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

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**FORM 8-K**

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CURRENT REPORT  
PURSUANT TO SECTION 13 OR 15(d)  
OF THE SECURITIES EXCHANGE ACT OF 1934

Date of Report (Date of earliest event reported): December 6, 2019

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**SORRENTO THERAPEUTICS, INC.**  
(Exact Name of Registrant as Specified in its Charter)

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Delaware  
(State or Other Jurisdiction  
of Incorporation)

001-36150  
(Commission  
File Number)

33-0344842  
(IRS Employer  
Identification No.)

4955 Directors Place  
San Diego, CA 92121  
(Address of Principal Executive Offices) (Zip Code)

Registrant's telephone number, including area code: (858) 203-4100

N/A  
(Former Name, or Former Address, if Changed Since Last Report)

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Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Securities Registered pursuant to Section 12(b) of the Act:

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<u>Title of each class</u>	<u>Trading Symbol</u>	<u>Name of each exchange on which registered</u>
Common Stock, \$0.0001 par value	SRNE	The Nasdaq Stock Market LLC

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## **Item 1.01. Entry into a Material Definitive Agreement.**

### *Amendment No. 2 to Term Loan Agreement*

On December 6, 2019, Sorrento Therapeutics, Inc. (the “Company”), certain of the Company’s domestic subsidiaries (the “Guarantors”), certain funds affiliated with Oaktree Capital Management, L.P. (“Oaktree” and such funds, the “Lenders”) and Oaktree Fund Administration, LLC (the “Agent”) entered into an amendment (the “Amendment”) to that certain Term Loan Agreement, dated as of November 7, 2018, by and among the Company, the Guarantors, the Lenders and the Agent, as administrative and collateral agent (the “Original Loan Agreement”), as amended by that certain Amendment No. 1 to Term Loan Agreement, dated as of May 3, 2019, by and among the Company, the Guarantors, the Lenders and the Agent (as amended, the “Loan Agreement”).

Pursuant to the Loan Agreement, the Lenders previously provided a senior secured first lien term loan facility to the Company consisting of an initial term loan of \$100.0 million on November 7, 2018 (the “Initial Loan”) and an additional term loan of \$20.0 million on May 3, 2019 (the “Early Delayed Draw Loan”, and together, with the Initial Loan, the “Term Loans”). The Original Loan Agreement provided that, in the event of an optional prepayment of all or any portion of the Term Loans prior to November 7, 2021, the Company would be obligated to pay a prepayment fee in an amount equal to the amount of interest that would have been paid on the principal amount of the Term Loans being prepaid for the period from and including the date of such prepayment to, but excluding, November 7, 2021, based on the interest rate in effect on the date of any such prepayment (the “Make-Whole Payment”), plus 3% of the principal amount of the Term Loans being so prepaid.

Under the terms of the Amendment, the Lenders agreed that, in the event of an optional prepayment of all or any portion of the Term Loans on or prior to March 31, 2020, the prepayment fee will be equal to 3% of the principal amount of the Term Loans being prepaid, and the Company will not be required to pay any Make-Whole Payment. Pursuant to the Amendment, the Company also agreed to certain financial milestones and to fund and maintain, in a blocked liquidity account, an amount equal to (i) \$2.5 million, or (ii) \$20.0 million upon the achievement by the Company of certain financial milestones; *provided*, that the amount required to be maintained in the blocked liquidity account will be \$10.0 million if the Company makes an optional prepayment of at least \$50.0 million in principal amount of the Term Loans on or prior to March 31, 2020.

In connection with the Amendment, on December 6, 2019, the Company paid the Lenders certain fees of \$1.2 million in the aggregate and issued to the Lenders warrants to purchase an aggregate of 2,000,000 shares of the Company’s common stock (the “Warrants”). The Warrants have an exercise price per share of \$3.26, subject to adjustment for stock splits, reverse stock splits, stock dividends and similar transactions, will be exercisable from June 6, 2020 through June 6, 2030 and will be exercisable solely on a cash basis, unless there is not an effective registration statement covering the resale of the shares issuable upon exercise of the Warrants (the “Warrant Shares”), in which case the Warrants shall also be exercisable on a cashless exercise basis.

### *Amendment No. 2 to Registration Rights Agreement*

In connection with the Amendment, on December 6, 2019, the Company and the Lenders entered into an amendment (the “RRA Amendment” and, together with the Amendment and the Warrants, the “Transaction Documents”) to that certain Registration Rights Agreement, dated as of November 7, 2018, as amended by that certain Amendment No. 1 to the Registration Rights Agreement, dated as of May 3, 2019, by and among the Company and the persons party thereto. Under the terms of the RRA Amendment, the Company agreed to file one or more registration statements with the Securities and Exchange Commission (the “SEC”) for the purpose of registering for resale the Warrant Shares by no later than the 45th day following the issuance of the Warrants.

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## *Board Appointment Letter*

In connection with the Amendment, on December 6, 2019, the Company and Oaktree entered into a letter agreement (the “Letter Agreement”) pursuant to which the Company agreed that, effective no later than the next regular meeting of the Company’s board of directors (the “Board”), the Board will increase the number of members of the Board and, subject to the satisfaction of certain conditions, appoint Mr. Edgar Lee as a member of the Board. The Company also agreed that the Board will nominate Mr. Lee as a director of the Company at the Company’s 2020 annual meeting of the Company’s stockholders and at each subsequent annual meeting during the term of the Letter Agreement. In the event that Mr. Lee resigns as a director or otherwise refuses or is unable to serve as a director during the term of the Letter Agreement, Oaktree may designate a replacement director who will be independent of Oaktree, considered an independent director of the Company under the listing rules of The Nasdaq Stock Market LLC, is mutually agreed upon in writing by the Company and Oaktree and has a comparable amount of business experience to Mr. Lee. The Letter Agreement will terminate if, at any time, the aggregate principal amount of the Term Loans held by funds associated with Oaktree is \$70.0 million or less.

The representations, warranties and covenants contained in the Transaction Documents were made only for purposes of such agreements and as of specific dates, were solely for the benefit of the parties to the Transaction Documents, and may be subject to limitations agreed upon by the contracting parties. Accordingly, the Transaction Documents are incorporated herein by reference only to provide investors with information regarding the terms of the Transaction Documents, and not to provide investors with any other factual information regarding the Company or its business, and should be read in conjunction with the disclosures in the Company’s periodic reports and other filings with the SEC.

The foregoing descriptions of the Warrants and the RRA Amendment do not purport to be complete and are qualified in their entirety by reference to the copies of the form of Warrant and the RRA Amendment filed herewith as Exhibits 4.1 and 4.2, respectively. The foregoing description of the Amendment does not purport to be complete and is qualified in its entirety by reference to the copy of the Amendment that the Company will file as an exhibit to its Annual Report on Form 10-K for the fiscal year ended December 31, 2019 (the “Form 10-K”) or via an amendment to this Current Report on Form 8-K. Certain terms of the Amendment have been omitted from this Current Report on Form 8-K and will be omitted from the versions of the Amendment to be filed as an exhibit to the Form 10-K or as amendment to this Current Report on Form 8-K pursuant to Item 601(b)(10) of Regulation S-K because such terms are both (i) not material and (ii) would likely cause competitive harm to the Company if publicly disclosed.

### **Item 2.03. Creation of a Direct Financial Obligation or an Obligation under an Off-Balance Sheet Arrangement of a Registrant.**

The information contained under Item 1.01 regarding the Amendment is hereby incorporated by reference in its entirety into this Item 2.03.

### **Item 3.02 Unregistered Sales of Equity Securities.**

The information contained under Item 1.01 regarding the Warrants is hereby incorporated by reference in its entirety into this Item 3.02. The Warrants and the Warrant Shares (collectively, the “Securities”) were offered and sold to the Lenders on December 6, 2019 in a transaction exempt from registration under the Securities Act of 1933, as amended (the “Securities Act”), in reliance on Section 4(a)(2) thereof and Rule 506 of Regulation D thereunder. Each of the Lenders represented that such Lender was an “accredited investor,” as defined in Regulation D, and was acquiring the Securities for investment only and not with a view towards, or for resale in connection with, the public sale or distribution thereof. Accordingly, the Securities have not been registered under the Securities Act and the Securities may not be offered or sold in the United States absent registration or an exemption from registration under the Securities Act and any applicable state securities laws. Neither this Current Report on Form 8-K nor the exhibits attached hereto is an offer to sell or the solicitation of an offer to buy shares of Common Stock, warrants or any other securities of the Company.

### **Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.**

Effective December 9, 2019 and in accordance with the Letter Agreement, the Board appointed Edgar Lee as a director of the Company.

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Edgar Lee, age 43, has been a Managing Director at Oaktree Capital Management, L.P., and has served as the portfolio manager for Oaktree Capital Management, L.P.'s Strategic Credit strategy, since 2013. From July 2018 to September 2019, Mr. Lee served as the Chairman of the Board of Directors, Chief Executive Officer and Chief Investment Officer of Oaktree Strategic Income II, Inc. Mr. Lee also served as Chief Executive Officer and Chief Investment Officer for Oaktree Specialty Lending Corporation and Oaktree Strategic Income Corporation from October 2017 to September 2019. From 2010 to 2013, Mr. Lee was a Senior Vice President within Oaktree Capital Management, L.P.'s Distressed Debt group and led a number of the group's investments in the media, technology and telecom industries. Prior to joining Oaktree Capital Management, L.P. in 2007, Mr. Lee worked within the Investment Banking division at UBS Investment Bank in Los Angeles, where he was responsible for advising clients on a number of debt and preferred stock restructurings, leveraged financings, buy-side and sell-side M&A, mezzanine financings and recapitalizations. Before that, he was employed within the Fixed Income division at Lehman Brothers Inc. Prior experience includes work at Katzenbach Partners LLP and the Urban Institute. Mr. Lee has served on the board of directors of Neo Performance Materials Inc. (TSX: NEO) since August 2016 and previously served on the boards of directors of Nine Entertainment Co. (ASX: NEC) and Charter Communications, Inc. (NASDAQ: CHTR) from January 2011 to May 2013. Mr. Lee received a B.A. degree in economics from Swarthmore College and an M.P.P. with a concentration in applied economics from Harvard University.

On December 9, 2019, Mr. Lee will be granted an option to purchase 75,000 shares of the Company's common stock that will vest on a monthly basis over 12 months commencing on December 9, 2019. The option will have an exercise price that is equal to the closing price of the Company's common stock on the date of grant. As a non-employee director, Mr. Lee will be entitled to receive the Company's standard cash retainers for membership on the Board and any committees of the Board, as disclosed under "Outside Director Compensation Policy" in the Company's definitive proxy statement for its 2019 Annual Meeting of Stockholders on Schedule 14A filed with the SEC on August 14, 2019.

The Company also entered into an indemnification agreement with Mr. Lee in the same form as its standard form of indemnity agreement with its other directors.

There are no family relationships between Mr. Lee and any director or executive officer of the Company. He was selected by the Board to serve as a director pursuant to the Letter Agreement.

The following are descriptions of transactions or series of transactions since January 1, 2018, or any currently proposed transaction, to which the Company has been a party, in which the amount involved in the transaction or series of transactions exceeds \$120,000 and in which Mr. Lee had or will have a direct or indirect material interest, other than compensation arrangements that are described above:

*2018 Purchase Agreements and Indenture for Scilex Pharmaceuticals Inc.*

On September 7, 2018, Scilex Pharmaceuticals Inc. ("Scilex Pharma") entered into purchase agreements (the "2018 Purchase Agreements") with certain investors (the "Purchasers") and the Company. Pursuant to the 2018 Purchase Agreements, on September 7, 2018, Scilex Pharma, among other things, issued and sold to the Purchasers senior secured notes due 2026 (the "Scilex Notes") with an aggregate principal of \$224.0 million for an aggregate purchase price of \$140.0 million (the "Offering"). In connection with the Offering, Scilex Pharma also entered into an indenture governing the Scilex Notes (the "Indenture") with U.S. Bank National Association, as trustee (the "Trustee") and collateral agent (the "Collateral Agent"), and the Company. Pursuant to the Indenture, the Company agreed to irrevocably and unconditionally guarantee, on a senior unsecured basis, the punctual performance and payment when due of all obligations of Scilex Pharma under the Indenture. The holders of the Scilex Notes will be entitled to receive quarterly payments of principal of the Scilex Notes equal to a percentage, in the range of 10% to 20% of the net sales of ZTlido® (lidocaine topical system) 1.8% for the prior fiscal quarter, beginning on February 15, 2019. Pursuant to the terms of the Indenture, the percentage of net sales payable and the aggregate principal amount due are subject to increase if certain conditions are not met.

Certain entities affiliated with Oaktree purchased \$80 million aggregate principal amount of the Scilex Notes in the Offering. Mr. Lee was a Managing Director at Oaktree at the time of the Offering.

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### *Oaktree Term Loan Agreement*

On November 7, 2018, the Company and the Guarantors entered into the Original Loan Agreement for the Initial Loan and a second tranche of \$50.0 million, subject to the achievement of certain commercial and financial milestones between August 7, 2019 and November 7, 2019 and the satisfaction of certain customary conditions (the “Conditional Loan”). In connection with the Original Loan Agreement, the Company and the Guarantors entered into a Collateral Agreement with the Agent (the “Collateral Agreement”). The Collateral Agreement provides that the Initial Loan and the Conditional Loan are secured by substantially all of the Company’s and the Guarantors’ assets and a pledge of 100% of the equity interests in other entities that each of the Company and the Guarantors holds (subject to certain exceptions and other than equity interests held by the Company or a Guarantor in certain foreign subsidiaries, which is limited to 65% of such voting equity interests).

In connection with the Loan Agreement, on November 7, 2018, the Company issued to the Lenders warrants to purchase 6,288,985 shares of the Company’s common stock (the “Initial Warrants”). The Initial Warrants have an exercise price per share of \$3.28, subject to adjustment for stock splits, reverse stock splits, stock dividends and similar transactions, are exercisable from May 7, 2019 through May 7, 2029 and are exercisable solely on a cash basis, unless there is not an effective registration statement covering the resale of the shares issuable upon exercise of the Initial Warrants, in which case the Initial Warrants shall also be exercisable on a cashless exercise basis.

On May 3, 2019, the Company, the Guarantors and the Lenders and the Agent entered into an amendment (the “First Amendment”) to the Loan Agreement. Under the terms of the First Amendment, among other things, on May 3, 2019, the Lenders loaned to the Company \$20.0 million of the Conditional Loan in the form of the Early Delayed Draw Loan, notwithstanding that the commercial and financial milestones had not occurred. The Initial Loan will mature on November 7, 2023. The Early Delayed Draw Loan will mature on May 3, 2020. The Term Loans may be prepaid by the Company, in whole or in part at any time, subject to a prepayment fee. Upon any prepayment or repayment of all or a portion of the Term Loans, the Company has agreed to pay the Lenders an exit fee equal to 1.25% of the principal amount paid or prepaid amounting to approximately \$1.5 million.

In connection with the First Amendment, on May 3, 2019, the Company issued to the Lenders warrants to purchase an aggregate of 1,333,304 shares of the Company’s common stock (the “2019 Warrants”). The 2019 Warrants have an exercise price per share of \$3.94, subject to adjustment for stock splits, reverse stock splits, stock dividends and similar transactions, are exercisable from November 3, 2019 through November 3, 2029 and are exercisable solely on a cash basis, unless there is not an effective registration statement covering the resale of the shares issuable upon exercise of the 2019 Warrants, in which case the 2019 Warrants shall also be exercisable on a cashless exercise basis.

The information contained under Item 1.01 is hereby incorporated by reference in its entirety into this Item 5.02.

The Company pays Oaktree an annual fee of \$100,000 for certain advisory services provided to the Board and an annual fee of \$100,000 for certain advisory services provided to the Board of Scilex Holding Company.

Mr. Lee was a Managing Director at Oaktree, which is the manager of each of the Lenders, during each of the above transactions. In addition, Oaktree is the parent of OCM Investments LLC, which is the investment manager of each of the Lenders. Mr. Lee was the Chairman of the Board of Directors, Chief Executive Officer and Chief Investment Officer of Oaktree Strategic Income II, Inc., which is one of the Lenders, during each of the above transactions. Mr. Lee was the Chief Executive Officer and Chief Investment Officer for Oaktree Specialty Lending Corporation, which is the sole owner and managing member of OCSL SRNE, LLC, which is one of the Lenders, during each of the above transactions.

On December 9, 2019, the Company issued a press release announcing the appointment of Mr. Lee to the Board. A copy of the press release is filed herewith as Exhibit 99.1

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**Item 9.01. Financial Statements and Exhibits.**

**(d) Exhibits.**

4.1      [Form of Warrant, dated December 6, 2019, issued by Sorrento Therapeutics, Inc.](#)

4.2      [Amendment No. 2 to the Registration Rights Agreement, dated as of December 6, 2019, by and among Sorrento Therapeutics, Inc. and the persons party thereto.](#)

99.1     [Press Release, dated December 9, 2019.](#)

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**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

**SORRENTO THERAPEUTICS, INC.**

Date: December 9, 2019

By: /s/ Henry Ji, Ph.D.  
Name: Henry Ji, Ph.D.  
Title: Chairman of the Board, President and Chief  
Executive Officer

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## [FORM OF WARRANT]

THE SECURITIES REPRESENTED HEREBY AND THE SECURITIES ISSUABLE UPON EXERCISE HEREOF HAVE NOT BEEN REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR APPLICABLE STATE SECURITIES LAWS AND MAY BE OFFERED, SOLD, ASSIGNED, PLEDGED, HYPOTHECATED, TRANSFERRED OR OTHERWISE DISPOSED OF (EACH, A "TRANSFER") ONLY IF SUCH SECURITIES ARE REGISTERED UNDER THE SECURITIES ACT AND ANY APPLICABLE STATE SECURITIES LAWS OR IF SUCH TRANSFER IS MADE PURSUANT TO AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT AND SUCH STATE SECURITIES LAWS AFTER PROVIDING AN OPINION OF COUNSEL TO SUCH EFFECT.

**COMMON STOCK PURCHASE WARRANT****SORRENTO THERAPEUTICS, INC.**

Warrant Shares: [•]

Initial Issuance Date: December 6, 2019

THIS COMMON STOCK PURCHASE WARRANT (this "**Warrant**") certifies that, for value received, [NAME OF INVESTOR] or its assigns (the "**Holder**") is entitled, upon the terms and subject to the limitations on exercise and the conditions hereinafter set forth, at any time and from time to time on or after June 6, 2020 (the "**Initial Exercise Date**") and on or prior to the close of business on June 6, 2030 (the "**Termination Date**") but not thereafter, to subscribe for and purchase from Sorrento Therapeutics, Inc., a Delaware corporation (the "**Company**"), up to [•] duly authorized, validly issued, fully paid and nonassessable shares of Common Stock (as subject to adjustment hereunder, the "**Warrant Shares**"). The purchase price of one share of Common Stock under this Warrant shall be equal to the Exercise Price (as defined below).

Section 1. Definitions. For purposes of this Warrant, the following capitalized terms have the meanings assigned to them in this Section 1.

a) "**Aggregate Exercise Price**" means an amount equal to the product of (i) the number of Warrant Shares in respect of which this Warrant is then being exercised pursuant to Section 2, multiplied by (ii) the Exercise Price in effect as of the Exercise Date in accordance with the terms of this Warrant; *provided* that for the purposes of Section 3(a), "**Aggregate Exercise Price**" shall mean an amount equal to the product of (x) the total number of Warrant Shares initially issuable pursuant to this Warrant (as adjusted pursuant to Section 3(a)) multiplied by (y) the Exercise Price in effect as of the date of the applicable adjustment pursuant to Section 3(a).

b) "**Business Day**" means any day, excluding Saturday, Sunday and any day which is a legal holiday in the City of New York or San Diego, California or is a day on which banking institutions located in the City of New York or San Diego, California are authorized or required by law or other governmental action to close.

c) "**Cashless Exercise Date**" has the meaning set forth in Section 2(c).

d) **“Change of Control”** means, at any time, the occurrence of any of the following events or circumstances: (i) any “person” or “group” (within the meaning of Section 13(d) or 14(d) of the Exchange Act) shall (A) become the “beneficial owner” (within the meaning of Section 13(d) of the Exchange Act), directly or indirectly, of securities of the Company representing 35% or more of the total voting power represented by the Company’s then outstanding voting securities or (B) otherwise acquire, directly or indirectly, the power to direct or cause the direction of the management or policies of the Company, whether through the ability to exercise voting power, by contract or otherwise, (ii) persons who were (A) directors of the Company on the date hereof or (B) appointed by directors who were directors of the Company on the date hereof or were nominated or approved by directors who were directors of the Company on the date hereof shall cease to occupy a majority of the seats (excluding vacant seats) on the board of directors of the Company, (iii) the consummation of a merger or consolidation of the Company with or into any other Person, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent at least 50% of the total voting power represented by the voting securities of the Company or such surviving entity or its parent outstanding immediately after such merger or consolidation or (iv) any direct or indirect sale, transfer or other disposition, in one transaction or a series of related transactions, of all or substantially all of the assets of the Company and its subsidiaries, taken as a whole (it being agreed that the sale, transfer or other disposition by any Person of the Equity Interests of any subsidiary constitutes an indirect sale, transfer or disposition of the assets of such subsidiary).

e) **“Closing Bid Price”** means, for any date, the price determined by the first of the following clauses that applies: (i) if the Common Stock is then listed or quoted on a Trading Market, the last reported closing bid price of the Common Stock for such date on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg L.P., (ii) if the Common Stock is not then listed on a Trading Market or quoted for trading on the OTC Bulletin Board and if prices for the Common Stock are then reported in the “Pink Sheets” published by OTC Markets Group Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per share of the Common Stock so reported or (iii) in all other cases, the fair market value of a share of Common Stock as determined by an independent nationally recognized investment banking, accounting or valuation firm selected in good faith by the Company and reasonably acceptable to the Holder, the fees and expenses of which shall be paid by the Company.

f) **“Common Stock”** means shares of the common stock of the Company, par value \$0.0001 per share.

g) **“Company”** has the meaning set forth in the Preamble.

h) **“DWAC”** has the meaning set forth in Section 2(d).

i) **“Equity Interests”** means any and all shares, interests, participations or other equivalents (however designated) of equity interests of a corporation, any and all equivalent ownership interests in a Person other than a corporation (including, without limitation, partnership interests, membership interests and similar ownership interests), any and all warrants, rights or options to purchase or other arrangements or rights to acquire any of the foregoing, and all other ownership or profit interests in a Person (including partnership, member or trusts interests in such Person), in each case whether voting or non-voting and whether or not outstanding on any date of determination.

- j) **“Exchange Act”** means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder, as the same may be amended from time to time.
- k) **“Exercise Date”** has the meaning set forth in Section 2(a).
- l) **“Exercise Price”** has the meaning set forth in Section 2(b).
- m) **“Governmental Authority”** means any supra-national, national, federal, provincial, state, municipal or other government, or political subdivision thereof, and any governmental department, commission, board, bureau, court, agency, authority, regulatory body, central bank, or instrumentality or other entity or officer exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or pertaining to government.
- n) **“Holder”** has the meaning set forth in the Preamble.
- o) **“Initial Exercise Date”** has the meaning set forth in the Preamble.
- p) **“Initial Issuance Date”** means December 6, 2019.
- q) **“Joint Venture”** means a joint venture, partnership or other similar arrangement, whether in corporate, partnership or other legal form.
- r) **“Notice of Exercise”** has the meaning set forth in Section 2(a).
- s) **“Person”** means and includes natural persons, corporations, limited partnerships, general partnerships, limited liability companies, limited liability partnerships, joint stock companies, Joint Ventures, associations, companies, trusts, banks, trust companies, land trusts, business trusts or other organizations, whether or not legal entities, and Governmental Authorities.
- t) **“SEC”** means the U.S. Securities and Exchange Commission.
- u) **“Securities Act”** means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder, as the same may be amended from time to time.
- v) **“Termination Date”** has the meaning set forth in the Preamble.
- w) **“Trading Day”** means a day on which the Common Stock is traded on a Trading Market or, if the Common Stock is not traded on a Trading Market, then on the principal securities exchange or securities market on which the Common Stock is then traded.

x) “**Trading Market**” means any market or exchange of The Nasdaq Stock Market LLC or the New York Stock Exchange.

y) “**Transfer Agent**” has the meaning set forth in Section 2(d).

z) “**VWAP**” means, for any date, the price determined by the first of the following clauses that applies: (i) if the Common Stock is then listed or quoted on a Trading Market, the daily volume weighted average price of the Common Stock for such date (or the nearest preceding date) on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg L.P. (based on a Trading Day from 9:30 a.m. (New York City time) to 4:00 p.m. (New York City time)), (ii) if the Common Stock is not then listed on a Trading Market or quoted for trading on the OTC Bulletin Board and if prices for the Common Stock are then reported in the “Pink Sheets” published by OTC Markets Group Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per share of the Common Stock so reported or (iii) in all other cases, the fair market value of a share of Common Stock as determined by an independent nationally recognized investment banking, accounting or valuation firm selected in good faith by the Company and reasonably acceptable to the Holder, the fees and expenses of which shall be paid by the Company.

aa) “**Warrant**” has the meaning set forth in the Preamble.

bb) “**Warrant Register**” has the meaning set forth in Section 4(c).

cc) “**Warrant Share Delivery Date**” has the meaning set forth in Section 2(d).

dd) “**Warrant Shares**” has the meaning set forth in the Preamble.

## Section 2. Exercise.

a) Exercise of the purchase rights represented by this Warrant may be made, in whole or in part, at any time or times on or after the Initial Exercise Date and on or before the Termination Date by delivery to the principal office of the Company (or such other office or agency of the Company as it may designate by notice in writing to the registered Holder at the address of the Holder appearing on the books of the Company) of a duly executed facsimile or original copy of the Notice of Exercise Form annexed hereto (each, a “**Notice of Exercise**”). Unless being exercised on a cashless basis in accordance with Section 2(c), within three Trading Days following the date of exercise as aforesaid, the Holder shall deliver the Aggregate Exercise Price for the shares specified in the applicable Notice of Exercise by wire transfer or cashier’s check drawn on a United States bank (such date of delivery of the Aggregate Exercise Price, the “**Exercise Date**”). Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company until the Holder has purchased all of the Warrant Shares available hereunder and this Warrant has been exercised in full, in which case, the Holder shall surrender this Warrant to the Company for cancellation within three Trading Days of the date the final Notice of Exercise is delivered to the Company. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Warrant Shares available hereunder shall have the effect of lowering the outstanding number of Warrant Shares purchasable hereunder in an amount equal to the applicable number of Warrant Shares purchased. The Holder and the Company shall maintain records showing the number of Warrant Shares purchased and the date of such purchases. The Company shall inform the Holder if a Notice of Exercise has not been duly completed within one Business Day of receipt of such notice, but shall not refuse or object to the issuance of the Warrant Shares upon receipt of, and pursuant to, a duly completed Notice of Exercise. **The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following the purchase of a portion of the Warrant Shares hereunder, the number of Warrant Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.**

b) Exercise Price. The exercise price per share of the Common Stock under this Warrant shall be \$3.26, subject to adjustment hereunder (the "**Exercise Price**").

c) Cashless Exercise. If at the time of exercise of this Warrant there is no effective registration statement registering the resale of the Warrant Shares by the Holder, the Holder, at its option, may exercise this Warrant, in whole or in part, by means of a "cashless exercise" in which the Holder shall be entitled to receive a certificate for the number of Warrant Shares equal to the quotient obtained by dividing  $[(Y)*(A-B)]$  by (A), where:

(A) = the average of the Closing Bid Price of the shares of Common Stock for the five consecutive Trading Days ending on the last Trading Day immediately preceding the date on which the Holder elects to exercise this Warrant by means of a "cashless exercise," as set forth in the applicable Notice of Exercise (such date, the "**Cashless Exercise Date**");

(B) = the Exercise Price of this Warrant, as adjusted hereunder; and

(Y) = the number of Warrant Shares that would be issuable upon exercise of this Warrant in accordance with the terms of this Warrant if such exercise were by means of a cash exercise pursuant to Section 2(a), rather than a cashless exercise.

d) Mechanics of Exercise.

i. Delivery of Certificates Upon Exercise. Certificates for shares purchased hereunder shall be transmitted by the Company's transfer agent (the "**Transfer Agent**") to the Holder by, at the Holder's option, (A) crediting the account of the Holder's prime broker with The Depository Trust Company through its Deposit or Withdrawal at Custodian system ("**DWAC**") if the Company is then a participant in such system and there is an effective registration statement permitting the issuance of the Warrant Shares to or resale of the Warrant Shares by the Holder or (B) physical delivery to the address specified by the Holder in the Notice of Exercise by the date that is three Trading Days after the latest of (1) the delivery to the Company of the Notice of Exercise, (2) surrender of this Warrant (if required), (3) payment of the Aggregate Exercise Price as set forth above and (4) three Trading Days following the Cashless Exercise Date, if applicable (such date in (1), (2), (3) or (4), the "**Warrant Share Delivery Date**"). The applicable Warrant Shares shall be deemed to have been issued, and the Holder or any other Person so designated to be named therein shall be deemed to have become a holder of record of such shares for all purposes, as of the applicable Exercise Date or the date that is three Trading Days following the Cashless Exercise Date, as applicable.

ii. *Delivery of New Warrants Upon Exercise.* If this Warrant shall have been exercised in part, the Company shall, at the request of the Holder and upon surrender of this Warrant, at the time of delivery of the certificate or certificates representing the Warrant Shares, deliver to the Holder a new Warrant evidencing the rights of the Holder to purchase the unpurchased Warrant Shares called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant.

iii. *Rescission Rights.* If the Company fails to cause the Transfer Agent to transmit to the Holder a certificate or the certificates representing the Warrant Shares pursuant to Section 2(d)(i) by the Warrant Share Delivery Date, then the Holder will have the right to rescind such exercise. Any rescission by the Holder pursuant to this Section 2(d)(iii) shall not affect any other remedies available to the Holder under applicable law or equity as a result of the Company's failure to timely deliver the Warrant Shares.

iv. *No Fractional Shares.* No fractional shares shall be issued upon the exercise of this Warrant. As to any fraction of a Warrant Share that the Holder would otherwise be entitled to purchase upon such exercise, the Company shall, at the Holder's election, either (A) pay to such Holder an amount in cash (by delivery of a certified or official bank check or by wire transfer of immediately available funds) equal to the product of (1) such fraction multiplied by (2) the Closing Bid Price of one Warrant Share on the Exercise Date or the Cashless Exercise Date, as applicable, or (B) round up to the next whole share.

v. *Closing of Books.* The Company will not close its stockholder books or records in any manner which prevents the timely exercise of this Warrant pursuant to the terms hereof.

e) Conditional Exercise. Notwithstanding any other provision hereof, if an exercise of any portion of this Warrant is to be made in connection with a public offering or a sale of the Company (pursuant to a merger, sale of stock, or otherwise), such exercise may, at the election of the Holder (set forth in the applicable Notice of Exercise), be conditioned upon the consummation of such transaction, in which case such exercise shall not be deemed to be effective until immediately prior to the consummation of such transaction.

f) applicable:

Representations, Warranties and Covenants of the Company. The Company hereby represents, covenants and agrees, as

i. As of the Initial Issuance Date, the Company (A) is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware, (B) has all requisite power and authority to own and operate its properties, to carry on its business as now conducted and as currently proposed to be conducted, to issue and enter into the Warrant and to carry out the transactions contemplated thereby, and (C) except where the failure to do so, individually or in the aggregate, has not had, and could not be reasonably expected to have, a material adverse effect on the business, assets, financial condition or operations of the Company, is qualified to do business and, where applicable is in good standing, in every jurisdiction where such qualification is required.

ii. This Warrant is, and any Warrant issued in substitution for or replacement of this Warrant (including pursuant to Section 2(d)(ii)) shall be, upon issuance, duly authorized and validly issued. This Warrant constitutes, and any Warrant issued in substitution for or replacement of this Warrant shall be, upon issuance, a legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms, except as enforceability may be limited by applicable bankruptcy, insolvency or other similar laws affecting the enforcement of creditors' rights generally and by general principles of equity.

iii. As of the Initial Issuance Date, the execution, delivery and performance by the Company of the Warrant does not and will not (A) violate any material provision of applicable law or the organizational documents of the Company, (B) conflict with, result in a breach of, or constitute (with the giving of any notice, the passage of time, or both) a default under any material agreement of the Company or (C) result in or require the creation or imposition of any lien upon any assets of the Company.

iv. The Company covenants that, during the period this Warrant is outstanding, it will reserve from its authorized and unissued Common Stock a sufficient number of shares to provide for the issuance of the Warrant Shares upon the exercise of any purchase rights represented by this Warrant. The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for the Warrant Shares upon the exercise of the purchase rights under this Warrant. The Company will take all such action as may be reasonably necessary or appropriate to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation, of any requirements of the Trading Market upon which the Common Stock may be listed or any preemptive or similar rights of any equity holder of the Company. The Company covenants that all Warrant Shares which may be issued upon the exercise of the purchase rights represented by this Warrant will, upon exercise of the purchase rights represented by this Warrant and payment for such Warrant Shares in accordance herewith, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges (other than taxes in respect of any transfer occurring contemporaneously with such issue).

v. Except and to the extent as waived or consented to by the Holder, the Company shall not by any action, including, without limitation, amending its certificate of incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate to protect the rights of the Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will (A) not increase the par value of any Warrant Shares above the amount payable therefor upon such exercise immediately prior to such increase in par value, (B) take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares upon the exercise of this Warrant and (C) use its best efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof, as may be, necessary to enable the Company to perform its obligations under this Warrant.

vi. Before taking any action which would result in an adjustment in the number of Warrant Shares for which this Warrant is exercisable or in the Exercise Price, the Company shall obtain all such authorizations or exemptions thereof, or consents thereto, as may be necessary from any public regulatory body or bodies having jurisdiction thereof.

g) Representations and Warranties of the Holder. The Holder, by the acceptance hereof, represents and warrants that it is an “accredited investor” under Rule 501 promulgated pursuant to the Securities Act and that it is acquiring this Warrant and, upon any exercise hereof, will acquire the Warrant Shares issuable upon such exercise, for its own account and not with a view to or for distributing or reselling such Warrant Shares or any part thereof in violation of the Securities Act or any applicable state securities law, except pursuant to sales registered or exempted under the Securities Act.

Section 3. Certain Adjustments.

a) Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions on shares of Common Stock or any other equity or equity equivalent securities payable in shares of Common Stock (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Company upon exercise of this Warrant), (ii) subdivides (by any stock split, recapitalization or otherwise) outstanding shares of Common Stock into a larger number of shares, (iii) combines (including by way of reverse stock split) outstanding shares of Common Stock into a smaller number of shares or (iv) issues by reclassification of shares of Common Stock any shares of capital stock of the Company, then in each case the Exercise Price shall be adjusted by multiplying the Exercise Price in effect immediately prior to (x) the record date for the determination of stockholders entitled to receive such dividend or distribution or (y) the effective date in the case of a subdivision, combination or re-classification by a fraction, the numerator of which shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding immediately before such event and the denominator of which shall be the number of shares of Common Stock outstanding immediately after such event, and the number of shares issuable upon exercise of this Warrant shall be proportionately adjusted such that the Aggregate Exercise Price of this Warrant shall remain unchanged. Any adjustment made pursuant to this Section 3(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification.

b) Pro Rata Distributions. If the Company, at any time while this Warrant is outstanding, shall distribute to all holders of Common Stock (and not to the Holder) evidences of its indebtedness or assets (including cash and cash dividends) or rights or warrants to subscribe for or purchase any security, then in each such case the Exercise Price shall be adjusted by multiplying the Exercise Price in effect immediately prior to the record date fixed for determination of stockholders entitled to receive such distribution by a fraction, the numerator of which shall be such VWAP on such record date less the then fair market value (as determined by the Board of Directors of the Company in good faith) at such record date of the portion of such assets or evidence of indebtedness so distributed applicable to one outstanding share of Common Stock, and the denominator of which shall be the VWAP determined as of the record date mentioned above. Such adjustment shall be made whenever any such distribution is made and shall become effective immediately after the record date mentioned above.

c) Certain Events. If any event of the type contemplated by the provisions of this Section 3 but not expressly provided for by such provisions occurs, then the Board of Directors of the Company shall make an appropriate adjustment in the Exercise Price and the number of Warrant Shares issuable upon exercise of this Warrant so as to protect the rights of the Holder in a manner consistent with the provisions of this Section 3; *provided*, that no such adjustment pursuant to this Section 3(c) shall increase the Exercise Price or decrease the number of Warrant Shares issuable as otherwise determined pursuant to this Section 3.

d) Calculations. All calculations under this Section 3 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this Section 3, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding treasury shares, if any) issued and outstanding.

e) Notice to the Holder.

i. *Adjustment to Exercise Price.* Whenever the Exercise Price is adjusted pursuant to any provision of this Section 3, the Company shall, at the request of the Holder, promptly compute such adjustment, in good faith, in accordance with the terms of this Warrant, and prepare a certificate setting forth such adjustment, including (A) a statement of the adjusted Exercise Price and adjusted number or type of Warrant Shares or other securities issuable upon exercise of this Warrant (as applicable) and (B) in the case of adjustment pursuant to Section 3(b), a statement of the portion of assets or evidences of indebtedness so distributed or such subscription rights applicable to one share of Common Stock, and setting forth a brief statement of the facts requiring such adjustment and certifying the calculation thereof. The Company will deliver a copy of each such certificate to the Holder as promptly as reasonably practicable following any adjustment of the Exercise Price, but in any event not later than ten Business Days thereafter.

ii. *Notice to Allow Exercise by the Holder.* If (A) the Company shall declare a dividend (or any other distribution in whatever form) on the Common Stock, (B) the Company shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (C) the Company shall authorize the granting to all holders of the Common Stock or rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights of the Company, (D) the Company enters into or becomes bound by an agreement in connection with a Change of Control or (E) the Company shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Company, then, in each case, the Company shall cause to be mailed to the Holder at its last address as it shall appear upon the Warrant Register (as defined below) of the Company, at least 20 calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distribution, redemption, rights or warrants are to be determined or (y) the date on which such Change of Control is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of Common Stock for securities, cash or other property deliverable upon such Change of Control; *provided* that the failure to mail such notice or any defect therein or in the mailing thereof shall not affect the validity of the corporate action required to be specified in such notice. The Holder shall remain entitled to exercise this Warrant during the period commencing on the date of such notice to the effective date of the event triggering such notice except as may otherwise be expressly set forth herein. Except as otherwise prohibited by applicable laws, to the extent that any notice provided pursuant to this Section 3(e)(ii) contains material, non-public information regarding the Company, the Company shall disclose such information regarding the Company in a Current Report on Form 8-K and file such Current Report on Form 8-K with the SEC no later than the second Trading Day following the date such notice is delivered to the Holder.

Section 4. Transfer of Warrant.

a) Transferability. Subject to applicable securities laws, this Warrant and all rights hereunder are transferable, in whole or in part, upon surrender of this Warrant at the principal office of the Company or its designated agent, together with a written assignment of this Warrant substantially in the form attached hereto duly executed by the Holder or its agent or attorney and funds sufficient to pay any transfer taxes payable upon the making of such transfer. Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees, as applicable, and in the denomination or denominations specified in such instrument of assignment, and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. This Warrant, if properly assigned in accordance herewith, may be exercised by a new holder for the purchase of Warrant Shares without having a new Warrant issued.

b) New Warrants. This Warrant may be divided or combined with other Warrants upon presentation hereof at the aforesaid office of the Company, together with a written notice specifying the names and denominations in which new Warrants are to be issued, signed by the Holder or its agent or attorney. Subject to compliance with Section 4(a), as to any transfer which may be involved in such division or combination, the Company shall execute and deliver a new Warrant or Warrants in exchange for the Warrant or Warrants to be divided or combined in accordance with such notice. All Warrants issued on transfers or exchanges shall be dated the Initial Issuance Date and shall be identical with this Warrant except as to the number of Warrant Shares issuable pursuant thereto.

c) Warrant Register. The Company shall register this Warrant, upon records to be maintained by the Company for that purpose (the "**Warrant Register**"), in the name of the record Holder hereof from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

Section 5. Miscellaneous.

a) No Rights as Stockholder Until Exercise. Except as provided in Section 3, this Warrant does not entitle the Holder to any voting rights, dividends or other rights as a stockholder of the Company prior to the exercise hereof as set forth in Section 2(d).

b) Loss, Theft, Destruction or Mutilation of Warrant. The Company covenants that upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of this Warrant or any stock certificate relating to the Warrant Shares, and in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it (which, in the case of this Warrant, shall not include the posting of any bond), and upon surrender and cancellation of such Warrant or stock certificate, if mutilated, the Company will make and deliver a new Warrant or stock certificate of like tenor and dated as of such cancellation, in lieu of such Warrant or stock certificate.

c) Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall not be a Business Day, then, such action may be taken or such right may be exercised on the next succeeding Business Day.

d) Governing Law; Jurisdiction.

i. *Governing Law.* This Warrant and any claims, controversy, dispute or cause of action (whether in contract or tort or otherwise) based upon, arising out of or relating to this Warrant and the transactions contemplated hereby shall be governed by, and construed in accordance with, the law of the State of New York.

ii. *Jurisdiction.* Each party hereto irrevocably and unconditionally agrees that it will not commence any action, litigation or proceeding of any kind or description, whether in law or equity, whether in contract or in tort or otherwise, against any other party hereto in any way relating to this Warrant or the transactions relating hereto, in any forum other than the courts of the State of New York sitting in New York County, and of the United States District Court of the Southern District of New York, and any appellate court from any thereof; and each of the parties hereto irrevocably and unconditionally submits to the jurisdiction of such courts and agrees that all claims in respect of any such action, litigation or proceeding may be heard and determined in such New York State court or, to the fullest extent permitted by applicable law, in such federal court. Each of the parties hereto agrees that a final judgment in any such action, litigation or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law.

iii. *Waiver of Venue.* Each party hereto irrevocably and unconditionally waives, to the fullest extent permitted by applicable law, any objection that it may now or hereafter have to the laying of venue of any action or proceeding arising out of or relating to this Agreement in any court referred to in paragraph (ii) of this Section 5. Each of the parties hereto hereby irrevocably waives, to the fullest extent permitted by applicable law, the defense of an inconvenient forum to the maintenance of such action or proceeding in any such court.

iv. *Service of Process.* Each party hereto irrevocably consents to service of process in the manner provided for notices in Section 5(f).

e) Waiver of Jury Trial. EACH PARTY HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY LEGAL PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS WARRANT OR THE TRANSACTIONS CONTEMPLATED HEREBY (WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY). EACH PARTY HERETO (A) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PERSON HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PERSON WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS WARRANT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION 5(E).

f) Notices. Except as otherwise provided in this Warrant, all notices and other communications provided for herein shall be in writing and shall be delivered by hand or overnight courier service, mailed by certified or registered mail or sent by facsimile or e-mail as follows:

i. If to the Company:

Sorrento Therapeutics, Inc.  
4955 Directors Place  
San Diego, California 92121  
E-mail: [hji@sorrentotherapeutics.com](mailto:hji@sorrentotherapeutics.com)  
Attn: Chief Executive Officer

With a copy (which shall not constitute notice) to:

Paul Hastings LLP  
1117 S. California Avenue  
Palo Alto, CA 94304  
E-mail: [jeffhartlin@paulhastings.com](mailto:jeffhartlin@paulhastings.com)  
Attn: Jeff Hartlin, Esq.;

ii. if to the Holder, to the address (or facsimile number or e-mail) set forth on Schedule A hereto;

With a copy (which shall not constitute notice) to:

Sullivan & Cromwell LLP  
1888 Century Park East, 21<sup>st</sup> Floor  
Los Angeles, CA 90067  
E-mail: [resslera@sullcrom.com](mailto:resslera@sullcrom.com)  
Attn: Alison Ressler

Notices or communications sent by hand or overnight courier service, or mailed by certified or registered mail, shall be deemed to have been given when received, notices or communications sent by facsimile shall be deemed to have been given when sent (except that, if not given during normal business hours for the recipient, such notice or communication shall be deemed to have been sent at the opening of business on the next Business Day for the recipient) and notices or communications sent by e-mail shall be deemed received upon the sender's receipt of an acknowledgement from the intended recipient (such as by the "return receipt requested" function, as available, return e-mail or other written acknowledgement) (except that, if not given during the normal business hours of the recipient, such notice or communication shall be deemed to have been sent at the opening of business on the next Business Day for the recipient).

g) Limitation of Liability. No provision hereof, in the absence of any affirmative action by the Holder to exercise this Warrant to purchase Warrant Shares, and no enumeration herein of the rights or privileges of the Holder, shall give rise to any liability of the Holder for the purchase price of any Common Stock or as a stockholder of the Company, whether such liability is asserted by the Company or by creditors of the Company.

h) Remedies. The Holder, in addition to being entitled to exercise all rights granted by law, including recovery of damages, will be entitled to specific performance of its rights under this Warrant. The Company agrees that monetary damages would not be adequate compensation for any loss incurred by reason of a breach by it of the provisions of this Warrant and hereby agrees to waive and not to assert the defense in any action for specific performance that a remedy at law would be adequate.

i) Successors and Assigns. Subject to applicable securities laws, this Warrant and the rights and obligations evidenced hereby shall be binding upon and inure to the benefit of the parties hereto and their respective the successors and permitted assigns. The provisions of this Warrant are intended to be for the benefit of the Holder from time to time of this Warrant and shall be enforceable by the Holder or holder of Warrant Shares.

j) Amendment. No provision of this Warrant may be amended, waived or modified other than by an instrument in writing signed by the Company and the Holder.

k) Severability. Any provision of this Warrant held to be invalid, illegal or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such invalidity, illegality or unenforceability without affecting the validity, legality and enforceability of the remaining provisions hereof, and the invalidity of a particular provision in a particular jurisdiction shall not invalidate such provision in any other jurisdiction.

l) Headings. Section headings herein are included for convenience of reference only and shall not constitute a part hereof for any other purpose or be given any substantive effect.

m) Language; Currency. This Warrant has been prepared in the English language and the English language shall control its interpretation. In addition, all notices required or permitted to be given hereunder, and all written, electronic, oral or other communications between the parties regarding this Warrant, shall be in the English language. All references to "\$" contained in this Warrant shall refer to United States Dollars unless otherwise stated.

*(Signature Page Follows)*

IN WITNESS WHEREOF, the Company has caused this Warrant to be executed by its officer thereunto duly authorized as of the date first above indicated.

**SORRENTO THERAPEUTICS, INC.**

By: \_\_\_\_\_  
Name: Henry Ji, Ph.D.  
Title: Chairman of the Board, President and Chief Executive Officer

Accepted and agreed,

**[HOLDER]**

By: \_\_\_\_\_  
Name:  
Title:

*[Signature Page to Common Stock Purchase Warrant]*

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**Schedule A**

[*Holder Address*]

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**NOTICE OF EXERCISE**

To:     SORRENTO THERAPEUTICS, INC.

(1)     The undersigned hereby elects to purchase \_\_\_\_\_ Warrant Shares of the Company pursuant to the terms of the attached Common Stock Purchase Warrant (the "**Warrant**"), and tenders herewith payment of the applicable exercise price, together with all applicable transfer taxes, if any.

(2)     Payment shall take the form of (check applicable box):

in lawful money of the United States; or

if permitted, the cancellation of such number of Warrant Shares as is necessary, in accordance with the formula set forth in Section 2(c) of the Warrant, to exercise the Warrant with respect to the maximum number of Warrant Shares purchasable pursuant to the cashless exercise procedure set forth in Section 2(c) of the Warrant.

(3)     As to any fraction of a Warrant Share that the undersigned would otherwise be entitled to purchase in connection with this Notice of Exercise, please (check applicable box):

pay an amount in cash pursuant to Section 2(d)(iv) of the Warrant; or

round up to the next whole share.

(4)     Please issue a certificate or certificates representing said Warrant Shares in the name of the undersigned or in such other name as is specified below:

\_\_\_\_\_

The Warrant Shares shall be delivered to the following DWAC Account Number or by physical delivery of a certificate to:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

[SIGNATURE OF HOLDER]

Name of Investing Entity: \_\_\_\_\_

Signature of Authorized Signatory of Investing Entity: \_\_\_\_\_

Name of Authorized Signatory: \_\_\_\_\_

Title of Authorized Signatory: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_

**ASSIGNMENT FORM**

(To assign the foregoing warrant, execute this form and supply required information. Do not use this form to exercise the warrant.)

FOR VALUE RECEIVED, all of or [\_\_\_\_\_] of the shares of the foregoing Common Stock Purchase Warrant (the "**Warrant**") and all rights evidenced thereby are hereby assigned to

\_\_\_\_\_ whose address is  
\_\_\_\_\_  
\_\_\_\_\_.

Dated: \_\_\_\_\_, \_\_\_\_\_

Holder's Signature: \_\_\_\_\_

Holder's Address: \_\_\_\_\_  
\_\_\_\_\_

Signature Guaranteed: \_\_\_\_\_

NOTE: The signature to this Assignment Form must correspond with the name as it appears on the face of the Warrant, without alteration or enlargement or any change whatsoever, and must be guaranteed by a bank or trust company. Officers of corporations and those acting in a fiduciary or other representative capacity should file proper evidence of authority to assign the Warrant.

\_\_\_\_\_

**AMENDMENT NO. 2  
TO THE  
REGISTRATION RIGHTS AGREEMENT**

This Amendment No. 2 (this “**Amendment**”) to the Registration Rights Agreement, dated as of November 7, 2018, as amended on May 3, 2019 (as amended, the “**RRA**”), by and among Sorrento Therapeutics, Inc., a Delaware corporation (the “**Company**”), and the parties identified on Schedule A thereto (each, a “**Holder**” and collectively, with such other Persons, if any, from time to time, that become a party thereto as holders of Registrable Securities, the “**Holders**”), is dated as of December 6, 2019. Capitalized terms used but not defined herein shall have the meanings ascribed to such terms in the RRA.

WHEREAS, pursuant to the Letter Agreement, dated as of December 6, 2019 (the “**December 2019 Letter Agreement**”), by and between the Company and Oaktree Capital Management, L.P., concurrently with the execution of this Amendment, on the date hereof, the Company will issue to each Holder a warrant to purchase such number of shares of Common Stock as is set forth opposite such Holder’s name under the column “Shares Issuable Upon Exercise of December 2019 Warrants” on Schedule A hereto (as such number may be adjusted pursuant to the terms of such warrant) (each, a “**December 2019 Warrant**” and, collectively, the “**December 2019 Warrants**”);

WHEREAS, the December 2019 Warrants will be exercisable into shares of Common Stock from time to time on or after June 6, 2020 and on or prior to the close of business on June 6, 2030 in each case in accordance with the terms thereof;

WHEREAS, pursuant to Section 4.8 of the RRA, the RRA may be amended by an instrument in writing signed by the Company and the holders of a majority of the shares of Common Stock issuable upon exercise of the then-outstanding Warrants;

WHEREAS, in connection with the issuance of the December 2019 Warrants, the Company and the Holders holding a majority of the shares of Common Stock issuable upon exercise of the Warrants outstanding as of immediately prior to the issuance of the December 2019 Warrants desire to amend certain terms of the RRA as set forth in this Amendment; and

WHEREAS, the Company and each Holder has authorized the execution and delivery of this Amendment by the undersigned authorized person.

NOW, THEREFORE, the RRA shall be amended as follows:

1. Amendments.

a) *Definitions.*

i. Section 1.1 is amended to add the following definition before the definition of “Disclosure Package”:

“**December 2019 Registrable Securities**” means (i) the December 2019 Warrant Shares, and (ii) any Additional Shares with respect to the December 2019 Warrant Shares; provided, however, that December 2019 Warrant Shares or Additional Shares with respect to the December 2019 Warrant Shares shall cease to be treated as Registrable Securities on the earliest to occur of, (a) the date such security has been disposed of pursuant to an effective registration statement, (b) the date on which such security is sold pursuant to Rule 144, or (c) the date on which the Holder thereof, together with its Affiliates, is able to dispose of all of its December 2019 Registrable Securities without restriction or limitation pursuant to Rule 144 and without the requirement to be in compliance with Rule 144 (or any successor rule).”

ii. Section 1.1 is amended to add the following definition between the definition of “December 2019 Registrable Securities” and the definition of “Disclosure Package”:

“**December 2019 Warrant Shares**” means any and all shares of Common Stock issuable upon exercise of the December 2019 Warrants.”

iii. The definition of “Registrable Securities” is amended and restated in its entirety as follows:

“**Registrable Securities**” means the Initial Registrable Securities, the Subsequent Registrable Securities, the 2019 Registrable Securities and the December 2019 Registrable Securities.”

iv. The definition of “Shares” is amended and restated in its entirety as follows:

“**Shares**” means the Initial Warrant Shares, the Subsequent Warrant Shares, the 2019 Warrant Shares and the December 2019 Warrant Shares.”

v. The definition of “Warrants” is amended and restated in its entirety as follows:

“**Warrants**” means the Initial Warrants, the Subsequent Warrants, the 2019 Warrants and the December 2019 Warrants.”

b) The first two sentences of Section 2.1 of the RRA are replaced in their entirety with the following:

“Within 45 days following the date of issuance of each of the Initial Warrants, the Subsequent Warrants, the 2019 Warrants and the December 2019 Warrants, the Company shall (a) file with the SEC, or (b) have filed with the SEC, a Resale Registration Statement (together with any New Registration Statement (as defined below), each, a “**Resale Registration Statement**” and collectively, the “**Resale Registration Statements**”) pursuant to Rule 415 under the Securities Act pursuant to which all of the Initial Registrable Securities, the Subsequent Registrable Securities, the 2019 Registrable Securities or the December 2019 Registrable Securities, respectively, shall be included (on the initial filing or by supplement or amendment thereto) to enable the public resale on a delayed or continuous basis of the Initial Registrable Securities, the Subsequent Registrable Securities, the 2019 Registrable Securities or the December 2019 Registrable Securities, respectively, by the Holders. The Company shall file each Resale Registration Statement on such form as the Company may then utilize under the rules of the SEC and use its best efforts to have such Resale Registration Statement declared effective under the Securities Act as soon as practicable, but in any event by the earlier of: (A) 120 days following the date of issuance of each of the Initial Warrants, the Subsequent Warrants, the 2019 Warrants and the December 2019 Warrants, respectively, and (B) five trading days after the date the Company receives written notification from the SEC that such Resale Registration Statement will not be reviewed.”

2. Miscellaneous. Except as expressly amended hereby, the RRA shall remain in full force and effect in accordance with the terms hereof. All references in the RRA to “hereof” or “this Agreement” shall be deemed to refer to the RRA as amended by this Amendment; *provided* that references in the RRA to “as of the date hereof” or “as of the date of this Agreement” or words of like import shall refer to November 7, 2018.

3. Counterparts. This Amendment may be executed in counterparts (and by different parties hereto in different counterparts), each of which shall constitute an original, but all of which when taken together shall constitute a single contract. Delivery of an executed counterpart of a signature page of this Amendment by facsimile or in electronic (i.e., “pdf” or “tif”) format shall be effective as delivery of a manually executed counterpart of this Amendment.

4. Governing Law. This Amendment and any claims, controversy, dispute or cause of action (whether in contract or tort or otherwise) based upon, arising out of or relating to this Amendment and the transactions contemplated hereby shall be governed by, and construed in accordance with, the law of the State of New York.

[REMAINDER OF PAGE INTENTIONALLY BLANK]

IN WITNESS WHEREOF, the undersigned have each duly executed this Amendment as of the date first above written.

**THE COMPANY:**

**SORRENTO THERAPEUTICS, INC.,**  
a Delaware corporation

By: /s/ Henry Ji, Ph.D.

Name: Henry Ji, Ph.D.

Title: President and Chief Executive Officer

*[Signature Page to Amendment No. 2 to Registration Rights Agreement]*

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**HOLDER:**

**SC INVESTMENTS E HOLDINGS, LLC**

By: Oaktree Fund GP IIA, LLC  
Its: Manager

By: Oaktree Fund GP II, L.P.  
Its: Managing Member

By: /s/ Brian Price  
Name: Brian Price  
Title: Authorized Signatory

By: /s/ Peter Boos  
Name: Peter Boos  
Title: Authorized Signatory

*[Signature Page to Amendment No. 2 to Registration Rights Agreement]*

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**HOLDER:**

**SC INVESTMENTS NE HOLDINGS, LLC**

By: Oaktree Fund GP IIA, LLC  
Its: Manager

By: Oaktree Fund GP II, L.P.  
Its: Managing Member

By: /s/ Brian Price  
Name: Brian Price  
Title: Authorized Signatory

By: /s/ Peter Boos  
Name: Peter Boos  
Title: Authorized Signatory

*[Signature Page to Amendment No. 2 to Registration Rights Agreement]*

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**HOLDER:**

**OCSL SRNE, LLC**

By: Oaktree Specialty Lending Corporation  
Its: Managing Member

By: Oaktree Capital Management, L.P.  
Its: Investment Adviser

By: /s/ Brian Price  
Name: Brian Price  
Title: Vice President

By: /s/ Peter Boos  
Name: Peter Boos  
Title: Assistant Vice President

*[Signature Page to Amendment No. 2 to Registration Rights Agreement]*

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**HOLDER:**

**OAKTREE STRATEGIC INCOME II, INC.**

By: Oaktree Capital Management, L.P.  
Its: Investment Adviser

By: /s/ Brian Price  
Name: Brian Price  
Title: Vice President

By: /s/ Peter Boos  
Name: Peter Boos  
Title: Assistant Vice President

*[Signature Page to Amendment No. 2 to Registration Rights Agreement]*

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**SCHEDULE A**

**HOLDERS**

<b>Holder</b>	<b>Contact Information for Notices</b>	<b>Shares Issuable Upon Exercise of December 2019 Warrants</b>
SC Investments E Holdings, LLC	<p>SC Investments E Holdings, LLC  c/o Oaktree Capital Management (UK) LLP  Verde, 10 Bressenden Place  London, SW1E 5DH  United Kingdom  Email: amkumar@oaktreecapital.com  Attn: Aman Kumar, Senior Vice President</p> <p>With a copy to:  Oaktree Capital Management, L.P.  333 S. Grand Avenue, 28<sup>th</sup> Floor  Los Angeles, California 90071  Email: mgallegly@oaktreecapital.com  Attn: Mary Gallegly, Senior Vice President</p>	800,557
SC Investments NE Holdings, LLC	<p>SC Investments NE Holdings, LLC  c/o Oaktree Capital Management (UK) LLP  Verde, 10 Bressenden Place  London, SW1E 5DH  United Kingdom  Email: amkumar@oaktreecapital.com  Attn: Aman Kumar, Senior Vice President</p> <p>With a copy to:  Oaktree Capital Management, L.P.  333 S. Grand Avenue, 28<sup>th</sup> Floor  Los Angeles, California 90071  Email: mgallegly@oaktreecapital.com  Attn: Mary Gallegly, Senior Vice President</p>	539,443
OCSL SRNE, LLC	<p>OCSL SRNE, LLC  c/o Oaktree Capital Management (UK) LLP  Verde, 10 Bressenden Place  London, SW1E 5DH  United Kingdom  Email: amkumar@oaktreecapital.com  Attn: Aman Kumar, Senior Vice President</p> <p>With a copy to:  Oaktree Capital Management, L.P.  333 S. Grand Avenue, 28<sup>th</sup> Floor  Los Angeles, California 90071  Email: mgallegly@oaktreecapital.com  Attn: Mary Gallegly, Senior Vice President</p>	500,000
Oaktree Strategic Income II, Inc.	<p>Oaktree Strategic Income II, Inc.  c/o Oaktree Capital Management (UK) LLP  Verde, 10 Bressenden Place  London, SW1E 5DH  United Kingdom  Email: amkumar@oaktreecapital.com  Attn: Aman Kumar, Senior Vice President</p> <p>With a copy to:  Oaktree Capital Management, L.P.  333 S. Grand Avenue, 28<sup>th</sup> Floor  Los Angeles, California 90071  Email: mgallegly@oaktreecapital.com  Attn: Mary Gallegly, Senior Vice President</p>	160,000
<b>TOTAL</b>		<b>2,000,000</b>





FOR IMMEDIATE RELEASE

December 9<sup>th</sup>, 2019**SORRENTO ANNOUNCES NEW BOARD MEMBER**

SAN DIEGO, December 9<sup>th</sup>, 2019/GlobeNewswire/ -- Sorrento Therapeutics, Inc. (Nasdaq: SRNE, "Sorrento") announced today that Mr. Edgar Lee has been appointed to its Board of Directors. Mr. Lee is currently a Managing Director at Oaktree Capital Management. Mr. Lee founded and was the portfolio manager of Oaktree's \$5.5bn Strategic Credit strategy. He was also the Chief Executive Officer and Chief Investment Officer of Oaktree's three business development companies (BDCs) including Oaktree Specialty Lending (Nasdaq: OCSL) and Oaktree Strategic Income Corporations (Nasdaq: OCSI). Prior to joining Oaktree in 2007, Mr. Lee worked at UBS Investment Bank in Los Angeles and Lehman Brothers in New York. He received a B.A. degree in economics from Swarthmore College and his master's degree from Harvard University. Mr. Lee serves as a director of Neo Performance Materials (TSX: NEO) and previously served on the boards of Nine Entertainment (ASX: NEC) and Charter Communications (Nasdaq: CHTR).

Dr. Henry Ji, Chairman and CEO, commented "We are very excited to have Edgar to join our board. He brings not only deep knowledge in capital markets and innovative financing but also practical expertise in strategic planning in biopharma industry."

Mr. Lee stated "Sorrento has a highly unique portfolio of valuable assets and a team of incredibly talented and innovative scientists. I have tremendous respect for Henry and the other board members and I am honored to have the opportunity to work with them."

**About Sorrento Therapeutics, Inc.**

Sorrento is a clinical stage, antibody-centric, biopharmaceutical company developing new therapies to turn malignant cancers into manageable and possibly curable diseases. Sorrento's multimodal multipronged approach to fighting cancer is made possible by its' extensive immuno-oncology platforms, including key assets such as fully human antibodies ("G-MAB™ library"), antibody-drug conjugates ("ADC") as well CAR-T and oncolytic virus ("Seprehvir®").

Sorrento's commitment to life-enhancing therapies for cancer patients is also demonstrated by our effort to advance a first-in-class (TRPV1 agonist) RTX and ZTlido®. RTX is completing a phase IB trial in terminal cancer patients. ZTlido® was approved by US FDA on February 28, 2018.

For more information visit [www.sorrentotherapeutics.com](http://www.sorrentotherapeutics.com)

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**Media and Investor Relations**

Contact: Alexis Nahama, SVP Corporate Development

Telephone: 1.858.203.4120

Email: [mediarelations@sorrentotherapeutics.com](mailto:mediarelations@sorrentotherapeutics.com)

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ZTlido® and G-MAB™ are trademarks owned by Scilex Pharmaceuticals Inc. and Sorrento, respectively.

Seprehvir®, is a registered trademark of Virttu Biologics Limited, a wholly-owned subsidiary of TNK Therapeutics, Inc. and part of the group of companies owned by Sorrento Therapeutics, Inc.

All other trademarks are the property of their respective owners.

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