dividends and similar transactions. Accrued but unpaid interest on the Notes shall be paid in cash semi-annually in arrears on or prior to the 30th day of June and 31st day of December of each calendar year commencing with the year ended December 31, 2018. If a Note holder elects to convert any of the principal amount of its Note, then all accrued but unpaid interest on such portion of the principal amount shall become due and payable in cash.

Transfer Agent and Registrar

The Transfer Agent and Registrar for our Common Stock is Philadelphia Stock Transfer, Inc., 2320 Haverford Road, Suite 230, Ardmore, PA 19003.

LEGAL MATTERS

Unless otherwise indicated in the applicable prospectus supplement, the validity of the Common Stock offered by this prospectus, and any supplement thereto, will be passed upon for us by Paul Hastings LLP, Palo Alto, California.

EXPERTS

The consolidated financial statements as of and for the years ended December 31, 2018 and 2017, and the related financial statement schedule, incorporated in this prospectus by reference from the Annual Report on Form 10-K for the year ended December 31, 2018 of Sorrento Therapeutics, Inc. and subsidiaries, or the Company, and the effectiveness of the Company's internal control over financial reporting as of December 31, 2018 have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their reports, which are incorporated herein by reference (which reports (1) express an unqualified opinion on the consolidated financial statements and financial statement schedule and include an explanatory paragraph referring to the Company's ability to continue as a going concern and (2) express an adverse opinion on the effectiveness of the Company's internal control over financial reporting because of material weaknesses), which are incorporated herein by reference. Such consolidated financial statements and financial statement schedule have been so incorporated by reference in reliance upon the reports of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

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

DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers, and persons controlling us pursuant to the provisions described in Item 15 of the registration statement of which this prospectus forms a part or otherwise, we have been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable. In the event that a claim for indemnification against such liabilities (other than our payment of expenses incurred or paid by our directors, officers, or controlling persons in the successful defense of any action, suit, or proceeding) is asserted by our directors, officers, or controlling persons in connection with the common stock being registered, we will, unless in the opinion of our counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by us is against public policy as expressed in the Securities Act and will be governed by the final adjudication of the issue.

IMPORTANT INFORMATION INCORPORATED BY REFERENCE

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

The following documents are incorporated by reference into this prospectus:

(a) The Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2018, filed with the SEC on March 15, 2019;
(b) The Registrant's Annual Report on Form 10-K/A for the fiscal year ended December 31, 2018, filed with the SEC on April 30, 2019;
(c) The Registrant's Current Reports on Form 8-K filed with the SEC on January 24, 2019, March 22, 2019 and May 3, 2019;
(d) The Registrant's Current Report on Form 8-K/A filed with the SEC on April 3, 2019; and
(e) The description of the Registrant's common stock set forth in the Registrant's Registration Statement on Form 8-A (File No. 001-36150), filed with the SEC on October 23, 2013, including any amendments or reports filed for the purpose of updating such description.

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

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

Sorrento Therapeutics, Inc.
4955 Directors Place
San Diego, CA 92121
Attn: Corporate Secretary
Phone: (858) 203-4100

SORRENTO THERAPEUTICS, INC.

9,890,998 SHARES OF COMMON STOCK

PROSPECTUS

May 7, 2019

Neither we nor the Selling Stockholders have authorized any dealer, salesperson or other person to give any information or to make any representations not contained in this prospectus or any prospectus supplement. You must not rely on any unauthorized information. This prospectus is not an offer to sell these securities in any jurisdiction where an offer or sale is not permitted. The information in this prospectus is current as of the date of this prospectus. You should not assume that this prospectus is accurate as of any other date.