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

FORM 10-Q

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

For the quarterly period ended March 31, 2019

OR

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

For the transition period from _____ to _____

Commission file number 001-36150

SORRENTO THERAPEUTICS, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware	**33-0344842**
(State or Other Jurisdiction of Incorporation or Organization)	**(I.R.S. Employer Identification Number)**

4955 Directors Place

San Diego, California 92121
(Address of Principal Executive Offices)

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(858) 203-4100
(Registrant's Telephone Number, Including Area Code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐.

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
Emerging growth company	☐		

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒.

The number of shares of the issuer's common stock, par value $0.0001 per share, outstanding as of April 26, 2019 was 122,550,710.

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

Title of each class:	Trading Symbol (s)	Name of each exchange on which registered:
Common Stock, $0.0001 par value	SRNE	The Nasdaq Stock Market LLC

Sorrento Therapeutics, Inc.

Form 10-Q for the Quarter Ended March 31, 2019

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PART I. FINANCIAL INFORMATION

Item 1. Consolidated Financial Statements.

SORRENTO THERAPEUTICS, INC.
CONSOLIDATED BALANCE SHEETS
(In thousands, except for share amounts; unaudited)

ASSETS	March 31, 2019	December 31, 2018
Current assets:		
Cash and cash equivalents	$ 90,971	$ 158,738
Restricted Cash	9,592	9,592
Marketable securities	391	297
Grants and accounts receivables, net	7,409	3,833
Inventory	4,568	2,898
Income tax receivable	193	526
Prepaid expenses and other	5,455	3,680
Total current assets	118,579	179,564
Property and equipment, net	28,900	24,384
Operating lease right-of-use assets	43,292	—
Intangibles, net	65,817	66,283
Goodwill	38,298	38,298
Cost method investments	237,008	237,008
Equity method investments	27,083	27,980
Restricted cash	45,150	45,000
Other, net	5,347	5,570
Total assets	$ 609,474	$ 624,087
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 14,652	$ 13,817
Accrued payroll and related benefits	10,159	10,236
Accrued expenses	23,590	13,403
Current portion of deferred revenue	3,157	2,703
Acquisition consideration payable	11,312	11,312
Current portion of debt	8,678	10,150
Current portion of operating lease liabilities	2,534	—
Total current liabilities	74,082	61,621
Long-term debt, net of discount	229,662	223,136
Deferred tax liabilities, net	9,230	9,416
Deferred revenue	115,501	116,274
Derivative liability	14,501	—
Operating lease liabilities	47,628	—
Deferred rent and other	757	6,140
Total liabilities	491,361	416,587
Commitments and contingencies (See Note 14)		
Equity:		
Sorrento Therapeutics, Inc. equity		
Preferred stock, $0.0001 par value; 100,000,000 shares authorized and no shares issued or outstanding	—	—
Common stock, $0.0001 par value 750,000,000 shares authorized and 122,311,917 and 122,280,092 shares issued and outstanding at March 31, 2019 and December 31, 2018, respectively	13	13
Additional paid-in capital	657,115	626,658
Accumulated other comprehensive income	100	15
Accumulated deficit	(475,821)	(367,750)
Treasury stock, 7,568,182 shares at cost at March 31, 2019, and December 31, 2018	(49,464)	(49,464)
Total Sorrento Therapeutics, Inc. stockholders' equity	131,943	209,472
Noncontrolling interests	(13,830)	(1,972)
Total equity	118,113	207,500
Total liabilities and stockholders' equity	$ 609,474	$ 624,087

See accompanying unaudited notes

SORRENTO THERAPEUTICS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands, except for per share amounts; unaudited)

	Three Months Ended March 31,	
	2019	**2018**
Revenues:		
Royalty and license	$ 120	$ 120
Sales and services	6,023	6,126
Total revenues	6,143	6,246
Operating costs and expenses:		
Costs of revenues	2,308	1,311
Research and development	25,584	14,632
Acquired in-process research and development	75,301	—
General and administrative	25,122	9,961
Intangible amortization	966	662
Loss on contingent liabilities	32	12,226
Total operating costs and expenses	129,313	38,792
Loss from operations	(123,170)	(32,546)
Gain on trading securities	94	3
Loss on derivative liability	(14,501)	—
Gain on foreign currency exchange	313	17
Interest expense	(9,080)	(1,052)
Interest income	534	4
Loss before income tax	(145,810)	(33,574)
Income tax benefit	(178)	(948)
Loss on equity method investments	(897)	(922)
Net loss	(146,529)	(33,548)
Net loss attributable to noncontrolling interests	(38,458)	(974)
Net loss attributable to Sorrento	$ (108,071)	$ (32,574)
Net loss per share - basic per share attributable to Sorrento	$ (0.88)	$ (0.38)
Net loss per share - diluted per share attributable to Sorrento	$ (0.88)	$ (0.38)
Weighted-average shares used during period - basic per share attributable to Sorrento	122,281	84,941
Weighted-average shares used during period - diluted per share attributable to Sorrento	122,281	84,941

See accompanying unaudited notes

SORRENTO THERAPEUTICS, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(Unaudited)
(In thousands)

	Three Months Ended March 31,	
	2019	**2018**
Net loss	(146,529)	$ (33,548)
Other comprehensive gain:		
Foreign currency translation adjustments	85	110
Total other comprehensive loss	85	110
Comprehensive loss	(146,444)	(33,438)
Comprehensive loss attributable to noncontrolling interests	(38,458)	(974)
Comprehensive loss attributable to Sorrento	$ (107,986)	$ (32,464)

See accompanying unaudited notes

SORRENTO THERAPEUTICS, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Unaudited)
(In thousands, except for share amounts)

Three Months Ended March 31, 2019

	Common Stock		Treasury Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Noncontrolling Interest	Total
	Shares	Amount	Shares	Amount					
Balance, December 31, 2018	122,280,092	$ 13	7,568,182	(49,464)	$ 626,658	$ 15	$ (367,750)	$ (1,972)	$ 207,500
Issuance of common stock upon exercise of stock options	31,825	—	—	—	81	—	—	—	81
Equity contribution related to Semnur acquisition	—	—	—	—	28,400	—	—	26,600	55,000
Stock-based compensation	—	—	—	—	1,976	—	—	—	1,976
Foreign currency translation adjustment	—	—	—	—	—	85		—	85
Net loss	—	—	—	—	—	—	(108,071)	(38,458)	(146,529)
Balance, March 31, 2019	122,311,917	$ 13	7,568,182	$ (49,464)	$ 657,115	$ 100	$ (475,821)	$ (13,830)	$ 118,113

Three Months Ended March 31, 2018

	Common Stock		Treasury Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Noncontrolling Interest	Total
	Shares	Amount	Shares	Amount					
Balance, December 31, 2017	82,903,567	$ 9	7,568,182	(49,464)	$ 413,901	$ 242	$ (165,120)	$ 7,042	$ 206,610
Adoption impact of ASC 606	—	—	—	—	—	—	910	—	910
Issuance of common stock upon exercise of stock options	24,090	—	—	—	155	—	—	—	155
Issuance of common stock for BDL settlement	309,916	—	—	—	2,340	—	—	—	2,340
Issuance of common stock for Scilex settlement	1,381,346	—	—	—	13,744	—	—	—	13,744
Issuance of common stock for public placement and investments, net	6,409,170	1	—	—	48,957	—	—	—	48,958
Stock-based compensation	—	—	—	—	1,594	—	—	—	1,594
Foreign currency translation adjustment	—	—	—	—	—	110	—	—	110
Net income (loss)	—	—	—	—	—	—	(32,574)	(974)	(33,548)
Balance, March 31, 2018	91,028,089	$ 10	7,568,182	$ (49,464)	$ 480,691	$ 352	$ (196,784)	$ 6,068	$ 240,873

See accompanying unaudited notes

SORRENTO THERAPEUTICS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited) (In thousands)

	Three Months Ended March 31,	
Operating activities	**2019**	**2018**
Net loss	$ (146,529)	$ (33,548)
Adjustments to reconcile net loss to net cash used for operating activities:		
Depreciation and amortization	3,038	2,005
Amortization of operating lease right-of-use assets	1,292	—
Non-cash interest expense	5,682	288
Loss on disposals	433	—
Semnur-related IPR&D	75,301	—
Amortization of debt issuance costs	518	1
Gain on trading securities	(94)	(3)
Stock-based compensation	1,976	1,594
Loss on derivative liability	14,501	—
Loss on equity method investments	897	922
Loss on contingent liabilities and acquisition consideration payable	32	12,226
Deferred tax provision	(186)	(895)
Changes in operating assets and liabilities, excluding effect of acquisitions:		
Grants and other receivables	(3,575)	(1,701)
Accrued payroll	(76)	19
Prepaid expenses and other	(2,989)	(1,286)
Deposits and other assets	406	113
Accounts payable	(3,439)	(1,825)
Deferred revenue	(319)	(1,378)
Other	163	(33)
Acquisition consideration payable for Scilex	—	(2,020)
Accrued expenses and other liabilities	8,659	1,558
Net cash used in operating activities	(44,309)	(23,963)
Investing activities		
Purchases of property and equipment	(5,228)	(448)
Purchase of assets related to Semnur	(17,040)	—
Net cash used in investing activities	(22,268)	(448)
Financing activities		
Proceeds from bridge loan for Scilex regulatory milestone	—	20,000
Repayment of bridge loan for Scilex regulatory milestone	—	(20,000)
Proceeds from loan agreement	—	1,586
Short-term loan repayment	(740)	—
Scilex consideration for regulatory milestone	—	(22,466)
Payment on Scilex Notes	(438)	—
Proceeds from issuance of common stock, net	—	48,958
Proceeds from exercise of stock options	81	155
Net cash (used in) provided by financing activities	(1,097)	28,233
Net change in cash, cash equivalents and restricted cash	(67,674)	3,822
Net effect of exchange rate changes on cash	57	1
Cash, cash equivalents and restricted cash at beginning of period	213,330	20,429

Cash, cash equivalents and restricted cash at end of period	$ 145,713	$ 24,252
Supplemental disclosures:		
Cash paid during the period for:		
Interest paid	$ 2,505	$ 128
Supplemental disclosures of non-cash investing and financing activities:		
Semnur non-cash consideration	$ 55,000	$ —
BDL non-cash consideration	$ —	$ 2,340
Property and equipment costs incurred but not paid	$ 1,531	$ 965
Scilex non-cash consideration for regulatory milestone	$ —	$ 13,744
Reconciliation of cash, cash equivalents and restricted cash within the Company's consolidated balance sheets:		
Cash and cash equivalents	90,971	24,252
Restricted cash	54,742	—
Cash, cash equivalents, and restricted cash	$ 145,713	$ 24,252

See accompanying unaudited notes

1. Nature of Operations and Business Activities

Nature of Operations and Basis of Presentation

Sorrento Therapeutics, Inc. (Nasdaq: SRNE), together with its subsidiaries (collectively, the "Company") is 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. The Company primarily focuses on therapeutics areas in Immune-Oncology and Non-Opioid Pain Management. The Company also has programs assessing the use of its technologies and products in auto-immune, inflammatory and neurodegenerative diseases.

At its core, the Company is an antibody-centric company and leverages its proprietary G-MAB™ library and targeted delivery modalities to generate the next generation of cancer therapeutics. The Company's fully human antibodies include PD-1, PD-L1, CD38, CD123, CD47, c-MET, VEGFR2, CCR2 and CD137 among others.

The Company's 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 ("CAR-T"), dimeric antigen receptor T-cell therapy ("DAR-T"), antibody drug conjugates ("ADCs") as well as bispecific antibody approaches. Additionally, the Company 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 the Company's clinical and pre-clinical programs, it aims to tailor its therapies to treat specific stages in the evolution of cancer, from elimination, to equilibrium and escape. In addition, the Company's objective is to focus on tumors that are resistant to current treatments and where it can design focused trials based on a genetic signature or biomarker to ensure patients have the best chance of a durable and significant response. The Company has 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.

Through March 31, 2019, the Company had devoted substantially all of its efforts to product development, raising capital and building infrastructure.

The accompanying consolidated financial statements include the accounts of the Company's subsidiaries. For consolidated entities where the Company owns or is exposed to less than 100% of the economics, the Company records net income (loss) attributable to noncontrolling interests in its consolidated statements of operations equal to the percentage of the economic or ownership interest retained in such entities by the respective noncontrolling parties. All intercompany balances and transactions have been eliminated in consolidation.

In the opinion of management, the unaudited financial information for the interim periods presented reflects all adjustments, which are only normal, recurring and necessary for a fair statement of financial position, results of operations and cash flows. These consolidated financial statements should be read in conjunction with the consolidated financial statements included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2018. Operating results for interim periods are not expected to be indicative of operating results for the Company's 2019 fiscal year, or any subsequent period.

2. Liquidity and Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern which contemplates the realization of assets and satisfaction of liabilities in the normal course of business. The Company has recurring losses from operations, recurring negative cash flows from operations and substantial cumulative net losses to date and anticipates that it will continue to do so for the foreseeable future as it continues to identify and invest in advancing product candidates, as well as expanding corporate infrastructure.

The Company has plans in place to obtain sufficient additional fundraising to fulfill its operating and capital requirements for the next 12 months. The Company's plans include continuing to fund its operating losses and capital funding needs through public or private equity or debt financings, strategic collaborations, licensing arrangements, asset sales, government grants or other arrangements. Although management believes such plans, if executed, should provide the Company

sufficient financing to meet its needs, successful completion of such plans is dependent on factors outside of the Company's control. As such, management cannot conclude that such plans will be effectively implemented within one year after the date that the financial statements are issued. As a result, management has concluded that the aforementioned conditions, among others, raise substantial doubt about the Company's ability to continue as a going concern within one year after the date the financial statements are issued.

As of March 31, 2019, the Company had $353.9 million of long term debt outstanding, comprised of convertible notes issued pursuant to the 2018 Securities Purchase Agreement (as defined below), the 2018 Purchase Agreements (as defined below) and the Indenture (as defined below) for Scilex Pharmaceuticals Inc. ("Scilex") and the Loan Agreement (as defined below) (collectively, the "Debt Arrangements") (See Note 12).

Each of the Debt Arrangements provides that, upon the occurrence of an event of default, the Purchasers or Lenders thereof (as applicable) may, by written notice to the Company, declare all of the outstanding principal and interest under such Debt Arrangement immediately due and payable. For purposes of the Debt Arrangements, an event of default includes, among other things, (i) the failure to pay outstanding indebtedness when due, (ii) the Company's breach of certain representations, warranties, covenants or obligations under the documents relating to the Debt Arrangements, or (iii) the occurrence of certain insolvency events involving the Company. The Company believes that it is not probable that the material adverse event clause under the Debt Arrangements will be exercised.

If the Company is unable to raise additional capital in sufficient amounts or on terms acceptable, the Company may have to significantly delay, scale back or discontinue the development or commercialization of one or more of its product candidates. The Company may also seek collaborators for one or more of its 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. The consolidated financial statements do not reflect any adjustments that might be necessary if the Company is unable to continue as a going concern.

Universal Shelf Registration

In November 2017, the Company filed a universal shelf registration statement on Form S-3 (the "2017 Shelf Registration Statement") with the Securities and Exchange Commission (the "SEC"), which was declared effective by the SEC in December 2017. The 2017 Shelf Registration Statement provides the Company with the ability to offer up to $350.0 million of securities, including equity and other securities as described in the registration statement. Included in the 2017 Shelf Registration Statement is a sales agreement prospectus (the "Initial Sales Prospectus") covering the offering, issuance and sale by the Company of up to a maximum aggregate offering price of $100.0 million of the Company's common stock that may be issued and sold under a sales agreement with B. Riley FBR, Inc. (the "ATM Agreement"). On March 15, 2019, the Company filed an additional prospectus supplement covering the offering, issuance and sale by the Company of up to an additional maximum aggregate offering price of $100.0 million of the Company's common stock under the ATM Agreement (together with the offering covered under the Initial Sales Prospectus, the "ATM Facility"). During the twelve months ended December 31, 2018, the Company sold approximately $83.6 million of common stock under the ATM Facility. The Company sold no shares under the ATM Facility during the three months ended March 31, 2019. The Company can offer up to approximately $116.4 million of additional shares of common stock under the ATM Facility, subject to certain limitations.

Pursuant to the 2017 Shelf Registration Statement, the Company may offer such securities from time to time and through one or more methods of distribution, subject to market conditions and the Company's capital needs. Specific terms and prices will be determined at the time of each offering under a separate prospectus supplement, which will be filed with the SEC at the time of any offering. However, the Company cannot be sure that such additional funds will be available on reasonable terms, or at all.

If the Company raises additional funds by issuing equity securities, substantial dilution to existing stockholders would result. If the Company raises additional funds by incurring debt financing, the terms of the debt may involve significant cash payment obligations as well as covenants and specific financial ratios that may restrict the Company's ability to operate its business.

3. Significant Accounting Policies

Use of Estimates

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and

the reported amounts of expenses during the reporting period. Management believes that these estimates are reasonable; however, actual results may differ from these estimates.

Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with original maturities of three months or less to be cash equivalents. The Company minimizes its credit risk associated with cash and cash equivalents by periodically evaluating the credit quality of its primary financial institution. The balance at times may exceed federally insured limits. The Company has not experienced any losses on such accounts.

Restricted Cash

Restricted cash in the Company's consolidated balance sheet as of March 31, 2019, included approximately $45.0 million of restricted cash related to the Scilex Notes (as defined below) in the form of both the Reserve Account (as defined below) and the Collateral Account (as defined below) (See Note 12). Restricted cash in the Company's consolidated balance sheet as of March 31, 2019 also included approximately $9.6 million of restricted cash related to the Loan Agreement in the form of the Oaktree Reserve Account (as defined below) (See Note 12).

Fair Value of Financial Instruments

The Company follows accounting guidance on fair value measurements for financial instruments measured on a recurring basis, as well as for certain assets and liabilities that are initially recorded at their estimated fair values. Fair value is defined as the exit price, or the amount that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The Company uses the following three-level hierarchy that maximizes the use of observable inputs and minimizes the use of unobservable inputs to value its financial instruments:

- Level 1: Observable inputs such as unadjusted quoted prices in active markets for identical instruments.
- Level 2: Quoted prices for similar instruments that are directly or indirectly observable in the marketplace.
- Level 3: Significant unobservable inputs which are supported by little or no market activity and that are financial instruments whose values are determined using pricing models, discounted cash flow methodologies, or similar techniques, as well as instruments for which the determination of fair value requires significant judgment or estimation.

Financial instruments measured at fair value are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires it to make judgments and consider factors specific to the asset or liability. The use of different assumptions and/or estimation methodologies may have a material effect on estimated fair values. Accordingly, the fair value estimates disclosed or initial amounts recorded may not be indicative of the amount that the Company or holders of the instruments could realize in a current market exchange.

The carrying amounts of cash equivalents and marketable securities approximate their fair value based upon quoted market prices. Certain of the Company's financial instruments are not measured at fair value on a recurring basis, but are recorded at amounts that approximate their fair value due to their liquid or short-term nature, such as cash, accounts receivable and payable, and other financial instruments in current assets or current liabilities.

Marketable Securities

Marketable securities are designated either as trading or available-for-sale securities and are accounted for at fair value. Marketable securities are classified as short-term or long-term based on the nature of the securities and their availability to meet current operating requirements. Marketable securities that are readily available for use in current operations and are classified as short-term available-for-sale securities are reported as a component of current assets in the accompanying consolidated balance sheets. Marketable securities that are not trading securities and are not considered available for use in current operations are classified as long-term available-for-sale securities and are reported as a component of long-term assets in the accompanying consolidated balance sheets.

Securities that are classified as trading are carried at fair value, with changes to fair value reported as a component of income. Securities that are classified as available-for-sale are carried at fair value, with temporary unrealized gains and losses

reported as a component of stockholders' equity until their disposition. The cost of securities sold is based on the specific identification method.

All of the Company's marketable securities are subject to a periodic impairment review. The Company recognizes an impairment charge when a decline in the fair value of its investments below the cost basis is judged to be other-than-temporary. For each of the three months ended March 31, 2019 and 2018, no other-than-temporary impairment charges were recorded for marketable securities.

Grants and Accounts Receivable

Grants receivable at March 31, 2019 and December 31, 2018 represent amounts due under several federal contracts with the National Institute of Allergy and Infectious Diseases ("NIAID"), a division of the National Institutes of Health ("NIH") (collectively, the "NIH Grants"). The Company considers the grants receivable to be fully collectible; accordingly, no allowance for doubtful amounts has been established. If amounts become uncollectible, they are charged to operations.

Accounts receivable at March 31, 2019 and December 31, 2018 consists of trade receivables from sales and services provided to certain customers, which are generally unsecured and due within 30 days. Estimated credit losses related to trade accounts receivable are recorded as general and administrative expenses and as an allowance for doubtful accounts within grants and accounts receivable, net. The Company reviews reserves and makes adjustments based on historical experience and known collectability issues and disputes. When internal collection efforts on accounts have been exhausted, the accounts are written off by reducing the allowance for doubtful accounts. As of each of the periods ended March 31, 2019 and December 31, 2018, the allowance for doubtful accounts was $20,000.

Inventory

The Company determines inventory cost on a first-in, first-out basis. The Company reduces the carrying value of inventories to a lower of cost or net realizable value for those items that are potentially excess, obsolete or slow-moving. The Company reserves for excess and obsolete inventory based upon historical experience, sales trends, and specific categories of inventory and age of on-hand inventory. As of March 31, 2019, the Company's inventory is primarily comprised of finished goods.

Property and Equipment

Property and equipment are carried at cost less accumulated depreciation. Depreciation of property and equipment is computed using the straight-line method over the estimated useful lives of the assets, which are generally three to five years. Leasehold improvements are amortized over the lesser of the life of the lease or the life of the asset. Repairs and maintenance are charged to expense as incurred.

Acquisitions and Intangibles

The Company has engaged in business combination and asset acquisition activity. The accounting for business combinations and asset acquisitions requires management to make judgments and estimates of the fair value of assets acquired, including the identification and valuation of intangible assets, as well as liabilities assumed. Such judgments and estimates directly impact the amount of goodwill recognized in connection with business acquisitions, as goodwill represents the excess of the purchase price of an acquired business over the fair value of its net tangible and identifiable intangible assets.

Goodwill and Other Long-Lived Assets

Goodwill, which has an indefinite useful life, represents the excess of cost over fair value of net assets acquired. Goodwill is reviewed for impairment at least annually during the fourth quarter, or more frequently if events occur indicating the potential for impairment. During its goodwill impairment review, the Company may assess qualitative factors to determine whether it is more likely than not that the fair value of its reporting units are less than their carrying amounts, including goodwill. The qualitative factors include, but are not limited to, macroeconomic conditions, industry and market considerations, and the overall financial performance of the Company. If, after assessing the totality of these qualitative factors, the Company determines that it is not more likely than not that the fair value of its reporting units are less than their carrying amounts, then no additional assessment is deemed necessary. Otherwise, the Company proceeds to perform the two-step test for goodwill impairment. The first step involves comparing the estimated fair value of the reporting units with their carrying values, including goodwill. If the carrying amount of the reporting units exceed their fair values, the Company performs the second step of the goodwill impairment test to determine the amount of loss, which involves comparing the implied fair value of the goodwill to the carrying value of the goodwill. The Company may also elect to bypass the qualitative assessment in a period and elect to proceed to perform the first step of the goodwill impairment test. The Company performed its annual assessment

for goodwill impairment in the fourth quarter of 2018, noting no impairment and that the fair value of the goodwill exceeded the carrying value by a significant margin. With the exception of the re-segmentation of the Company's segments, which did not result in impairment, during the quarter ended March 31, 2019, there have not been any other triggering events indicating the potential for impairment through March 31, 2019.

In determining the fair value utilized in the goodwill impairment assessment, the Company considers qualitative factors such as changes in strategy, cash flows and the regulatory environment as well as the market capitalization of the Company's publicly traded common stock. The Company's share price is highly volatile and although there was significant excess of fair value over book value at the annual impairment assessment date of December 31, 2018, subsequent declines in the market share price could pose risks of impairment in the future.

It is not possible at this time to determine if an impairment charge would result from these factors, or, if it does, whether such charge would be material. The Company will continue to monitor the recoverability of its goodwill.

The Company evaluates its long-lived and intangible assets with definite lives, such as property and equipment, acquired technology, customer relationships, patent and license rights, for impairment by considering competition by products prescribed for the same indication, the likelihood and estimated future entry of non-generic and generic competition with the same or similar indication and other related factors. The factors that drive the estimate of useful life are often uncertain and are reviewed on a periodic basis or when events occur that warrant review. Recoverability is measured by comparison of the assets' book value to future net undiscounted cash flows that the assets are expected to generate. There have not been any impairment losses of long-lived assets through March 31, 2019.

Acquisition Consideration Payable - Gain or Loss on Contingent Liabilities

Acquisition consideration payable relates to the Company's acquisition of businesses and various other assets and is recorded on the Company's consolidated balance sheets at fair value and is re-measured at each balance sheet date until such contingent liabilities have been settled, with changes in fair value recorded as gain or loss on contingent liabilities. The Company estimates the fair value of contingent consideration based on Level 3 inputs primarily driven by the probability of achieving certain financing or operating related milestones.

Debt, Including Debt with Detachable Warrants

Debt with detachable warrants is evaluated for the classification of warrants as either equity instruments, derivative liabilities, or liabilities depending on the specific terms of the warrant agreement. In circumstances in which debt is issued with equity-classified warrants, the proceeds from the issuance of convertible debt are first allocated to the debt and the warrants at their relative estimated fair values. The portion of the proceeds so allocated to the warrants are accounted for as paid-in capital and a debt discount. The remaining proceeds, as further reduced by discounts created by the bifurcation of embedded derivatives and beneficial conversion features, are allocated to the debt. The Company accounts for debt as liabilities measured at amortized cost and amortizes the resulting debt discount from the allocation of proceeds, to interest expense using the effective interest method over the expected term of the debt instrument. The Company considers whether there are any embedded features in debt instruments that require bifurcation and separate accounting as derivative financial instruments pursuant to ASC 815, *Derivatives and Hedging*.

If the amount allocated to the convertible debt results in an effective per share conversion price less than the fair value of the Company's common stock on the commitment date, the intrinsic value of this beneficial conversion feature is recorded as a discount to the convertible debt with a corresponding increase to additional paid in capital. The beneficial conversion feature discount is equal to the difference between the effective conversion price and the fair value of the Company's common stock at the commitment date, unless limited by the remaining proceeds allocated to the debt.

The Company may enter financing arrangements, the terms of which involve significant assumptions and estimates, including future net product sales, in determining interest expense, amortization period of the debt discount, as well as the classification between current and long-term portions. In estimating future net product sales, the Company assesses prevailing market conditions using various external market data against the Company's anticipated sales and planned commercial activities. See Note 12 for discussion of the Scilex Notes, which include repayments based on a percentage of net sales of ZTlido® (lidocaine topical system 1.8%). Consequently, the Company imputes interest on the carrying value of the debt and record interest expense using an imputed effective interest rate. The Company reassesses the expected payments each reporting period and account for any changes through an adjustment to the effective interest rate on a prospective basis, with a corresponding impact to the classification of the Company's current and long-term portions.

Derivative Liability

Derivative liabilities are recorded on the Company's consolidated balance sheets at their fair value on the date of issuance and are revalued on each balance sheet date until such instruments are exercised or expire, with changes in the fair value between reporting periods recorded as other income or expense.

Investments in Other Entities

The Company holds a portfolio of investments in equity securities that are accounted for under either the equity method or cost method. Investments in entities over which the Company has significant influence but not a controlling interest are accounted for using the equity method, with the Company's share of earnings or losses reported in loss on equity method investments.

All investments are reviewed on a regular basis for possible impairment. If an investment's fair value is determined to be less than its net carrying value and the decline is determined to be other-than-temporary, the investment is written down to its fair value. Such an evaluation is judgmental and dependent on specific facts and circumstances. Factors considered in determining whether an other-than-temporary decline in value has occurred include: the magnitude of the impairment and length of time that the estimated market value was below the cost basis; financial condition and business prospects of the investee; the Company's intent and ability to retain the investment for a sufficient period of time to allow for recovery in market value of the investment; issues that raise concerns about the investee's ability to continue as a going concern; any other information that the Company may be aware of related to the investment.

Research and Development Costs

All research and development costs are charged to expense as incurred. Such costs primarily consist of lab supplies, contract services, stock-based compensation expense, salaries and related benefits.

Acquired In-Process Research and Development Expense

The Company has acquired and may continue to acquire the rights to develop and commercialize new drug candidates. The up-front payments to acquire a new drug compound or drug delivery devices, as well as future milestone payments associated with asset acquisitions that do not meet the definition of derivative and are deemed probable to achieve the milestones, are immediately expensed as acquired in-process research and development provided that the drug has not achieved regulatory approval for marketing and, absent obtaining such approval, have no alternative future use. The acquired in-process research and development related to the business combination of Virttu Biologics Limited ("Virttu"), for which certain products are under development and expected to be commercialized in the future, was capitalized and recorded within "Intangibles, net" on the accompanying consolidated balance sheet. The Company commenced amortization of acquired in-process research and development related to the business combination of Scilex upon commercialization of ZTlido® (lidocaine topical system 1.8%) in October 2018. Capitalized in-process research and development will be reviewed annually for impairment or more frequently as changes in circumstance or the occurrence of events suggest that the remaining value may not be recoverable. (See Note 4 for further discussion of acquired in-process research and development expense related to the acquisition of Semnur Pharmaceuticals, Inc.).

Income Taxes

The provisions of the Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 740 *"Income Taxes,"* addresses the determination of whether tax benefits claimed or expected to be claimed on a tax return should be recorded in the financial statements. Under ASC Topic 740-10, the Company may recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by taxing authorities, based on the technical merits of the position. The Company has determined that it has uncertain tax positions.

The Company accounts for income taxes using the asset and liability method to compute the differences between the tax basis of assets and liabilities and the related financial amounts, using currently enacted tax rates.

The Company has deferred tax assets, which are subject to periodic recoverability assessments. Valuation allowances are established, when necessary, to reduce deferred tax assets to the amount that more likely than not will be realized. As of each of December 31, 2018 and March 31, 2019, the Company maintained a full valuation allowance against its deferred tax assets, with the exception of an amount equal to its deferred tax liabilities.

Revenue Recognition

The Company's revenues are generated from various NIH grant awards, license fees, product sales, the sale of customized reagents and other materials, and the provision of contract manufacturing and other services. The Company does not have significant costs associated with costs to obtain contracts with its customers. Substantially all of the Company's revenues and accounts receivable result from contracts with customers.

Grant Revenues

The revenue from the NIH grant awards is based upon subcontractor and internal costs incurred that are specifically covered by the grant, and where applicable, a facilities and administrative rate that provides funding for overhead expenses. These revenues are recognized when expenses have been incurred by subcontractors or when the Company incurs internal expenses that are related to the grant. Grant revenues were not material for the three months ended March 31, 2019.

Royalty and License Revenues

License fees for the licensing of product rights are recorded as deferred revenue upon receipt of cash and recognized as revenue on a straight-line basis over the license period, with the exception of license agreements with no remaining performance obligations or undelivered obligations. The Company applies judgment in determining the timing of revenue recognition related to contracts that include multiple performance obligations. The total transaction price of the contract is allocated to each performance obligation in an amount based on the estimated relative standalone selling prices of the promised goods or services underlying each performance obligation. For goods or services for which observable standalone selling prices are not available, the Company develops an estimated standalone selling price of each performance obligation.

As of March 31, 2019, the future performance obligations for royalty and license revenues relate to the license agreements with ImmuneOncia Therapeutics, LLC ("ImmuneOncia") and NantCell, Inc. ("NantCell").

The total consideration for the ImmuneOncia license performance obligation, effective September 1, 2016, represented $9.6 million. The estimated revenue expected to be recognized for future performance obligations, as of March 31, 2019, was approximately $8.4 million. The Company expects to recognize license revenue of approximately $0.5 million of the remaining performance obligation annually through the remaining term. The Company applied judgment in estimating the 20-year contract term, analogous to the expected life of the patent, over which revenue is recognized over time given the ongoing performance obligation related to the Company's participation on a steering committee for the technologies under the agreement.

As of March 31, 2019, the NantCell license agreement, effective April 21, 2015, represented $110.0 million of contract liabilities reflected in long-term deferred revenue. See Note 11 for additional information regarding the remaining performance obligation for the agreement.

Sales and Services Revenues

Sales and services revenues are comprised of Scilex product sales of ZTlido® (lidocaine topical system 1.8%), contract manufacturing associated with sales of customized reagents at Concortis Biosystems Corp. ("Concortis"), materials and supply agreements, contract manufacturing services at BioServ Corporation, and the Company's joint development agreement with Celularity Inc. ("Celularity").

The Company does not disclose the value of unsatisfied performance obligations for (i) contracts with an original expected length of one year or less and (ii) contracts for which it recognizes revenue at the amount to which it has the right to invoice for services performed. The Company applied the practical expedient in ASC Topic 606-10-50-14 to the revenue contracts for Concortis sales and services and materials and supply agreements due to the general short-term length of such contracts.

The following table shows sales and service revenues disaggregated by product and services type for the three months ended March 31, 2019 (in thousands):

	Three Months Ended March 31,	
	March 31, 2019	March 31, 2018
Scilex product sales	$ 2,859	$ —
Concortis sales and services	1,810	1,463
Materials and supply agreements	500	861
Bioserv sales and services	854	2,135
Joint development agreement	—	1,667
	$ 6,023	$ 6,126

The Company is obligated to accept from customers the return of products sold that are damaged or do not meet certain specifications. The Company may authorize the return of products sold in accordance with the terms of its sales contracts, and estimates allowances for such amounts at the time of sale. The Company has not experienced any sales returns.

Scilex Pharmaceuticals Inc.

Revenues from Scilex product sales include sales of its ZTlido® (lidocaine topical system 1.8%). Scilex's performance obligation with respect to Scilex product sales is satisfied at a point in time, which transfers control upon delivery of product to the customer. The Company considers control to have transferred upon delivery because the customer has legal title to the asset, physical possession of the asset has been transferred to the customer, the customer has significant risks and rewards of ownership of the asset, and the Company has a present right to payment at that time. The Company identified a single performance obligation. Invoicing typically occurs upon shipment and the length of time between invoicing and when payment is due is not significant. The aggregate dollar value of unfulfilled orders as of March 31, 2019 was not material.

For Scilex product sales, the Company records gross-to-net sales adjustments for government and managed care rebates, chargebacks, wholesaler fees, sales returns and prompt payment discounts. Such variable consideration are estimated in the period of the sale and are estimated using a most likely amount approach based primarily upon provisions included in the Company's customer contract, customary industry practices and current government regulations and was not significant for the three months ended March 31, 2019. There were no significant changes in variable consideration during the three months ended March 31, 2019.

Concortis Biosystems Corporation ("Concortis")

Contract manufacturing associated with sales of customized reagents for Concortis operations relate to providing synthetic expertise to customers' synthesis by delivering proprietary cytotoxins, linkers and linker-toxins and ADC service using industry standard toxin and antibodies provided by customers. Revenue associated with the sales of customized reagents is recognized at a point in time upon the transfer of control, which is generally upon shipment given the short contract terms which are generally three months or less.

Materials and Supply Agreements

Revenues from the sale of materials associated with the Company's research and development arrangements are recognized upon the transfer of control, which is generally upon shipment. Outstanding performance obligations related to materials and supply agreements was $0.4 million as of March 31, 2019, and the Company expects to fulfill $0.1 million of such obligations during the remainder of 2019.

Bioserv Corporation ("Bioserv")

Contract manufacturing services associated with the Company's Bioserv operations related to finish and fill activities for drug products and reagents are recognized ratably over the contract term based on a time-based measure which reflects the transfer of services to the customer because the manufactured products are highly customized and do not have an alternative use to the Company. As of each of December 31, 2018 and March 31, 2019, the Company had approximately $0.4 million of unbilled accounts receivable for which revenue has been recognized but not billed at the reporting date. As of December 31, 2018 and March 31, 2019, the Company had approximately $0.2 million and $0.1 million of upfront payments related to its contract manufacturing services included in deferred revenue, respectively.

As of December 31, 2018 and March 31, 2019, the estimated revenue expected to be recognized for future performance obligations associated with contract manufacturing services was approximately $1.6 million and $1.2 million, respectively.

The following table includes Bioserv sales and services revenue expected to be recognized in the future related to performance obligations that are undelivered or partially delivered at the end of the reporting period and do not include contracts with original durations of one year or less (in thousands):

	Remainder of 2019	2020	2021 and thereafter
Contract manufacturing services	$705	$407	$131

Joint Development Agreement

On September 26, 2017, the Company entered into a joint development agreement with Celularity whereby the Company agreed to provide research services to Celularity through June 30, 2018 in exchange for an upfront payment of $5.0 million. The revenue related to the joint development agreement of $5.0 million was recognized over the length of the service agreement as services were performed. The Company recorded sales and services revenues under the joint development agreement of $1.7 million during the three months ended March 31, 2018. The Company recorded no sales and services revenues under the joint development agreement during the three months ended March 31, 2019.

Stock-Based Compensation

The Company accounts for stock-based compensation in accordance with FASB ASC Topic 718 *"Compensation – Stock Compensation,"* which establishes accounting for equity instruments exchanged for employee services. Under such provisions, stock-based compensation cost is measured at the grant date, based on the calculated fair value of the award, and is recognized as an expense, under the straight-line method, over the employee's requisite service period (generally the vesting period of the equity grant).

The Company accounts for equity instruments, including restricted stock or stock options, issued to non-employees in accordance with authoritative guidance for equity based payments to non-employees. Stock options issued to non-employees are accounted for at their estimated fair value determined using the Black-Scholes option-pricing model. The fair value of options and restricted stock granted to non-employees is re-measured over the vesting period, and the resulting changes in fair value are recognized as expense in the period of the change in proportion to the services rendered to date.

Comprehensive Income (Loss)

Comprehensive income (loss) is primarily comprised of net income (loss) and adjustments for the change in unrealized gains and losses on the Company's investments in available-for-sale marketable securities, net of taxes and foreign currency translation adjustments. The Company displays comprehensive income (loss) and its components in its consolidated statements of comprehensive income (loss).

Net Loss per Share

Basic net loss per share is computed by dividing net loss for the period by the weighted average number of shares of common stock outstanding during the period. Diluted net loss per share reflects the additional dilution from potential issuances of common stock, such as stock issuable pursuant to the exercise of stock options or the exercise of outstanding warrants. The treasury stock method and if-converted method are used to calculate the potential dilutive effect of these common stock equivalents. Potentially dilutive shares are excluded from the computation of diluted net loss per share when their effect is anti-dilutive. In periods where a net loss is presented, all potentially dilutive securities are anti-dilutive and are excluded from the computation of diluted net loss per share.

Reorganization of Segments

Beginning in the quarter ended March 31, 2019, the Company re-segmented its business into two new operating segments: the Sorrento Therapeutics segment and the Scilex segment.

Leases

The Company determines if an arrangement is a lease at inception. Operating leases are included in operating lease right-of-use ("ROU") assets, current portion of operating lease liabilities, and operating lease liabilities in the Company's consolidated balance sheets. ROU assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized at the commencement date based on the present value of lease payments over the lease term. As the Company's leases do not provide an implicit rate, the Company uses its incremental borrowing rate based on the information

available at the commencement date in determining the present value of lease payments. The operating lease ROU asset also includes any lease payments made and is reduced by lease incentives. The Company's lease terms may include options to extend or terminate the lease when it is reasonably certain that the Company will exercise that option. Lease expense for lease payments is recognized on a straight-line basis over the lease term. As of March 31, 2019, the Company has no finance leases.

Recent Accounting Pronouncements

In February 2016, the FASB issued Accounting Standards Update ("ASU") No. 2016-02, *Leases*. ASU No. 2016-02 is aimed at making leasing activities more transparent and comparable, and requires substantially all leases be recognized by lessees on their balance sheet as a right-of-use asset and corresponding lease liability, including leases currently accounted for as operating leases. ASU No. 2016-2 is effective for financial statements issued for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. In July 2018, the FASB issued ASU No. 2018-11, which allows for an alternative method to adopt the lease standard by recognizing a cumulative-effect adjustment to the opening balance sheet of retained earnings in the period of adoption, with no adjustment to prior comparative periods. In March 2019, the FASB issued ASU No. 2019-01, which clarifies that entities are not subject to the transition disclosure requirements in ASC 250-10-50-3 related to the effect of an accounting change on certain interim period financial information. ASU No. 2016-02 and all subsequent amendments (collectively, "ASC 842") were effective for public entities for annual reporting periods beginning after December 15, 2018, including interim periods therein. The Company adopted ASC 842 during the first quarter of 2019 and elected to apply the cumulative-effect adjustment to the opening balance sheet and optional transition method to not present comparable prior periods as allowed under ASU No. 2018-11. The Company made the following practical expedients elections: (1) elected the short-term lease exception, (2) did not elect hindsight and (3) elected to not separate its non-lease components from lease components. The Company also adopted the transitional practical expedients, which allowed the Company to carry forward its historical assessment of whether existing agreements contained a lease and the classification of the Company's existing operating leases. The adoption of ASC 842 resulted in the recording of $44.9 million in operating ROU assets and $2.6 million and $47.8 million in current portion of operating lease liabilities and non-current operating lease liabilities, respectively. Deferred rent, recorded in other current liabilities and other non-current liabilities, was derecognized. There were no adjustments to retained earnings. The Company will continue to report financial information for fiscal years ending before December 31, 2018 under the previous lease accounting standard.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments,* to improve financial reporting by requiring timelier recording of credit losses on loans and other financial instruments held by financial institutions and other organizations. The ASU requires the measurement of all expected credit losses for financial assets held at the reporting date based on historical experience, current conditions and reasonable and supportable forecasts. The ASU also requires enhanced disclosures to help investors and other financial statement users better understand significant estimates and judgments used in estimating credit losses, as well as the credit quality and underwriting standards of an organization's portfolio. The ASU is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. Early application will be permitted for all organizations for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. The Company is currently evaluating the impact that the adoption of ASU No. 2016-13 will have on the Company's consolidated financial position, results of operations or cash flows.

In January 2017, the FASB issued ASU No. 2017-04, *Simplifying the Test for Goodwill Impairment (Topic 350)*. This standard eliminates Step 2 from the goodwill impairment test, instead requiring an entity to recognize a goodwill impairment charge for the amount by which the goodwill carrying amount exceeds the reporting unit's fair value. This guidance is effective for interim and annual goodwill impairment tests in fiscal years beginning after December 15, 2019 with early adoption permitted. This guidance must be applied on a prospective basis. The Company is currently evaluating the impact that the adoption of ASU No. 2017-04 will have on the Company's consolidated financial position, results of operations or cash flows.

In June 2018, the FASB issued ASU No. 2018-07, *Compensation - Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting*, to include share-based payment transactions for acquiring goods and services from nonemployees. The ASU is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. The adoption of this standard did not have a material impact on the Company's consolidated financial position, results of operations or cash flows.

In August 2018, the FASB issued ASU No. 2018-13, *Disclosure Framework-Changes to the Disclosure Requirements for Fair Value Measurement,* to improve the effectiveness of the disclosure requirements for fair value measurements. The ASU is effective for fiscal years and interim periods beginning after December 15, 2019. Amendments on changes in unrealized gains and losses, the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements and the narrative description of measurement uncertainty will be applied prospectively as of the beginning of the fiscal year of adoption with all other amendments being applied retrospectively to all periods presented upon their effective

date. Early adoption is permitted. The Company is evaluating the impact that adopting this standard will have on its consolidated financial statements.

In August 2018, the FASB issued ASU No. 2018-15, *Intangibles-Goodwill and Other-Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract.* The amendments in this update align the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal-use software license). The amendments in this update are effective for interim and annual periods for the Company beginning on January 1, 2020, with early adoption permitted. The amendments in this update may be applied either retrospectively or prospectively. The Company is evaluating the impact the standard will have on its consolidated financial statements.

In November 2018, the FASB issued ASU No. 2018-18, *Collaborative Arrangements (Topic 808): Clarifying the Interaction Between Topic 808 and Topic 606.* The amendments in this update provide guidance on how to assess whether certain transactions between collaborative arrangement participants should be accounted for within the revenue recognition standard. The amendments in this update are effective for interim and annual periods for the Company beginning on January 1, 2020, with early adoption permitted. The Company is in the process of evaluating the impact the standard will have on its consolidated financial statements.

4. Acquisitions

Acquisition of Semnur Pharmaceuticals, Inc.

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

Concurrently with the execution of the Merger Agreement, the Company and each of the other holders of outstanding shares of capital stock of Scilex, the Company's majority-owned subsidiary, contributed each share of Scilex capital stock that the Company or it owned to HoldCo in exchange for one share of HoldCo common stock (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 the Company became the owner of approximately 77% of HoldCo's issued and outstanding capital stock.

At the closing of the Semnur acquisition, HoldCo issued to the holders of Semnur's capital stock and options to purchase Semnur's common stock (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 was 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 (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 were required to sign an exchange and registration rights agreement with the Company (the "Exchange Agreement"), which is further described below.

Following the issuance of the Stock Consideration, the Company is 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 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 ("FDA") 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 of the Merger (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 (the "Share Exchange"), the Stock Consideration for shares of the Company's common stock with a value of $55.0 million based on a price per share of the Company's common stock equal to the greater of (a) the 30-day trailing volume weighted average price of one share of the Company's common stock as reported on The Nasdaq Stock Market LLC 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), the Company 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 the Company's common stock issued in the Share Exchange (the "Registration Statement") and use its commercially reasonable efforts to maintain the effectiveness of such Registration Statement for up to three years thereafter. In the Exchange Agreement, the Company has also agreed to indemnify the applicable Semnur Equityholders and their affiliates for certain liabilities related to such Registration Statement, including certain liabilities arising under the Securities Act of 1933, as amended, and the Securities Exchange Act of 1934, as amended.

Jaisim Shah, a member of the Company's 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.

The transaction was accounted for as an asset acquisition since substantially all the value of the gross assets was concentrated in a single asset. Under the Merger Agreement, HoldCo acquired the Semnur SP-102 technology for consideration valued at approximately $70.0 million, excluding contingent consideration, transaction costs of $2.5 million, and liabilities assumed of $4.2 million, which was allocated based on the relative fair value of the assets acquired. The $70.0 million of consideration consisted of $15.0 million in cash and shares of HoldCo valued at $55.0 million. No contingent consideration was recorded as of March 31, 2019 since the related regulatory approval milestones are not deemed probable until they actually occur. As a result, approximately $75.3 million was expensed as a component of acquired in-process research and development.

5. Fair Value Measurements

Fair value measurement is defined as the price that would be received to sell an asset or paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants at the measurement date. A fair value hierarchy is established, which prioritizes the inputs used in measuring fair value into three broad levels as follows:

Level 1—Quoted prices in active markets for identical assets or liabilities.

Level 2—Inputs, other than quoted prices in active markets, that are observable either directly or indirectly.

Level 3—Unobservable inputs based on the Company's own assumptions.

The following table presents the Company's financial assets and liabilities that are measured at fair value on a recurring basis (in thousands):

	Fair Value Measurements at March 31, 2019			
	Balance	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Cash and cash equivalents	$ 90,971	$ 90,971	$ —	$ —
Restricted cash	54,742	54,742	—	—
Marketable securities	391	316	—	75
Total assets	$ 146,104	$ 146,029	$ —	$ 75
Liabilities:				
Derivative liability	$ 14,501	$ —	$ —	$ 14,501
Acquisition consideration payable	11,312	—	—	11,312
Acquisition consideration payable - Non-current	757	—	—	757
Total liabilities	$ 26,570	$ —	$ —	$ 26,570

	Fair Value Measurements at December 31, 2018			
	Balance	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Cash and cash equivalents	$ 158,738	$ 158,738	$ —	$ —
Restricted cash	54,592	54,592	—	—
Marketable securities	297	247	—	50
Total assets	$ 213,627	$ 213,577	$ —	$ 50
Liabilities:				
Acquisition consideration payable	$ 11,312	$ —	$ —	$ 11,312
Acquisition consideration payable - Non-current	725	—	—	725
Total liabilities	$ 12,037	$ —	$ —	$ 12,037

The Company's financial assets and liabilities carried at fair value are comprised of cash, cash equivalents, restricted cash, marketable securities and acquisition consideration payable. Cash and cash equivalents consist of money market accounts and bank deposits which are highly liquid and readily tradable. These investments are valued using inputs observable in active markets for identical securities. Marketable securities are valued using inputs observable in active markets for identical securities. The fair value of the contingent consideration is measured on a recurring basis using significant unobservable inputs (Level 3). Contingent consideration is measured using the income approach and discounting to present value the contingent payments expected to be made based on assessment of the probability that the company would be required to make such future payment.

The following table includes a summary of the Company's contingent consideration liabilities and acquisition consideration payables associated with acquisitions.

(in thousands)	Fair Value
Beginning Balance at December 31, 2018	$ 12,037
Re-measurement of Fair Value	32
Ending Balance at March 31, 2019	$ 12,069

As of March 31, 2019, $9.9 million of the Virttu contingent liability remains to be paid in cash.

The following table includes a summary of the Company's contingent and financing liabilities, related inputs used to determine fair value, and the valuation methodologies used for the fair value measurements using significant unobservable inputs (Level 3) at March 31, 2019:

(in thousands)	Fair Value Measurements at March 31, 2019	Valuation Methodology	Significant Unobservable Input	Weighted Average (range, if applicable)
Virttu Contingent Consideration (Non-current)	$ 757	Multiple outcome discounted cash flow	Discount Rate Probability of Regulatory Milestone	19.2% 16%
Concortis Contingent Consideration	$ 511	Multiple outcome discounted cash flow	Discount Rate Percent probabilities assigned to scenarios	19.2% 20%
Shanghai Three Contingent Consideration	$ 336	Multiple outcome discounted cash flow	Discount Rate Percent probabilities assigned to scenarios	19.2% 10%
RWMC Contingent Consideration	$ 503	Multiple outcome discounted cash flow	Discount Rate, Percent probabilities assigned to scenarios	19.2% 10%

The principal significant unobservable inputs used in the valuations of the contingent considerations are the discount rates, and probabilities assigned to scenario outcomes. An increase in the discount rate will cause a decrease in the fair value of the contingent consideration. Conversely, a decrease in the discount rate will cause an increase in the fair value of the contingent consideration. An increase in the probabilities assigned to certain scenarios will cause the fair value of contingent consideration to increase. Conversely, a decrease in the probabilities assigned to certain scenarios will cause the fair value of contingent considerations to decrease.

During the three months ended March 31, 2019, the Company recorded a $14.5 million loss on derivative liability attributed to revised probabilities related to the marketing approval for ZTlido® (lidocaine topical system 5.4%) and revised sales forecasts. The fair value of the derivative liability is estimated using the discounted cash flow method under the income approach combined with a Monte Carlo simulation model, which involves significant Level 3 inputs and assumptions including a discount rate of 18%, net sales forecasts and an estimated probability of 90% of not meeting marketing approval before a predetermined date. Due to changes in market approval probabilities for ZTlido® (lidocaine topical system 5.4%) and a revised forecast of cumulative net sales of ZTlido® (lidocaine topical system 1.8%), the fair value of the derivative liability changed, resulting in a loss in the Company's consolidated statement of operations during the three months ended March 31, 2019 and a corresponding derivative liability in the Company's consolidated balance sheets at March 31, 2019.

The following table includes a summary of the derivative liabilities measured at fair value using significant unobservable inputs (Level 3) during the three months ended March 31, 2019:

(in thousands)	Fair Value
Beginning Balance at December 31, 2018	$ —
Re-measurement of Fair Value	14,501
Ending Balance at March 31, 2019	$ 14,501

6. Marketable Securities

Marketable securities consisted of the following as of March 31, 2019 and December 31, 2018 (in thousands):

	March 31, 2019		
	Cost	Gross Realized Gains (Losses)	Fair Value
Trading securities:			
MedoveX common shares and warrants	$ 750	$ (359)	$ 391

	December 31, 2018		
	Cost	Gross Realized Gains (Losses)	Fair Value
Trading securities:			
MedoveX common shares and warrants	$ 750	$ (453)	$ 297

Trading Securities

On August 5, 2016, the Company entered into a Unit Purchase Agreement (the "Unit Purchase Agreement") with MedoveX Corporation ("MedoveX"). Pursuant to the terms of the Unit Purchase Agreement, the Company purchased three Units for $750,000. Each Unit had a purchase price of $250,000 and consisted of (i) 208,333 shares of MedoveX common stock (the "MedoveX Common Stock"), and (ii) a warrant to purchase 104,167 shares of MedoveX Common Stock (the "MedoveX Warrant"). The MedoveX Warrant has an initial exercise price of $1.52 per share, subject to adjustment, and is initially exercisable six months following the date of issuance for a period of five years from the date of issuance. In addition, the Company entered into a Registration Rights Agreement with MedoveX pursuant to which MedoveX was required to file a registration statement registering for resale all shares of MedoveX Common Stock and shares of MedoveX Common Stock issuable pursuant to the MedoveX Warrant issued as part of the Units.

For the three months ended March 31, 2019 and 2018, the Company recorded a gain of $0.1 million and a gain of $3.0 thousand, respectively, on trading securities. The Company's investment in MedoveX will be revalued on each balance sheet date. The fair value of the Company's holding in MedoveX Common Stock at March 31, 2019 is a Level 1 measurement. The fair value of the Company's holdings in the MedoveX Warrant was estimated using the Black-Scholes option-pricing method. The risk-free rate was derived from the U.S. Treasury yield curve, matching the MedoveX Warrant's term, in effect at the measurement date. The volatility factor was determined based on MedoveX's historical stock prices. The warrant valuation is a Level 3 measurement.

The following table includes a summary of the warrant measured at fair value using significant unobservable inputs (Level 3) during the three months ended March 31, 2019 (in thousands):

	Total
Beginning balance at December 31, 2018	$ 50
Change in fair value of warrant	25
Ending balance at March 31, 2019	$ 75

7. Property and Equipment

Property and equipment consisted of the following as of March 31, 2019 and December 31, 2018 (in thousands):

	March 31, 2019	December 31, 2018
Furniture and fixtures	$ 1,239	$ 1,127
Office equipment	665	632
Machinery and lab equipment	28,766	27,690
Leasehold improvements	9,101	9,001
Construction in progress	6,488	1,221
	46,259	39,671
Less accumulated depreciation	(17,359)	(15,287)
	$ 28,900	$ 24,384

Depreciation expense for the three months ended March 31, 2019 and 2018 was $2.1 million and $1.3 million, respectively.

8. Cost Method Investments

As of March 31, 2019 and December 31, 2018, the aggregate carrying amount of the Company's cost-method investments in non-publicly traded companies was $237.0 million and included an ownership interest in NantCell, Inc. ("NantCell"), NantBioScience, Inc. ("NantBioScience"), Globavir Biosciences, Inc., Brink Biologics, Inc., Coneksis, Inc., and Celularity.

The Company's cost-method investments are assessed for impairment quarterly. The Company has determined that it is not practicable to estimate the fair value of its cost-method investments on a regular basis and does not reassess the fair value of cost-method investments if there are no identified events or changes in circumstances that may have a significant adverse effect on the fair value of the investments. No impairment losses were recorded during the three months ended March 31, 2019.

9. Equity Method Investments

NANTibody

In 2013, the Company acquired IgDraSol Inc. ("IgDraSol"), a private company focused on the development of oncologic agents for the treatment of cancer, from a third party unrelated to the NantWorks, LLC ("NantWorks") affiliated entities for 3.0 million shares of the Company's common stock and $380,000 of cash for a total purchase price of $29.1 million. This transaction included the acquisition of IgDraSol's lead compound, CynviloqTM, a micellar diblock copolymeric paclitaxel formulation drug product.

In May 2015, the Company entered into an agreement with NantPharma, LLC ("NantPharma"), a NantWorks company, pursuant to which the Company sold to NantPharma all of its equity interests in IgDraSol, which continued to hold the rights to CynviloqTM. Pursuant to the agreement, NantPharma paid the Company an upfront fee of $90.1 million, of which $60.0 million was required to be used by the Company to fund two joint ventures, as described below.

In April 2015, the Company and NantCell, a subsidiary of NantWorks, LLC ("NantWorks"), a private company owned by Dr. Patrick Soon-Shiong, established a new entity called Immunotherapy NANTibody, LLC ("NANTibody") as a stand-alone biotechnology company with $100.0 million initial joint funding. NantCell owns 60% of the equity interest of NANTibody and agreed to contribute $60.0 million to NANTibody. The Company owns 40% of NANTibody and in July 2015, the Company had NantPharma, LLC ("NantPharma") contribute its portion of the initial joint funding of $40.0 million to NANTibody from the proceeds of the sale of IgDraSol. Additionally, the Company and NantCell were allowed to appoint two and three representatives, respectively, to NANTibody's five-member Board of Directors. NANTibody will focus on accelerating the development of multiple immuno-oncology mAbs for the treatment of cancer, including but not limited to anti-PD-1, anti-PD-L1, anti-CTLA4mAbs, and other immune-check point antibodies as well as ADCs and bispecific antibodies.

NANTibody had been formed to advance pre-clinical and clinical immunology assets contributed by the Company and NantCell. The Company continues to hold 40% of the outstanding equity of NANTibody and NantCell holds the remaining 60%. Until July 2, 2017, NANTibody held approximately $100.0 million of cash and cash equivalents, and the Company recorded its investment in NANTibody at approximately $40.0 million. As an equity method investment, the Company's ratable portion of 40% of money expended for the development of intellectual property assets held by NANTibody would be reflected within income (loss) on equity method investments in its statement of operations. As a result of limited spending at NANTibody, the cash on hand at NANTibody remained at approximately $100.0 million since the inception of the NANTibody joint venture until July 2, 2017. Further, the Company's equity method investment in NANTibody remained at approximately $40.0 million until July 2, 2017.

The financial statements of NANTibody are not received sufficiently timely for the Company to record its portion of earnings or loss in the current financial statements and therefore the Company reports its portion of earnings or loss on a quarter lag.

In February 2018, NANTibody notified the Company that on July 2, 2017, NANTibody acquired all of the outstanding equity of IgDraSol in exchange for $90.1 million in cash. NANTibody purchased IgDraSol from NantPharma, which is controlled by NantWorks, an entity with a controlling interest in NantCell and NantPharma.

Although the Company has had a designee serving on the Board of Directors of NANTibody since the formation of NANTibody in April 2015, and although the Company has held 40% of the outstanding equity of NANTibody since NANTibody's formation, neither the Company nor its director designee was given any advance notice of NANTibody's purchase of IgDraSol or of any board meeting or action to approve such purchase. As such, the Company's designee on NANTibody's Board of Directors was not given an opportunity to consider or vote on the transaction as a director and the Company was not given an opportunity to consider or vote on the transaction in its position as a significant (40%) equity holder of NANTibody.

As a result of the July 2, 2017 purchase of IgDraSol, NANTibody's cash and cash equivalents were reduced from $99.6 million as of June 30, 2017 to $9.5 million as of September 30, 2017, and NANTibody's contributed capital was reduced from $100.0 million as of June 30, 2017 to $10.0 million as of September 30, 2017, to effect the transfer of IgDraSol from NantPharma to NANTibody. No additional information was provided to the Company to explain why NANTibody's total assets as of September 30, 2017 were reduced by approximately $90.1 million. The Company requested, but did not receive, additional information from NANTibody for purposes of supporting the value of IgDraSol, including any information regarding clinical advancements in the entity since the sale of IgDraSol by the Company in May 2015.

Prior to the communication of the transfer of IgDraSol from NantPharma to NANTibody, the Company relied on the cash and cash equivalents of NANTibody for purposes of determining the value of its investment in NANTibody, which capital was expended by NANTibody to acquire IgDraSol on July 2, 2017. As a result of the transfer of IgDraSol, the Company reassessed the recoverability of its equity method investment in NANTibody as of July 2, 2017. In doing so, the Company considered the expected outcomes for the intellectual property assets held by NANTibody as of July 2, 2017. As a result of the lack of evidence of any development activity associated with any of the assets held in NANTibody, given the passage of time since the formation of the joint venture, many competitive products from other drug developers worldwide have advanced and/or commercialized for the targeted disease indications of the assets held in NANTibody, and given the Company's minority interest in NANTibody (the investee), the Company concluded that it does not have the ability to recover the carrying amount of the investment and an other-than-temporary decline in the value of the investment had occurred. Accordingly, an impairment was recorded to the Company's equity method investment in NANTibody for the three and nine months ended September 30, 2017. The fair value of the Company's investment in NANTibody was measured at fair value on July 2, 2017 using significant unobservable inputs (Level 3) due to the determination of fair value requiring significant judgment, including the potential outcomes of the intellectual property assets held by NANTibody. For these reasons, fair value was determined by applying the Company's 40% equity interest in NANTibody to the remaining cash and cash equivalents, which resulted in an impairment of $36.0 million. The impairment resulted in a revised carrying value of the Company's investment in NANTibody of $3.7 million which approximated its ratable 40% ownership of the cash maintained by NANTibody expected to be used for future research and development. As of March 31, 2019 and 2018, the carrying value of the Company's investment in NANTibody was approximately $3.3 million and $3.5 million, respectively.

NANTibody recorded a net loss of $362 thousand and a net loss of $484 thousand for the three months ended December 31, 2018 and 2017, respectively. The Company recorded its portion of loss from NANTibody in loss on equity method investments on its consolidated statements of operations for the three months ended March 31, 2019 and 2018. As of December 31, 2018, NANTibody had $9.5 million in current assets and $1.0 million in current liabilities and no noncurrent assets or noncurrent liabilities. As of December 31, 2017, NANTibody had $9.8 million in current assets and $1.7 million in current liabilities and no noncurrent assets or noncurrent liabilities.

NantStem

In July 2015, the Company and NantBioScience established a new entity called NantCancerStemCell, LLC ("NantStem") as a stand-alone biotechnology company with $100.0 million initial joint funding. As initially organized, NantBioScience was obligated to make a $60.0 million cash contribution to NantStem for a 60% equity interest in NantStem, and the Company was obligated to make a $40.0 million cash contribution to NantStem for a 40% equity interest in NantStem. Fifty percent of these contributions were funded in July 2015 and the remaining amounts were to be made by no later than September 30, 2015. The Company had NantPharma contribute its portion of the initial joint funding of $20.0 million to NantStem from the proceeds of the sale of IgDraSol. Pursuant to a Side Letter dated October 13, 2015, the NantStem joint venture agreement was amended to relieve the Company of the obligation to contribute the second $20.0 million payment, and its ownership interest in NantStem was reduced to 20%. NantBioScience's funding obligations were unchanged. The Side Letter was negotiated at the same time the Company issued a call option on shares of NantKwest that it owned to Cambridge Equities, L.P. ("Cambridge"), a related party to NantBioScience.

A loss related to other-than-temporary impairment of $0.5 million was recognized for the equity investment in NantStem for the year ended December 31, 2018. There was no loss related to other-than-temporary impairment recognized for the equity investment for the three months ended March 31, 2019 and 2018.

The Company is accounting for its interest in NantStem as an equity method investment, due to the significant influence the Company has over the operations of NantStem through its board representation and 20% voting interest. The Company's investment in NantStem is reported in equity method investments on its consolidated balance sheets and its share of NantStem's loss is recorded in loss on equity method investments on its consolidated statement of operations. As of March 31, 2019 and 2018, the carrying value of the Company's investment in NantStem was approximately $17.8 million and $18.7 million, respectively.

The financial statements of NantStem are not received sufficiently timely for the Company to record its portion of earnings or loss in the current financial statements and therefore the Company reports its portion of earnings or loss on a quarter lag.

NantStem recorded a net loss of $985 thousand and net income of $190 thousand for the three months ended December 31, 2018 and 2017, respectively. The Company recorded its portion of income (loss) from NantStem in income (loss) on equity method investments on its consolidated statements of operations for the three months ended March 31, 2019 and 2018. As of December 31, 2018, NantStem had $74.5 million in current assets and $133 thousand in current liabilities and $5.9 million in noncurrent assets and no noncurrent liabilities. As of December 31, 2017, NantStem had $82.7 million in current assets and $90 thousand in current liabilities and no noncurrent assets or noncurrent liabilities.

Yuhan Agreement

In March 2016, the Company and Yuhan Corporation, a South Korean company ("Yuhan"), entered into an agreement to form a joint venture company called ImmuneOncia Therapeutics, LLC ("ImmuneOncia") to develop and commercialize a number of immune checkpoint antibodies against undisclosed targets for both hematological malignancies and solid tumors. Under the terms of the joint venture agreement, Yuhan contributed an initial investment of $10.0 million to ImmuneOncia, and the Company granted ImmuneOncia an exclusive license to one of its immune checkpoint antibodies for specified countries while retaining the rights for the U.S., European and Japanese markets, as well as global rights for ImmuneOncia to two additional antibodies that will be selected by ImmuneOncia from a group of pre-specified antibodies from the Company's immuno-oncology antibody portfolio. During October 2016, funding and operations of ImmuneOncia commenced. Yuhan owns 51% of ImmuneOncia, while the Company owns 49%.

The Company is accounting for its interest in ImmuneOncia as an equity method investment, due to the significant influence the Company has over the operations of ImmuneOncia through its board representation and 49% voting interest while not sharing joint control with Yuhan. The Company's investment in ImmuneOncia is reported in equity method investments on its consolidated balance sheets and its share of ImmuneOncia's loss is recorded in loss on equity method investments on its consolidated statement of operations. As of March 31, 2019 and 2018, the carrying value of the Company's investment in ImmuneOncia was approximately $2.1 million and $6.1 million, respectively. The difference between the Company's investment in ImmuneOncia and the Company's 49% interest in the net assets of ImmuneOncia was approximately $4.5 million at March 31, 2019.

ImmuneOncia recorded a net loss of $1.6 million for each of the three months ended March 31, 2019 and 2018. The Company recorded its portion (49% equity interest) of loss from ImmuneOncia in loss on equity method investments on its consolidated statement of operations for each of the three months ended March 31, 2019 and 2018, respectively. As of March 31, 2019, ImmuneOncia had $36.8 million in current assets, $1.2 million in current liabilities, $7.7 million in noncurrent assets and $29.8 million in noncurrent liabilities. As of March 31, 2018, ImmuneOncia had $6.3 million in current assets, $270 thousand in current liabilities, $8.5 million in noncurrent assets, and $33 thousand noncurrent liabilities.

Shanghai Three

On March 7, 2016, TNK agreed to issue to SiniWest Holdings, Inc. ("SiniWest Holdings") $4.0 million in shares of TNK Class A Stock, subject to certain circumstances, to be issued upon a financing resulting in gross proceeds (individually or in the aggregate) to TNK of at least $10.0 million and a $1.0 million upfront cash payment in exchange for SiniWest Holdings transferring certain assets to TNK, including SiniWest Holdings' 25% interest in Shanghai Three-Alliance Biotech Co. LTD, a China based company ("Shanghai Three"). The Company is accounting for its interest in Shanghai Three as an equity method investment, due to the significant influence the Company has over the operations of Shanghai Three through its 25% voting interest. The Company's investment in Shanghai Three is reported in equity method investments on the consolidated balance sheets and its share of Shanghai Three's income or loss is recorded in income (loss) on equity method investments on the consolidated statement of operations. As of each of the three months ended March 31, 2019 and 2018, the carrying value of the Company's investment in Shanghai Three was approximately $3.8 million.

The financial statements of Shanghai Three are not received sufficiently timely for the Company to record its portion of earnings or loss in the current financial statements and therefore the Company reports its portion of earnings or loss on a quarter lag.

Shanghai Three incurred no operating expenses or net loss for the three months ended December 31, 2018 and 2017. As of December 31, 2018, Shanghai Three had $0.3 million in current assets, $2.6 million in current liabilities, $5.1 million in noncurrent assets and $2.0 million in noncurrent liabilities. As of December 31, 2017, Shanghai Three had approximately $0.4 million in current assets, $5.3 million in noncurrent assets, $2.8 million in current liabilities and $2.0 million in noncurrent liabilities. As of March 31, 2019, no material activity had occurred subsequent to the Company's initial investment.

Fair Value of Equity Method Investment

The Company periodically evaluates the carrying value of the Company's equity method investments, when events and circumstances indicate that the carrying amount of an asset may not be recovered. The Company determines the fair value of its equity method investments to evaluate whether impairment losses shall be recorded using Level 3 inputs. These investments include the Company's holdings in privately held biotechnology companies that are not exchange traded and therefore not supported with observable market prices. However, these investments are valued by reference to their net asset values and unobservable inputs including future cash flows if available.

10. Goodwill and Intangible Assets

At each of March 31, 2019 and December 31, 2018, the Company had recorded goodwill of $38.3 million. The Company performed a qualitative test for goodwill impairment during the quarter ended December 31, 2018. Based upon the results of the qualitative testing the Company concluded that it is more-likely-than-not that the fair values of the Company's goodwill was in excess of its carrying value and therefore performing the first step of the two-step impairment test was unnecessary. No goodwill impairment was recognized for the three months ended March 31, 2019 and 2018. A summary of the Company's goodwill as of March 31, 2019 is as follows (in thousands):

	Total
Balance at December 31, 2018	$ 38,298
Goodwill Acquired from Acquisitions	—
Balance at March 31, 2019	$ 38,298

Beginning in the quarter ended March 31, 2019, the Company re-segmented its business into two new operating segments: the Sorrento Therapeutics segment and the Scilex segment. These segments are the Company's reporting units, and are the level at which the Company conducts its goodwill impairment evaluations. Goodwill was allocated to the Sorrento Therapeutics and the Scilex operating segments on a relative fair value basis. Goodwill for the Sorrento Therapeutics segment and Scilex segment was $31.6 million and $6.7 million, respectively, as of March 31, 2019.

The Company's intangible assets, excluding goodwill, include acquired license and patent rights, core technologies, customer relationships and acquired in-process research and development. Amortization for the intangible assets that have finite useful lives is generally recorded on a straight-line basis over their useful lives. Intangible assets with indefinite useful lives totaling $13.9 million are included in acquired in-process research and development in the table below. A summary of the Company's identifiable intangible assets as of March 31, 2019 and December 31, 2018 is as follows (in thousands):

	March 31, 2019		
	Gross Carrying Amount	Accumulated Amortization	Intangibles, net
Customer relationships	$ 1,585	$ 1,380	$ 205
Acquired technology	3,410	929	2,481
Acquired in-process research and development	35,834	731	35,103
Patent rights	32,720	5,287	27,433
Assembled workforce	$ 605	$ 10	$ 595
Total intangible assets	$ 74,154	$ 8,337	$ 65,817

	December 31, 2018		
	Gross Carrying Amount	Accumulated Amortization	Intangibles, net
Customer relationships	$ 1,585	$ 1,373	$ 212
Acquired technology	3,410	885	2,525
Acquired in-process research and development	35,834	366	35,468
Patent rights	32,720	4,742	27,978
Assembled workforce	105	5	100
Total intangible assets	$ 73,654	$ 7,371	$ 66,283

As of March 31, 2019, the weighted average remaining life for identifiable intangible assets is 14.9 years. Aggregate amortization expense was $1.0 million and $0.7 million for the three months ended March 31, 2019 and 2018, respectively.

Estimated future amortization expense related to intangible assets at March 31, 2019 is as follows (in thousands):

Years Ending December 31,	Amount
2019 (Remaining nine months)	$ 2,152
2020	2,869
2021	3,923
2022	3,923
2023	3,918
2024	3,827
Thereafter	45,205
Total expected future amortization	$ 65,817

11. Significant Agreements and Contracts

License Agreement with NantCell

In April 2015, the Company and NantCell entered into a license agreement. Under the terms of the agreement, the Company granted an exclusive license to NantCell covering patent rights, know-how, and materials related to certain antibodies, ADCs and two CAR-TNK products. NantCell agreed to pay a royalty not to exceed five percent (5%) to the Company on any net sales of products (as defined) from the assets licensed by the Company to NantCell. In addition to the future royalties payable under this agreement, NantCell paid an upfront payment of $10.0 million to the Company and issued 10 million shares of NantCell common stock to the Company valued at $100.0 million based on a recent equity sale of NantCell common stock to a third party. As of March 31, 2019, the Company had not yet provided all of the items noted in the agreement, including research services for and on behalf of NantCell, and therefore has recorded the entire upfront payment and value of the equity interest received as deferred revenue. Specifically, only a portion of the materials associated with the licensed assets have been delivered while the majority of the licensed assets remain undelivered and the related research activities are still to be performed. The Company will recognize the upfront payment and the value of the equity interest received over the period beginning with the commencement of the last item delivered. The Company's ownership interest in NantCell does not provide the Company with control or the ability to exercise significant influence; therefore the $100.0 million investment is carried at cost in the consolidated balance sheets and evaluated for other-than-temporary impairment on a quarterly basis.

12. Loan and Security Agreement and Convertible Notes

2018 Chinese Yuan ("RMB") Loan

In March 2018, the Company entered into a revolving credit line in the aggregate principal amount of $1.6 million ("RMB 10.0 million") with the Bank of China and the Agricultural Bank of China, which was guaranteed by Levena Suzhou Biopharma, Co. Ltd. This bank facility was used for working capital purposes. In January 2019, the Company repaid part of the remaining principal amount of $0.7 million ("RMB 5.0 million").

2018 Securities Purchase Agreement in Private Placement and Amendment to Warrants

On March 26, 2018, the Company entered into a Securities Purchase Agreement (the "March 2018 Securities Purchase Agreement") with certain accredited investors (the "March 2018 Purchasers"). Pursuant to the March 2018 Securities Purchase Agreement, the Company agreed to issue and sell to the March 2018 Purchasers, in a Private Placement (the "March 2018 Private Placement"), (1) convertible promissory notes in an aggregate principal amount of $120,500,000 (the "Notes"), and (2) warrants to purchase 8,591,794 shares of the common stock of the Company (the "Warrants"). On June 13, 2018, the Company entered into an amendment (the "June 2018 Amendment") to the March 2018 Securities Purchase Agreement. Under the terms of the June 2018 Amendment, the Company and the March 2018 Purchasers agreed that the aggregate principal amount of the Notes was reduced to $37,848,750 and that the aggregate number of shares of Common Stock issuable upon exercise of the Warrants was reduced to 2,698,662, and also agreed to certain other adjustments to the threshold principal amount of the Notes required to remain outstanding in order for certain rights and obligations to apply to the Notes.

On June 13, 2018, pursuant to the March 2018 Securities Purchase Agreement, as amended by the June 2018 Amendment, the Company issued and sold to the March 2018 Purchasers, in the March 2018 Private Placement (1) Notes in an aggregate principal amount of $37,848,750, and (2) Warrants to purchase an aggregate of 2,698,662 shares of Common Stock. The Notes accrue interest at a rate equal to 5.0% per annum and mature upon the earlier to occur of June 13, 2023 and the date of the closing of a change of control (the "Maturity Date"). At any time and from time to time before the Maturity Date, each March 2018 Purchaser shall have the option to convert any portion of the outstanding principal amount of such March 2018 Purchaser's Note that is equal to or greater than the lesser of: (1) $4,000,000, and (2) the then-outstanding principal amount of such March 2018 Purchaser's Note 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 December 31, 2018. Each Warrant has an exercise price of $3.28 per share, subject to adjustment for stock splits, reverse stock splits, stock dividends and similar transactions, became exercisable on December 11, 2018, has a term of five and a half years from the date of issuance and will be exercisable on a cash basis, unless there is not an effective registration statement covering the resale of the shares issuable upon exercise of the Warrants, in which case the Warrants shall also be exercisable on a cashless exercise basis. See Note 3 for discussion of the Company's policies for accounting for debt with detachable warrants. In connection with the issuance of the Notes and the Warrants, the Company recorded a debt discount of approximately $21.6 million based on an allocation of proceeds to the Warrants of approximately $9.6 million and a beneficial conversion feature of approximately $12.0 million, before issuance costs. The Company accounts for the debt at amortized cost and amortizes the debt discount to interest expense using the effective interest method over the expected term of the Notes. The fair value of the Notes was estimated using a lattice model with Level 3 inputs including the historical stock price volatility, risk-free interest rate, and debt yield.

On November 7, 2018, the Company entered into an Agreement and Consent (the "Agreement and Consent") with the March 2018 Purchasers. Pursuant to the Agreement and Consent, in consideration for certain of the March 2018 Purchasers, in their capacity as holders of the Notes, providing a waiver and consent on behalf of all holders of the Notes, pursuant to which the March 2018 Purchasers provided the Company with certain waivers of their rights and certain of the Company's covenants under the Securities Purchase Agreement, as amended by Amendment No. 1 thereto, with respect to the Loan Agreement (as defined below) and the transactions contemplated thereby, the Company and the March 2018 Purchasers agreed to amend the Warrants to reduce the exercise price per share of its common stock thereunder from $8.77 to $3.28. The amendment of the Warrants resulted in a loss on debt extinguishment of $1.9 million representing the incremental fair value of the modified Warrants along with the difference between the fair value and carrying value of the Notes at the modification date of November 7, 2018.

The Company determined that the amendment of the Warrants resulted in an extinguishment at the modification date. As a result, the Company recorded a loss on debt extinguishment for the difference between the fair value of $23.1 million and the carrying value of $17.0 million, or $6.1 million. The Company recorded the loss as of the date of modification, or November 7,

2018. As of March 31, 2019, the estimated Level 3 fair value of the Notes was approximately $26.5 million, compared to the carrying value of $24.1 million.

Borrowings under the Notes consisted of the following (in thousands):

	March 31, 2019	December 31, 2018
Face value of loan	$ 37,849	$ 37,849
Unamortized debt discount	(14,289)	(14,804)
Accretion of debt discount	538	515
Ending balance	$ 24,098	$ 23,560

Interest expense recognized on the Notes for the three months ended March 31, 2019 totaled $0.5 million for the stated interest. Debt discount and debt issuance costs, which are presented as a direct reduction of the Notes in the consolidated balance sheets, are amortized as interest expense using the effective interest method. The amount of debt discount and debt issuance costs included in interest expense for the three months ended March 31, 2019 was approximately $0.5 million.

The Company performed a Level 3 based assessment and identified a number of embedded derivatives that require bifurcation from the Notes and separate accounting as a single compound derivative. As the current fair value attributed to the bifurcated compound derivative is immaterial, the Company has not recorded this derivative within its consolidated financial statements. The Company will re-evaluate this assessment each reporting period.

2018 Purchase Agreements and Indenture for Scilex

On September 7, 2018, Scilex entered into Purchase Agreements (the "2018 Purchase Agreements") with certain investors (collectively, the "Scilex Note Purchasers") and the Company. Pursuant to the 2018 Purchase Agreements, on September 7, 2018, Scilex, among other things, issued and sold to the Scilex Note Purchasers senior secured notes due 2026 in an aggregate principal amount of $224,000,000 (the "Scilex Notes") for an aggregate purchase price of $140,000,000 (the "Offering"). In connection with the Offering, Scilex also entered into the Indenture governing the Scilex Notes with U.S. Bank National Association, a national banking 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 under the Indenture (the "Guarantee").

The net proceeds of the Offering were approximately $89.3 million, after deducting the Offering expenses payable by Scilex and funding a segregated reserve account with $20.0 million (the "Reserve Account") and a segregated collateral account with $25.0 million (the "Collateral Account") pursuant to the terms of the Indenture. The net proceeds of the Offering will be used by Scilex to support the commercialization of ZTlido® (lidocaine topical system 1.8%), for working capital and general corporate purposes in respect of the commercialization of ZTlido® (lidocaine topical system 1.8%). Funds in the Reserve Account will be released to Scilex upon receipt by the Trustee of an officer's certificate under the Indenture from Scilex confirming receipt of a marketing approval letter from the FDA with respect to ZTlido® (lidocaine topical system 5.4%) or a similar product with a concentration of not less than 5% (the "Marketing Approval Letter") on or prior to July 1, 2023. Funds in the Collateral Account will be released upon receipt of a written consent authorizing such release from the holders of a majority in principal amount of the Scilex Notes issued, upon the occurrence and during the continuance of an event of default at the direction of the holders of a majority in principal amount of the Scilex Notes issued or upon the repayment in full of all amounts owed under the Scilex Notes.

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. If Scilex has not received the Marketing Approval Letter by March 31, 2021, the percentage of net sales payable shall be increased to be in the range of 15% to 25%. If actual cumulative net sales of ZTlido® (lidocaine topical system 1.8%) from October 1, 2022 through September 30, 2023 are less than 60% of a predetermined target sales threshold for such period, then Scilex will be obligated to pay an additional installment of principal of the Scilex Notes each quarter in an amount equal to an amount to be determined by reference to the amount of such deficiency.

The aggregate principal amount due under the Scilex Notes shall be increased by $28,000,000 on February 15, 2022 if actual cumulative net sales of ZTlido® (lidocaine topical system 1.8%) from the issue date of the Scilex Notes through December 31, 2021 do not equal or exceed 95% of a predetermined target sales threshold for such period. If actual cumulative net sales of ZTlido® (lidocaine topical system 1.8%) for the period from October 1, 2022 through September 30, 2023 do not

equal or exceed 80% of a predetermined target sales threshold for such period, the aggregate principal amount shall also be increased on November 15, 2023 by an amount equal to an amount to be determined by reference to the amount of such deficiency.

The final maturity date of the Scilex Notes will be August 15, 2026. The Scilex Notes may be redeemed in whole at any time upon 30 days' written notice at Scilex's option prior to August 15, 2026 at a redemption price equal to 100% of the then-outstanding principal amount of the Scilex Notes. In addition, upon a change of control of Scilex (as defined in the Indenture), each holder of a Scilex Note shall have the right to require Scilex to repurchase all or any part of such holder's Scilex Note at a repurchase price in cash equal to 101% of the then-outstanding principal amount thereof.

The 2018 Purchase Agreements include the terms and conditions of the offer and sale of the Scilex Notes, representations and warranties of the parties, indemnification and contribution obligations and other terms and conditions customary in agreements of this type.

The Indenture governing the Scilex Notes contains customary events of default with respect to the Scilex Notes (including a failure to make any payment of principal on the Scilex Notes when due and payable), and, upon certain events of default occurring and continuing, the Trustee by notice to Scilex, or the holders of at least 25% in principal amount of the outstanding Scilex Notes by notice to Scilex and the Trustee, may (subject to the provisions of the Indenture) declare 100% of the then-outstanding principal amount of the Scilex Notes to be due and payable. Upon such a declaration of acceleration, such principal will be due and payable immediately. In the case of certain events, including bankruptcy, insolvency or reorganization involving the Company or Scilex, the Scilex Notes will automatically become due and payable.

Pursuant to the Indenture, the Company and Scilex must also comply with certain covenants with respect to the commercialization of ZTlido® (lidocaine topical system 1.8%), as well as customary additional affirmative covenants, such as furnishing financial statements to the holders of the Scilex Notes, minimum cash requirements and net sales reports; and negative covenants, including limitations on the following: the incurrence of debt; the payment of dividends, the repurchase of shares and under certain conditions making certain other restricted payments; the prepayment, redemption or repurchase of subordinated debt; a merger, amalgamation or consolidation involving Scilex; engaging in certain transactions with affiliates; and the making of investments other than those permitted by the Indenture.

The Scilex Notes and related Guarantee have not been, and will not be, registered under the Securities Act of 1933, as amended, or the securities laws of any other jurisdiction and may not be offered or sold in the United States without registration or an applicable exemption from registration requirements. The holders of the Scilex Notes do not have any registration rights.

Pursuant to a Collateral Agreement by and among Scilex, the Trustee and the Collateral Agent (the "Collateral Agreement"), the Scilex Notes will be secured by ZTlido® (lidocaine topical system 1.8%) and all of the existing and future property and assets of Scilex necessary for, or otherwise relevant to, now or in the future, the manufacture and sale of ZTlido® (lidocaine topical system 1.8%), on a worldwide basis (exclusive of Japan), including, but not limited to, the intellectual property related to ZTlido® (lidocaine topical system 1.8%), the marketing or similar regulatory approvals related to ZTlido® (lidocaine topical system 1.8%), any licenses, agreements and other contracts related to ZTlido® (lidocaine topical system 1.8%), and the current assets related to ZTlido® (lidocaine topical system 1.8%) such as inventory, accounts receivable and cash and any and all future iterations, improvements or modifications of such product made, developed or licensed (or sub-licensed) by Scilex or any of its affiliates or licensees (or sub-licensees) (including ZTlido® (lidocaine topical system 5.4%)).

Pursuant to the terms of the Indenture, the Company issued an irrevocable standby letter of credit to Scilex (the "Letter of Credit"), which provides that, in the event that (1) Scilex does not hold at least $35,000,000 in unrestricted cash as of the end of any calendar month during the term of the Scilex Notes, (2) actual cumulative net sales of ZTlido® (lidocaine topical system 1.8%) from the issue date of the Scilex Notes through December 31, 2021 are less than a specified sales threshold for such period, or (3) actual cumulative net sales of ZTlido® (lidocaine topical system 1.8%) for any calendar year during the term of the Scilex Notes, beginning with the 2022 calendar year, are less than a specified sales threshold for such calendar year, Scilex, as beneficiary of the Letter of Credit, will draw, and the Company will pay to Scilex, $35,000,000 in a single lump-sum amount as a subordinated loan. The Letter of Credit will terminate upon the earliest to occur of: (a) the repayment of the Scilex Notes in full, (b) the actual net sales of ZTlido® (lidocaine topical system 1.8%) for any calendar year during the term of the Scilex Notes exceeding a certain threshold, (c) the consummation of an initial public offering on a major international stock exchange by Scilex that satisfies certain valuation thresholds, and (d) the replacement of the Letter of Credit with another letter of credit in form and substance, including as to the identity and creditworthiness of issuer, reasonably acceptable to the holders of at least 80% in principal amount of outstanding Scilex Notes. As of March 31, 2019, the estimated fair value of the Notes was approximately $142.2 million compared to the carrying value of $145.3 million. The Company uses the discounted cash flow method under the income approach, which involves significant Level 3 inputs and assumptions, combined with a Monte Carlo

simulation, as appropriate. The value of the debt instrument is based on the present value of future interest and principal payments, discounted a rate of return reflective the Company's credit risk.

Borrowings of the 2018 Purchase Agreements and Indenture for Scilex consisted of the following (in thousands):

	March 31, 2019	December 31, 2018
Face value of loan	$ 224,000	$ 224,000
Unamortized debt discount	(77,624)	(84,000)
Capitalized debt issuance costs	(5,313)	(5,748)
Accretion of debt discount	4,326	6,376
Amortization of debt issuance cost	299	435
Payments	(438)	—
Ending balance	$ 145,250	$ 141,063

Future minimum payments under the Notes, based on a percentage of projected net sales of ZTlido® (lidocaine topical system 1.8%) are as follows (in thousands):

Year Ending December 31,	
2019 (Remaining nine months)	$ 3,912
2020	17,770
2021	31,283
2022	73,007
2023	97,590
Total future minimum payments	223,562
Unamortized debt discount	(73,298)
Unamortized capitalized debt issuance costs	(5,014)
Total minimum payment	145,250
Current portion	(7,933)
Long-term portion of Scilex Notes	$ 137,317

Debt discount and debt issuance costs, which are presented as a direct reduction of the Scilex Notes in the consolidated balance sheets, are amortized as interest expense using the effective interest method. As principal repayments on the Scilex Notes are based on a percentage of net sales of ZTlido® (lidocaine topical system 1.8% and lidocaine topical system 5.4%, if a Marketing Approval Letter is received), the Company has elected to account for changes in estimated cash flows from future net sales prospectively. Specifically, a new effective interest rate will be determined based on revised estimates of remaining cash flows and changes in expected cash flows will be recognized prospectively. The amount of debt discount and debt issuance costs included in interest expense for the three months ended March 31, 2019 was approximately $4.6 million.

The Company identified a number of embedded derivatives that require bifurcation from the Scilex Notes and separate accounting as a single compound derivative. The Company recorded this derivative within its consolidated financial statements (See Note 5). The Company re-evaluates this assessment each reporting period.

2018 Oaktree Term Loan Agreement

On November 7, 2018, the Company and certain of its domestic subsidiaries (the "Guarantors") entered into a Term Loan Agreement (the "Loan Agreement") with certain funds and accounts managed by Oaktree Capital Management, L.P. (collectively, the "Lenders") and Oaktree Fund Administration, LLC, as administrative and collateral agent (the "Agent"), for an initial term loan of $100.0 million (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" and, together with the Initial Loan, the "Term Loan"). The Initial Loan matures on November 7, 2023 (the "Maturity Date") and bears interest at a rate equal to the London Interbank Offered Rate ("LIBOR") plus the applicable margin, or 7%. The Initial Loan was funded on November 7, 2018. The net proceeds of the Initial Loan were approximately $91.3 million, after deducting estimated loan costs, commissions, fees and expenses and funding a debt service reserve account with approximately $9.6 million (the "Debt Service Reserve Account"), and will be used for general corporate purposes. In connection with the Loan Agreement, the Company and the Guarantors entered into a Collateral Agreement with the Agent (the "Collateral Agreement"). The Collateral Agreement provides that the Term Loan is secured by

substantially all of the Company's and the Guarantors' assets, and a pledge of 100% of the equity interests in other entities 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, will be exercisable from May 7, 2019 through May 7, 2029 and will be exercisable 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 (the "Initial Warrant Shares"), in which case the Initial Warrants shall also be exercisable on a cashless exercise basis. In connection with the Loan Agreement, on November 7, 2018, the Company and the Lenders entered into a Registration Rights Agreement (the "Registration Rights Agreement") pursuant to which, among other things, the Company agreed to file one or more registration statements with the SEC for the purpose of registering for resale the Initial Warrant Shares and the shares of common stock issuable upon exercise of warrants that may be issued in connection with the Conditional Loan (the "Conditional Warrants"). Under the Registration Rights Agreement, the Company agreed to file a registration statement with the SEC registering all of the Initial Warrant Shares and the shares of common stock issuable upon exercise of the Conditional Warrants for resale by no later than the 45th day following the issuance of the Initial Warrants and the Conditional Warrants, respectively.

As of March 31, 2019, the estimated fair value of the Initial Loan was approximately $67.9 million compared to the carrying value of $68.2 million.

Borrowings under the Initial Loan consisted of the following (in thousands):

	March 31, 2019	December 31, 2018
Face value of loan	$ 100,000	$ 100,000
Debt discount - warrant	(26,248)	(26,659)
Capitalized debt issuance costs	(6,543)	(6,658)
Accretion of debt discount and amortization of issuance costs	1,039	526
Ending balance	$ 68,248	$ 67,209

Interest expense recognized on the Initial Loan for the three months ended March 31, 2019 totaled $2.4 million for the stated interest. Debt discount and debt issuance costs, which are presented as a direct reduction of the Loan Agreement in the consolidated balance sheets, are amortized as interest expense using the effective interest method. The amount of debt discount and debt issuance costs included in interest expense for the three months ended March 31, 2019 was approximately $1.0 million.

The Company performed a Level 3 based assessment and identified a number of embedded derivatives that require bifurcation from the Initial Loan and separate accounting as a single compound derivative. Certain of these embedded features include default interest due to non-credit-related events of default, mandatory prepayment upon a change of control, mandatory prepayment upon an asset disposition, mandatory prepayment upon non-permitted debt issuance, indemnified taxes, increased costs upon a change in law and automatic acceleration upon a non-bankruptcy event of default. As the current fair value attributed to the bifurcated compound derivative is immaterial, the Company has not recorded this derivative within its consolidated financial statements. The Company will re-evaluate this assessment each reporting period.

13. Stock Incentive Plans

2009 Stock Incentive Plan

The following table summarizes stock option activity as of March 31, 2019 and the changes for the period then ended (dollar values in thousands, other than weighted-average exercise price):

	Options Outstanding	Weighted-Average Exercise Price	Aggregate Intrinsic Value
Outstanding at December 31, 2018	10,523,075	$ 4.91	$ 1,723
Options Granted	—	$ —	
Options Canceled	(302,675)	$ 2.03	
Options Exercised	(34,950)	$ 6.46	
Outstanding at March 31, 2019	10,185,450		$ 10,253

The aggregate intrinsic value of options exercised during the three months ended March 31, 2019 and 2018 was $125 thousand and $0, respectively. The Company uses the Black-Scholes valuation model to calculate the fair value of stock options. The fair value of employee stock options was estimated at the grant date using the following assumptions:

	Three Months Ended March 31,	
	2019	2018
Weighted-average grant date fair value	$ —	$ 7.25
Dividend yield	—%	—%
Volatility	100%	81%
Risk-free interest rate	2.42%	2.49%
Expected life of options	6.1 years	6.1 years

The assumed dividend yield was based on the Company's expectation of not paying dividends in the foreseeable future. Due to the Company's limited historical data, the estimated volatility incorporates the historical and implied volatility of comparable companies whose share prices are publicly available. The risk-free interest rate assumption was based on the U.S. Treasury's rates for U.S. Treasury zero-coupon bonds with maturities similar to those of the expected term of the award being valued. The weighted average expected life of options was estimated using the average of the contractual term and the weighted average vesting term of the options.

The total employee and director stock-based compensation recorded as operating expenses was $1.7 million and $1.3 million for the three months ended March 31, 2019 and 2018, respectively.

The total unrecognized compensation cost related to unvested employee and director stock option grants as of March 31, 2019 was $15.1 million and the weighted average period over which these grants are expected to vest is 2.3 years.

Stock-based compensation expense related to non-employee consultants recorded as operating expenses was $283 thousand and $74 thousand for the three months ended March 31, 2019 and 2018, respectively.

Common Stock Reserved for Future Issuance

Common stock reserved for future issuance consists of the following at March 31, 2019:

Common stock warrants outstanding under the loan and security agreements	6,354,877
Common stock warrants outstanding under the Hercules securities agreement	306,748
Common stock warrants outstanding under the convertible notes	14,819,872
Common stock warrants outstanding under private placements	4,153,620
Common stock options outstanding under the Non-Employee Director Plan	3,200
Authorized for future grant or issuance under the 2009 Stock Incentive Plan	18,289,456
Shares issuable upon the conversion of the 2018 Notes	5,397,325
Issuable under assignment agreement based upon achievement of certain milestones	80,000
	49,405,098

2017 Equity Incentive Plan

In June 2017, the Company's subsidiary, Scilex, adopted the Scilex 2017 Equity Incentive Plan, reserved 4.0 million shares of Scilex common stock and awarded 1.0 million options to certain Company personnel, directors and consultants under such plan. Stock options granted under this plan typically vest 1/4th of the shares on the first anniversary of the vesting commencement date and 1/48th of the remaining options vest each month thereafter.

Upon closing of the Company's acquisition of Semnur, the Scilex Amended and Restated 2017 Equity Incentive Plan was terminated, and each option to purchase Scilex common stock outstanding and unexercised immediately prior to the Closing were cancelled and substituted for that number of options to acquire common stock of HoldCo, as further described in Note 4.

14. Commitments and Contingencies

Litigation

In the normal course of business, the Company may be named as a defendant in one or more lawsuits. The Company is not a party to any outstanding material litigation and management is currently not aware of any legal proceedings that, individually or in the aggregate, are deemed to be material to the Company's financial condition or results of operations.

On April 3, 2019, the Company 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 the 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. Specifically, the Company has filed:

- An arbitration demand with the American Arbitration Association in Los Angeles, California against NantPharma, LLC and Chief Executive Officer Patrick Soon-Shiong, seeking damages in excess of $1 billion, as well as additional punitive damages, related to alleged fraud and breaches of the Stock Sale and Purchase Agreement, dated May 14, 2015, entered into between NantPharma LLC and the Company, included as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed with the SEC on August 7, 2015. The Company makes no representations as to the likely success or outcome of such arbitration; and

- An action in the Los Angeles Superior Court derivatively on behalf of Immunotherapy NANTibody LLC ("NANTibody") against NantCell, Inc., NANTibody Board Member and NantCell, Inc. Chief Executive Officer Patrick Soon-Shiong, and NANTibody officer Charles Kim, related to several breaches of the June 11, 2015 Limited Liability Company Agreement for NANTibody entered into between the Company and NantCell, Inc. The suit also alleges breaches of fiduciary duties and seeks, inter alia, a declaration that the Assignment Agreement entered into on July 2, 2017, between NantPharma, LLC and NANTibody is void and an equitable unwinding of the Assignment Agreement. The suit calls for the restoration of $90.05 million to the NANTibody capital account, thereby restoring the Company's equity method investment in NANTibody to its invested amount as of June 30, 2017 amount of $40 million. The Company makes no representations as to the likely success or outcome of such lawsuit.

Operating Leases

During the first quarter of 2019, the Company adopted guidance codified in ASU 2016-02, ASU 2018-11 and ASU 2019-01 (collectively "ASC 842"). ASC 842 aims to increase transparency and comparability among organizations by recognizing lease assets and liabilities on the balance sheet and disclosing key information about leasing arrangements. In adopting the new guidance, the Company elected to apply the cumulative-effect adjustment to the opening balance sheet and optional transition method to not present comparable prior periods. Prior comparative periods will not be adjusted. The cumulative effect of applying ASC 842 to all existing leases did not result in an adjustment to retained earnings.

The Company elected the package of practical expedients which, among other things, allows the Company to carry forward its historical lease classifications. The Company has also elected to adopt the short-term leases practical expedient to exclude short-term leases from the calculation of the right-of-use assets and lease liabilities in the consolidated balance sheet. Additionally, the Company does not allocate lease payments to non-lease components; therefore, fixed payments for common-area-maintenance and administrative services are included in the Company's operating lease right-of-use assets and liabilities.

Many of the Company's leases are subject to variable lease payments. Variable lease payments are recognized in the period in which the obligation for those payments are incurred and are not included in the measurement of the right-of-use assets or lease liabilities. Additionally, certain leases may be subject to annual changes in the consumer price index ("CPI"). Changes in the CPI are treated as variable lease payments and do not result in a remeasurement of the right-of-use assets or lease liabilities.

The Company leases administrative, research and development, sales and marketing and manufacturing facilities under various non-cancelable lease agreements. Facility leases generally provide for periodic rent increases, and many contain escalation clauses and renewal options. As of March 31, 2019, the Company's leases have remaining lease terms of approximately 1.2 to 10.6 years, some of which include options to extend the lease terms for up to five years, and some of which allow for early termination. In calculating the lease liability, lease terms may include options to extend or terminate the lease when it is reasonably certain that the Company will exercise such options.

The following table summarizes our facility leases by segment as of March 31, 2019:

Location (1)	Lease term	Square footage	Primary use
Sorrento Therapeutics			
San Diego, CA	2029 - option to extend for one additional 5-year period	77,000	Principal executive offices, research and development
San Diego, CA	2029 - option to extend for one additional 5-year period	61,000	Administrative, research and development
San Diego, CA	2029 - option to extend for one additional 5-year period	43,000	Research and development
San Diego, CA	2022 - option to extend for one additional 5-year period	36,000	Administrative and cGMP fill and finish and storage
San Diego, CA	2020	11,000	Research and development
Suzhou, China	2022	25,000	Administrative, research and development
New York, NY	2020	4,600	Administrative
Atlanta, GA	2024 - option to extend for one additional 5-year period	3,400	Administrative, research and development
Newhouse, Scotland	2021	2,300	Administrative, research and development
Scilex (2)			
Berwyn, PA	2020	2,700	Not in use
Mission Viejo, CA	2020	1,400	Administrative
Mountain View, CA (3)	2020	4,500	Administrative

(1) Certain of these facilities are utilized by more than one segment.

(2) In December 2018, Scilex entered into a new lease in Broomfield, Colorado, for approximately 4,500 square feet of additional office space. The lease has not commenced as of March 31, 2019 and has an expected lease term through 2024.

(3) The Company acquired the Mountain View lease as part of the Semnur acquisition during the first quarter of 2019.

The components of lease expense were as follows (in thousands):

Operating leases	Three months ended March 31, 2019
Long term operating lease costs	$ 2,300
Short term operating lease costs	4
Total operating leases costs	$ 2,304

Supplemental quantitative information related to leases includes the following (in thousands):

	Three months ended March 31, 2019
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash flows from operating leases	1,533
Right-of-use assets obtained in exchange for new operating lease liabilities	300
Weighted average remaining lease term in years - operating leases	9.9 years
Weighted average discount rate - operating leases	12.1%

Maturities of lease liabilities were as follows (in thousands):

Years ending December 31,	Operating leases
2019 (Remaining nine months)	$ 5,319
2020	9,153
2021	8,448
2022	8,496
2023	8,186
2024	8,374
Thereafter	42,117
Total lease payments	90,093
Less imputed interest	(39,931)
Total lease liabilities as of March 31, 2019	$ 50,162

Rent expense for operating leases totaled approximately $6.1 million, $3.2 million and $2.1 million, for the years ended December 31, 2018, December 31, 2017 and December 31, 2016, respectively.

Under ASC 840, minimum future non-cancelable annual operating lease obligations are as follows for the years ending December 31 (in thousands):

2019	$ 6,396
2020	8,733
2021	8,011
2022	7,959
2023	8,186
Thereafter	52,425
	$ 91,710

15. Income Taxes

The Company maintains deferred tax assets that reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. These deferred tax assets include net operating loss carryforwards, research credits and temporary differences. In assessing the Company's ability to realize deferred tax assets, management considers, on a periodic basis, whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. As such, management has determined that it is appropriate to maintain a valuation allowance against the Company's U.S. federal and state deferred tax assets, with the exception of an amount equal to its deferred tax liabilities.

The Company's income tax benefit of $0.2 million and $0.9 million reflect effective tax rates of 0.12% and 2.8% for the three months ended March 31, 2019 and 2018, respectively.

The difference between the expected statutory federal tax expense of 21% and the 0.12% effective tax expense for the three months ended March 31, 2019 was primarily attributable to the valuation allowance against most of the Company's deferred tax assets. For the three months ended March 31, 2019, when compared to the same period in 2018, the decrease in the tax benefit and change in effective income tax rate was primarily attributable to the increased valuation allowance in 2019.

The Company is subject to taxation in the U.S. and various state and foreign jurisdictions. The Company's tax years for 2007 and later are subject to examination by the U.S. and state tax authorities due to the existence of the NOL carryforwards.

As of March 31, 2019, the Company had approximately $4.4 million of unrecognized tax benefits that, if recognized, would impact the effective income tax rate for continuing operations, subject to possible offset by an increase in the deferred tax asset valuation allowance. As of March 31, 2018, the Company had approximately $3.9 million of unrecognized tax benefits that, if recognized, would impact the effective income tax rate for continuing operations, subject to possible offset by an increase in the deferred tax asset valuation allowance.

The Company recognizes interest and penalties related to unrecognized tax benefits in its provision for income taxes. For the three months ended March 31, 2019 and 2018, no expense was recorded related to interest and penalties. The Company

believes that no significant amount of the liabilities for uncertain tax positions will expire within twelve months of March 31, 2019.

16. Related Party Agreements

During the year ended December 31, 2015, the Company entered into a joint venture called Immunotherapy NANTibody, LLC, with NantCell, a subsidiary of NantWorks. In July 2015, the Company contributed its portion of the initial joint funding of $40.0 million to the NANTibody joint venture. The Company and NantCell have also entered into a license agreement pursuant to which the Company received a $10.0 million upfront license payment and $100.0 million of vested NantCell common stock.

During the year ended December 31, 2015, the Company entered into a joint venture called NantCancerStemCell, LLC, with NantBioScience, a wholly-owned subsidiary of NantWorks. In connection with negotiated changes to the structure of NantStem the Company issued a call option on shares of NantKwest that it owned to Cambridge, a related party to the Company and to NantBioScience. In April 2015, the Company purchased 1.0 million shares of NantBioScience common stock for $10.0 million.

In March 2016, the Company and Yuhan entered into an agreement to form a joint venture company called ImmuneOncia Therapeutics, LLC, to develop and commercialize a number of immune checkpoint antibodies against undisclosed targets for both hematological malignancies and solid tumors. As of March 31, 2019, the carrying value of the Company's investment in ImmuneOncia Therapeutics, LLC was approximately $2.1 million. During the three months ended June 30, 2016, Yuhan purchased $10.0 million of common stock and warrants.

On August 15, 2017, the transactions contemplated by that certain Contribution Agreement, dated June 12, 2017, by and among the Company, TNK and Celularity, pursuant to which, among other things, the Company and TNK agreed to contribute certain intellectual property rights related to their proprietary chimeric antigen receptor constructs and related chimeric antigen receptors to Celularity in exchange for shares of Celularity's Series A Preferred Stock equal to 25% of Celularity's outstanding shares of capital stock, calculated on a fully-diluted basis closed. Dr. Henry Ji, the Company's Chairman of the Board, President and Chief Executive Officer, Jaisim Shah, a member of the Company's Board of Directors and David Deming, a member of the Company's Board of Directors, were previously appointed as members of the board of directors of Celularity.

On November 8, 2016, the Company entered into the Scilex Purchase Agreement, pursuant to which the Company acquired from the Scilex Stockholders approximately 72% of the outstanding capital stock of Scilex. Dr. Henry Ji, the Company's President and Chief Executive Officer and a member of the Company's Board of Directors, and George K. Ng, the Company's former Vice President, Chief Administrative Officer and Chief Legal Officer, were stockholders of Scilex prior to the acquisition transaction.

As further discussed in Note 4, on March 18, 2019, the Company entered into a Merger Agreement with Semnur, HoldCo, Merger Sub, and Fortis Advisors LLC, solely as representative of the Equityholders' Representative. Pursuant to the Merger Agreement, Merger Sub merged with and into Semnur, with Semnur surviving as a wholly owned subsidiary of HoldCo. Jaisim Shah, a member of the Company's 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. Following the issuance of the Stock Consideration as discussed in Note 4, the Company is the owner of approximately 58% of HoldCo's issued and outstanding capital stock.

As of March 31, 2019, approximately 15% of the outstanding capital stock of Holdco represents a noncontrolling interest and continues to be held by ITOCHU CHEMICAL FRONTIER Corporation. Scilex has entered into a product development agreement with ITOCHU CHEMICAL FRONTIER Corporation, which serves as the sole manufacturer and supplier to Scilex for the ZTlido® product.

17. Loss Per Share

For the three months ended March 31, 2019 and 2018, basic loss per common share is computed by dividing net loss by the weighted average number of common shares outstanding during the period. Diluted loss per common share is calculated to give effect to all dilutive securities, using the treasury stock method.

The following table sets forth the reconciliation of basic and diluted loss per share for the three months ended March 31, 2019 and 2018 (in thousands):

	Three Months Ended March 31,	
	2019	2018
Basic and Diluted		
Net loss attributable to Sorrento	$ (108,071)	$ (32,574)
Denominator for Basic Loss Per Share	122,281	84,941
Denominator for Diluted Loss Per Share	122,281	84,941
Basic Loss Per Share	$ (0.88)	$ (0.38)
Diluted Loss Per Share	$ (0.88)	$ (0.38)

The potentially dilutive stock options that would have been excluded because the effect would have been antidilutive for the three months ended March 31, 2019 and 2018 were 3.9 million and 3.3 million, respectively. The potentially dilutive warrants that would have been excluded because the effect would have been antidilutive for the three months ended March 31, 2019 and 2018 were 4.5 million and 2.0 million, respectively.

Basic and diluted per share amounts are computed independently in the consolidated statements of operations. Therefore, the sum of per share components may not equal the per share amounts presented.

18. Segment Information

During the quarter ended March 31, 2019, the Company realigned its businesses into two operating and reportable segments, Sorrento Therapeutics and Scilex. The Company reports segment information based on the management approach. The management approach designates the internal reporting used by the Chief Operating Decision Maker ("CODM"), which is the Company's Chief Executive Officer, for making decisions and assessing performance as the source of the Company's reportable segments. The CODM allocates resources and assesses the performance of each operating segment based on licensing, sales and services revenue, operating expenses, and operating income (loss) before interest and taxes. The Company has determined its reportable segments to be Sorrento Therapeutics and Scilex based on the information used by the CODM.

Sorrento Therapeutics. The Sorrento Therapeutics segment is organized around the Company's Immune-Oncology therapeutic area, leveraging its proprietary G-MAB™ antibody library and targeted delivery modalities to generate the next generation of cancer therapeutics. These modalities include proprietary chimeric antigen receptor T-cell therapy ("CAR-T"), dimeric antigen receptor T-cell therapy ("DAR-T"), antibody drug conjugates ("ADCs") as well as bispecific antibody approaches. Additionally, this segment also includes Sofusa®, a revolutionary drug delivery system that delivers biologics directly into the lymphatic system to potentially achieve improved efficacy and fewer adverse effects than standard parenteral immunotherapy, and resiniferatoxin ("RTX"), which is a non-opioid-based neurotoxin and is currently in clinical trials for late stage cancer pain and osteoarthritis.

Scilex. The Scilex segment is largely organized around the Company's non-opioid pain management operations and includes the operations of Scilex and Semnur. As of March 31, 2019, revenues from the Scilex segment are exclusively derived from the sale of ZTlido® (lidocaine topical system 1.8%).

- In October 2018, Scilex commercially launched its ZTlido® (lidocaine topical system 1.8%) product and began recognizing revenue in the fourth quarter of 2018.

- Semnur's SP-102 compound is the first non-opioid corticosteroid formulated as a viscous gel injection in development for the treatment of lumbar radicular pain/sciatica, containing no neurotoxic preservatives, surfactants, solvents or particulates. SP-102 has been awarded fast track status by the FDA. See Note 4 for further detail on the Semnur acquisition.

The Company manages its assets on a company basis, not by segments, as many of its assets are shared or commingled. The Company's CODM does not regularly review asset information by reportable segment and, therefore, it does not report asset information by reportable segment. The majority of long-lived assets for both segments are located in the United States.

The following table presents information about the Company's reportable segments for the three months ended March 31, 2019 and 2018 (in thousands):

	Three months ended March 31,					
	2019			2018		
(in thousands)	Sorrento Therapeutics	Scilex	Total	Sorrento Therapeutics	Scilex	Total
External revenues	$ 3,284	$ 2,859	$ 6,143	$ 6,246	$ —	$ 6,246
Operating expenses	35,131	94,182	129,313	35,702	3,090	38,792
Operating loss before interest and taxes	(31,847)	(91,323)	(123,170)	(29,456)	(3,090)	(32,546)

19. Subsequent Events

On May 3, 2019, the Company, the Guarantors and the Lenders and the Agent entered into an amendment (the "Amendment") to the Loan Agreement.

Under the terms of the Amendment, among other things, the Lenders agreed to make available to the Company $20.0 million of the Conditional Loan, notwithstanding that the commercial and financial milestones had not occurred (the "Early Conditional Loan"). The Lenders also agreed to loan the Company the remaining $30.0 million of the Conditional Loan upon the satisfaction of the commercial and financial milestones between August 7, 2019 and November 7, 2019 (the "Remaining Conditional Loan" and, together with the Initial Loan and the Early Conditional Loan, the "Term Loans"). The Term Loans, other than the Early Conditional Loan, will mature on November 7, 2023. The Early Conditional Loan will mature on May 3, 2020; however, if the commercial and financial milestones have not occurred on or prior to such date, the Early Conditional Loan will mature on November 7, 2023. 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 (including the Early Conditional Loan and the Remaining Conditional Loan), the Company has agreed to pay the Lenders an exit fee equal to 1.25% of the principal amount paid or prepaid. The Early Conditional Loan was funded on May 3, 2019.

In connection with the 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, will be exercisable from November 3, 2019 through November 3, 2029 and will be exercisable 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 (the "2019 Warrant Shares"), in which case the 2019 Warrants shall also be exercisable on a cashless exercise basis.

In connection with the Amendment, on May 3, 2019, the Company and the Lenders entered into an amendment (the "RRA Amendment" and, together with the Amendment and the 2019 Warrants, the "Transaction Documents") to the Registration Rights Agreement. Under the terms of the RRA Amendment, the Company agreed to file one or more registration statements with the SEC for the purpose of registering for resale the 2019 Warrant Shares by no later than the 45th day following the issuance of the 2019 Warrants.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

This Quarterly Report on Form 10-Q contains "forward-looking statements" about our expectations, beliefs or intentions regarding our potential product offerings, business, financial condition, results of operations, strategies or prospects. You can identify forward-looking statements by the fact that these statements do not relate strictly to historical or current matters. Rather, forward-looking statements relate to anticipated or expected events, activities, trends or results as of the date they are made and are often identified by the use of words such as "assumes," "plans," "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "might," or "will," and similar expressions or variations. Because forward-looking statements relate to matters that have not yet occurred, these statements are inherently subject to risks and uncertainties that could cause our actual results to differ materially from any future results expressed or implied by the forward-looking statements. Many factors could cause our actual activities or results to differ materially from the activities and results anticipated in forward-looking statements. These factors include those described under the caption "Risk Factors" included elsewhere in this Quarterly Report on Form 10-Q and in our other filings with the Securities and Exchange Commission (the "SEC"). Furthermore, such forward-looking statements speak only as of the date of this report. We undertake no obligation to update any forward-looking statements to reflect events or circumstances occurring after the date of such statements.

Overview

Sorrento Therapeutics, Inc. (Nasdaq: SRNE), together with its subsidiaries (collectively, the "Company", "we", "us" and "our") is 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 ("CAR-T"), dimeric antigen receptor T-cell therapy ("DAR-T"), antibody drug conjugates ("ADCs") 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 ("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 ("IND") for anti-CD38 CAR-T for the treatment of refractory or relapsed multiple myeloma ("RRMM") and obtained approval from the U.S. Food and Drug Administration (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, Inc. ("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 ("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 ("NIH") 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. ("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.

Recent Developments

Re-segmentation

Beginning in the quarter ended March 31, 2019, the Company re-segmented its business into two new operating segments: the Sorrento Therapeutics segment and the Scilex segment.

Acquisition of Semnur Pharmaceuticals, Inc.

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

Semnur's SP-102 compound is the first non-opioid corticosteroid formulated as a viscous gel injection in development for the treatment of lumbar radicular pain/sciatica, containing no neurotoxic preservatives, surfactants, solvents or particulates.

Concurrently with the execution of the Merger Agreement, we and each of the other holders of outstanding shares of capital stock of Scilex, our majority-owned subsidiary, contributed each share of Scilex capital stock we or it owned to HoldCo in exchange for one share of HoldCo common stock (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.

At the closing of the Semnur acquisition, HoldCo issued to the holders of Semnur's capital stock and options to purchase Semnur's common stock (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 (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 (the "Exchange Agreement"), which is further described in Note 4 of the accompanying notes to the consolidated financial statements in Part I, Item 1 of in this Form 10-Q.

Semnur is included under the Scilex operating segment.

Critical Accounting Policies and Estimates

Management's discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements which are prepared in accordance with GAAP. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets and liabilities, related disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. We continually evaluate our estimates and judgments, the most critical of which are those related to debt with detachable warrants, derivative liabilities, acquisition consideration payable, income taxes and stock-based compensation. We base our estimates and judgments on historical experience and other factors that we believe to be reasonable under the circumstances. Materially different results can occur as circumstances change and additional information becomes known.

During the quarter ended March 31, 2019, there were no significant changes to the items that we disclosed as our critical accounting policies and estimates in Note 4 to our consolidated financial statements for the year ended December 31, 2018 contained in our Annual Report on Form 10-K for the year ended December 31, 2018, as amended, as filed with the SEC, except as described below.

Leases

We determine if an arrangement is a lease at inception. Operating leases are included in operating lease right-of-use ("ROU") assets, current portion of operating lease liabilities, and operating lease liabilities in our consolidated balance sheets. ROU assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to

make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized at the commencement date based on the present value of lease payments over the lease term. As our leases do not provide an implicit rate, we use our incremental borrowing rate based on the information available at the commencement date in determining the present value of lease payments. The operating lease ROU asset also includes any lease payments made and is reduced by lease incentives. Our lease terms may include options to extend or terminate the lease when it is reasonably certain that we will exercise that option. Lease expense for lease payments is recognized on a straight-line basis over the lease term. As of March 31, 2019, we have no finance leases.

Derivative Liability

Derivative liabilities are recorded on our consolidated balance sheets at their fair value on the date of issuance and are revalued on each balance sheet date until such instruments are exercised or expire, with changes in the fair value between reporting periods recorded as other income or expense.

Derivative liabilities may result from existing financing arrangements, including our Scilex Notes, the terms of which are further described in Note 12 of the accompanying notes to the consolidated financial statements in Part I, Item 1 of in this Form 10-Q. For our Scilex Notes, interest payments and repayments of principal are based on a percentage of net sales of ZTlido® (lidocaine topical system 1.8%) and could be accelerated should certain net sales targets not be met or marketing approval be delayed. In estimating the fair value of such financial instruments, we may apply significant assumptions and estimates, including estimates involving future net product sales and timing and probability of marketing approvals. We estimate the fair value of our derivative liabilities, including those associated with the Scilex Notes, using the discounted cash flow method under the income approach, which involves significant Level 3 inputs and assumptions, combined with a Monte Carlo simulation model. Such assumptions include market approval probabilities for ZTlido® (lidocaine topical system 5.4%) and forecasts of cumulative net sales of ZTlido® (lidocaine topical system 1.8%).

Results of Operations

The following describes certain line items set forth in our consolidated statements of operations.

Our Business

During the quarter ended March 31,2019, we realigned our businesses into two operating and reportable segments, Sorrento Therapeutics and Scilex, in order to help users of our financial statements better understand our performance, assess our prospects for future net cash flows and make more informed judgments about us as a whole.

Sorrento Therapeutics. The Sorrento Therapeutics segment is organized around our Immune-Oncology therapeutic area, leveraging our proprietary G-MAB™ antibody library and targeted delivery modalities to generate the next generation of cancer therapeutics. These modalities include proprietary chimeric antigen receptor T-cell therapy ("CAR-T"), dimeric antigen receptor T-cell therapy ("DAR-T"), antibody drug conjugates ("ADCs") as well as bispecific antibody approaches. Additionally, this segment also includes Sofusa®, a revolutionary drug delivery system that delivers biologics directly into the lymphatic system to potentially achieve improved efficacy and fewer adverse effects than standard parenteral immunotherapy, and resiniferatoxin ("RTX"), which is a non-opioid-based neurotoxin and is currently in clinical trials for late stage cancer pain and osteoarthritis.

Scilex. The Scilex segment is largely organized around our non-opioid pain management operations and includes the operations of Scilex Pharmaceuticals Inc. and Semnur Pharmaceuticals, Inc. As of March 31, 2019, revenues from the Scilex segment are exclusively derived from the sale of ZTlido® (lidocaine topical system 1.8%).

Comparison of the Three Months Ended March 31, 2019 and 2018

Revenues. Revenues were $6.1 million for the three months ended March 31, 2019, as compared to $6.2 million for the three months ended March 31, 2018.

Revenue in our Sorrento Therapeutics segment decreased from $6.3 million to $3.3 million for the three months ended March 31, 2019, compared to the prior fiscal year. The decrease of $3.0 million is primarily attributable to the decrease in sales and services revenues under the joint development agreement with Celularity Inc. during the three months ended March 31, 2019 as such arrangement is complete.

Our Scilex segment recognized revenues of $2.9 million for the three months ended March 31, 2019. The Scilex segment recognized no revenues for the three months ended March 31, 2018, as sales of ZTlido® (lidocaine topical system 1.8%) did not commence until October 2018.

We expect that any revenue we generate will fluctuate from year to year as a result of the unpredictability of the demand for products and services offered as well as the timing and amount of grant awards, research and development reimbursements and other payments received under any strategic collaborations.

Cost of revenues. Cost of revenues for the three months ended March 31, 2019 and 2018 were $2.3 million and $1.3 million, respectively, and relate to product sales, the sale of customized reagents and providing contract manufacturing services. The costs generally include employee-related expenses including salary and benefits, direct materials and overhead costs including rent, depreciation, utilities, facility maintenance and insurance. The increase of $1.0 million is primarily attributable to indirect costs associated with our investments in contract manufacturing capacity expansion. Cost of revenues for Scilex was not material.

Research and Development Expenses. Research and development expenses for the three months ended March 31, 2019 and 2018 were $25.6 million and $14.6 million, respectively. Research and development expenses include expenses associated with the ramp up of ZTlido® (lidocaine topical system 1.8%) as well as the costs related to our RTX program activities towards entering into future clinical trials, costs to identify, isolate and advance human antibody drug candidates derived from our libraries as well as advancing our ADC preclinical drug candidates, preclinical testing expenses and the expenses associated with fulfilling our development obligations related to the NIH grant awards (collectively the "NIH Grants"). Such expenses consist primarily of salaries and personnel related expenses, stock-based compensation expense, clinical development expenses, preclinical testing, lab supplies, consulting costs, depreciation and other expenses.

The increase of $11.0 million is attributable to increased clinical activities related to consulting and lab supply costs incurred in connection with our expanded research and development activities and activities to advance RTX into clinical trials and potentially pursue other development activities and regulatory related activities associated with ZTlido® (lidocaine topical system 1.8%). We expect research and development expenses to increase in absolute dollars as we: (i) advance RTX and our other product candidates into clinical trials and pursue other development, acquire, develop and manufacture clinical trial materials and increase other regulatory operating activities, (ii) incur incremental expenses associated with our efforts to further advance a number of potential product candidates into preclinical development activities, (iii) continue to identify and advance a number of fully human therapeutic antibody and ADC preclinical product candidates, (iv) incur higher salary, lab supply and infrastructure costs in connection with supporting all of our programs, (v) invest in our joint ventures, collaborations or other third party agreements, and (vi) expand our corporate infrastructure.

R&D expense for our Sorrento Therapeutics segment increased by $11.4 million as compared to the same quarter of the prior year and was primarily attributable to increased clinical activities related to consulting and lab supply costs incurred in connection with our expanded research and development activities and activities to advance RTX into clinical trials.

R&D expense for our Scilex segment decreased by $0.4 million as compared to the same quarter of the prior year and was primarily driven by lower clinical trial costs, as ZTlido® (lidocaine topical system 1.8%) achieved FDA approval in the first quarter of 2018.

Acquired In-process Research and Development Expenses. Acquired in-process research and development expenses for the three months ended March 31, 2019 were $75.3 million and were primarily due to acquired in-process research and development expenses associated with the acquisition of Semnur during the three months ended March 31, 2019. We did not have acquired in-process research and development expenses during the three months ended March 31, 2018.

General and Administrative Expenses. General and administrative expenses for the three months ended March 31, 2019 and 2018 were $25.1 million and $10.0 million, respectively, or an increase of $15.2 million.

G&A expense for our Sorrento Therapeutics segment decreased by approximately $0.3 million year over year and consisted primarily of salaries and personnel-related expenses for executive, finance and administrative personnel, stock-based compensation expense, professional fees, infrastructure expenses, legal and accounting expenses and other general corporate expenses.

G&A expense for our Scilex segment increased by approximately $14.9 million year over year primarily due to increased selling activities associated with the commercialization of ZTlido® (lidocaine topical system 1.8%).

Intangible Amortization. Intangible amortization for the three months ended March 31, 2019 and 2018 was $966 thousand and $662 thousand, respectively.

Amortization expense for our Sorrento Therapeutics segment remained relatively consistent with prior year.

Amortization expense for our Scilex segment increased due to the amortization of acquired in-process research and development upon commercialization of ZTlido® (lidocaine topical system 1.8%) that occurred in the fourth quarter of 2018.

Loss on Derivative Liability. Loss on derivative liability for the three months ended March 31, 2019 was $14.5 million compared to no loss on derivative liability in the same period in 2018. The loss incurred during the three months ended March 31, 2019 was attributed to revised probabilities related to marketing approval for ZTlido® (lidocaine topical system 5.4%) and revised sales forecasts as further described in Note 12 of the accompanying notes to the consolidated financial statements in Part I, Item 1 of this Form 10-Q.

Loss on Contingent Liabilities. Changes in acquisition consideration payable for the three months ended March 31, 2019 and 2018 resulted in a loss of $0.1 million and $12.2 million, respectively. The change in acquisition consideration payable for the three months ended March 31, 2019 as compared to the same period in 2018 relates primarily to contingent consideration for our acquisition of Virttu Biologics Limited from the prior year, which was settled in 2018.

Interest Expense. Interest expense for the three months ended March 31, 2019 and 2018 was $9.1 million and $1.1 million, respectively. The increase in interest expense of $8.0 million as compared to the same period in 2018 is primarily attributed to interest expense associated with the loan agreement entered into with certain funds and accounts managed by Oaktree Capital Management, L.P. (collectively, the "Lenders") and Oaktree Fund Administration, LLC, as administrative and collateral agent (the "Loan Agreement") and the senior secured notes due 2026 in an aggregate principal amount of $224.0 million (the "Scilex Notes") entered into in the second half of fiscal year 2018.

Interest Income. Interest income for the three months ended March 31, 2019 and 2018 was $534 thousand and $4 thousand, respectively.

Income Tax Expense (Benefit). Income tax benefit for the three months ended March 31, 2019 was $(0.2) million and income tax benefit for the three months ended March 31, 2018 was $(0.9) million. The decrease in income tax benefit was primarily attributable to the increased valuation allowance in 2019.

Loss on equity method investments. Loss on equity method investments for the three months ended March 31, 2019 and 2018 was $0.9 million and $0.9 million, respectively. (See Note 9 of the accompanying notes to the consolidated financial statements in Part I, Item 1 of this Form 10-Q for additional information.)

Net Loss. Net loss for the three months ended March 31, 2019 and 2018 was $146.5 million and $33.5 million, respectively.

Liquidity and Capital Resources

As of March 31, 2019, we had $91.0 million in cash and cash equivalents attributable in part to the following financing arrangements (See Note 12 of the accompanying notes to the consolidated financial statements in Part I, Item 1 of this Form 10-Q for additional information):

On June 13, 2018, pursuant to a Securities Purchase Agreement as amended, with certain accredited investors (the "Securities Purchase Agreement"), we issued and sold to certain purchasers, in a private placement (1) convertible promissory notes in an aggregate principal amount of $37,848,750 (the "Notes"), and (2) warrants to purchase an aggregate of 2,698,662 shares of our common stock.

On September 7, 2018, Scilex entered into purchase agreements (the "2018 Purchase Agreements") with the certain investors (the "Purchasers") and us. Pursuant to the 2018 Purchase Agreements, on September 7, 2018, Scilex, among other things, issued and sold to the Purchasers the Scilex Notes with an aggregate principal of $224.0 million for an aggregate purchase price of $140.0 million (the "Offering"). The net proceeds of the Offering were approximately $89.3 million, after deducting the Offering expenses payable by Scilex and funding a segregated reserve account ($20.0 million) and a segregated collateral account ($25.0 million) pursuant to the terms of an indenture governing the Scilex Notes (the "Indenture"). In connection with the Offering, Scilex also entered into the Indenture governing the Scilex Notes with U.S. Bank National Association, as trustee and collateral agent, and us. Pursuant to the Indenture, we agreed to irrevocably and unconditionally guarantee, on a senior unsecured basis, the punctual performance and payment when due of all obligations of Scilex under the Indenture.

On November 7, 2018, we and certain of our domestic subsidiaries entered into the Loan Agreement with the Lenders and Oaktree Fund Administration, LLC, as administrative and collateral agent, for an initial term loan of $100.0 million (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 Initial Loan was funded on November 7, 2018. The net proceeds of the Initial Loan were approximately $91.3 million, after deducting estimated loan costs, commissions, fees and expenses.

Cash Flows from Operating Activities. Net cash used for operating activities was $44.3 million for the three months ended March 31, 2019 as compared to $24.0 million for the three months ended March 31, 2018. Net cash used reflects a net loss of $146.5 million, which was partially offset by charges related to acquired in-process research and development of $75.3 million, as well as other non-cash reconciling items totaling approximately $28.1 million, primarily related to depreciation and amortization, stock based compensation and loss on derivative liability.

We expect to continue to incur substantial and increasing losses and negative net cash flows from operating activities as we seek to expand and support our clinical and pre-clinical development and research activities, support the commercial launch of ZTlido® and fund our joint ventures, collaborations, and other third party agreements.

Cash Flows from Investing Activities. Net cash used for investing activities was $22.3 million for the three months ended March 31, 2019 as compared to $0.4 million for the three months ended March 31, 2018. Our investing activities used $5.2 million to acquire equipment and building improvements during the first quarter of 2019 and approximately $17.0 million associated with the acquisition of Semnur-related in-process research and development and related assets.

We expect to increase our investment in equipment as we seek to expand and progress our research and development capabilities.

Cash Flows from Financing Activities. Net cash used in financing activities was $1.1 million for the three months ended March 31, 2019 as compared to net cash provided by financing of $28.2 million for the three months ended March 31, 2018. The decrease compared to the same period in prior year is primarily attributed to proceeds from the issuance of common stock, partially offset by the payment of the Scilex consideration related to the regulatory milestone in the prior year.

Future Liquidity Needs. We have principally financed our operations through underwritten public offerings and private equity financings with aggregate net proceeds of $295.1 million since inception, as we have not generated any significant product related revenue from our principal operations to date, and do not expect to generate significant revenue for several years, if ever. We will need to raise additional capital before we exhaust our current cash resources in order to continue to fund our research and development, including our plans for clinical and preclinical trials and new product development, as well as to fund operations generally. As and if necessary, we will seek to raise additional funds through various potential sources, such as equity and debt financings or through corporate collaboration and license agreements. We can give no assurances that we will be able to secure such additional sources of funds to support our operations, or, if such funds are available to us, that such additional financing will be sufficient to meet our needs. These conditions, among others, 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 issue additional equity securities to raise funds, the ownership percentage of existing stockholders would be reduced. New investors may demand rights, preferences or privileges senior to those of existing holders of common stock. 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. These factors raise substantial doubt about our ability to continue as a going concern. Our consolidated financial statements and related notes thereto included elsewhere in this Quarterly Report on Form 10-Q do not include any adjustments that might result from the outcome of this uncertainty.

We anticipate that we will continue to incur net losses into the foreseeable future as we: (i) advance RTX and other product candidates into clinical trials, (ii) continue to identify and advance a number of potential mAb and ADC product candidates into preclinical development activities, (iii) continue our development of, and seek regulatory approvals for, our product candidates, (iv) expand our corporate infrastructure, including the costs associated with being a Nasdaq listed public company, and (v) incur our share of joint venture and collaboration costs for our products and technologies.

We plan to continue to fund our operating losses and capital funding needs through public or private equity or debt financings, strategic collaborations, licensing arrangements, asset sales, government grants or other arrangements.

If we raise additional funds by issuing equity securities, substantial dilution to existing stockholders would result. If we raise additional funds by incurring debt financing, the terms of the debt may involve significant cash payment obligations as well as covenants and specific financial ratios that may restrict our ability to operate our business.

Uses of Cash. We have and plan to expand our business and intellectual property portfolio through the acquisition of new businesses and technologies as well as entering into licensing arrangements.

Off-Balance Sheet Arrangements

Since our inception through March 31, 2019, we have not engaged in any off-balance sheet arrangements as defined in Item 303(a)(4) of Regulation S-K.

New Accounting Pronouncements

Refer to Note 3, "Significant Accounting Policies," in the accompanying notes to the consolidated financial statements in Part I, Item 1 of this Form 10-Q for a discussion of recent accounting pronouncements.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Interest Rate Risk. Our exposure to market risk is confined to our cash and cash equivalents and debt securities. We have cash and cash equivalents and invest primarily in high-quality money market funds, which we believe are subject to limited credit risk. Due to the low risk profile of our investments, an immediate 10% change in interest rates would not have a material effect on the fair market value of our portfolio. We do not believe that we have any material exposure to interest rate risk arising from our investments.

The fair market value of our Loan Agreement is subject to interest rate risk as a portion of the interest rate fluctuates based on the LIBOR. Generally, the fair market value of the debt will vary as interest rates increase or decrease. We have determined that there was no material market risk exposure from such instruments to our consolidated financial position, results of operations or cash flows as of March 31, 2019.

We are not subject to interest rate risk on the Notes issued in 2018 in connection with our Securities Purchase Agreement as the Notes have a fixed rate of 5.00%. We are not subject to interest rate risk on the Scilex Notes associated with our 2018 Purchase Agreements as repayment of the Scilex Notes is determined by projected net sales as further discussed in Note 12 in the accompanying notes to the consolidated financial statements in Part I, Item 1 of this Form 10-Q. For both the Notes and Scilex Notes, changes in interest rates will generally affect the fair value of the debt instrument, but not our earnings or cash flows.

Capital Market Risk. We currently do not have significant revenues from grants or sales and services and we have no product revenues from our planned principal operations and therefore depend on funds raised through other sources. One source of funding is through future debt or equity offerings. Our ability to raise funds in this manner depends upon, among other things, capital market forces affecting our stock price.

Item 4. Controls and Procedures.

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our reports filed under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), is recorded, processed, summarized and reported within the time periods specified in the SEC's regulations, rules and forms and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow for timely decisions regarding required disclosure.

In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. As required by Rule 13a-15(b) promulgated by the SEC under the Exchange Act, we carried out an evaluation, under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered by this Quarterly Report on Form 10-Q. Based on the foregoing, our principal executive officer and principal

financial officer concluded that our disclosure controls and procedures were not effective as of the end of the period covered by this Quarterly Report on Form 10-Q as a result of the material weaknesses described below.

In March 2018, in connection with the preparation of our 2017 financial statements, we identified that the accounting implications of terms in certain unusual or non-recurring and significant agreements were not identified and assessed on a timely basis. Further, valuation of certain associated assets or liabilities were not properly reassessed at the end of each reporting period. The material weakness did not result in a restatement of previously issued annual consolidated financial statements or condensed interim consolidated financial statements.

During 2018, we undertook remediation measures, including designing new controls and enhancing existing internal controls which, if effectively implemented, would provide reasonable assurance that we timely and precisely (1) identify and assess the accounting implications of terms in unusual or non-recurring and significant agreements and (2) reassess the valuation of associated assets or liabilities at the end of each reporting period. These included measures designed to improve centralized documentation control, improve the internal communication procedures between senior executive management, accounting personnel, and related business owners, leverage external accounting experts as appropriate to perform the necessary reviews, and strengthen policies and procedures related to the transferring of responsibilities and the handoff of personnel duties. However, in connection with the preparation of our consolidated financial statements for the year ended December 31, 2018 there were multiple errors identified related to management's review of significant agreements. We believe the errors identified are due to deficiencies in our internal control environment resulting from insufficient competent accounting resources, including a Chief Accounting Officer, to effectively operate internal controls over financial reporting in a timely manner.

This ineffective control environment contributed to the following material weaknesses: (i) management did not adequately evaluate the underlying assumptions associated with the accounting for key terms identified in significant agreements, which in the current year included convertible notes and debt agreements and (ii) management did not accurately assess the significant assumptions in order to properly estimate the fair value of contingent consideration liabilities. We also identified the following deficiencies in our internal control environment resulting from insufficient accounting resources that collectively represent a material weakness: Management did not properly assess significant assumptions through the performance of precise reviews of accounting estimates including probability of occurrence and assumptions used in evaluating the fair value of embedded derivatives, fair value of indefinite-lived intangible assets, and income tax related balances. Such material weaknesses could result in material misstatements of the aforementioned account balances or disclosures in the annual or interim consolidated financial statements that would not be prevented or detected.

As a result of the material weaknesses, we are in the process of implementing remediation measures including, but not limited to, performing a comprehensive assessment of accounting and finance resource requirements and hiring a Chief Accounting Officer and other personnel with sufficient accounting expertise to improve the operating effectiveness of our review controls and monitoring activities, and utilizing external accounting experts as appropriate. We believe that our remediation measures, if effectively implemented, will provide reasonable assurance that we timely identify terms in agreements that could have material accounting implications, assess the accounting and disclosure implications of the terms, and account for such items in the financial statements appropriately. Any failure to implement these improvements to our internal control over financial reporting would result in continued material weaknesses in our internal control and could impact our ability to produce reliable financial reports, effectively manage the company or prevent fraud, and could potentially harm our business and our performance.

Changes in Internal Control Over Financial Reporting

There has been no change in our internal control over financial reporting during the quarter ended March 31, 2019 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting. Our plans for remediating our material weaknesses, as identified above, are still in progress and would constitute changes in our internal control over financial reporting prospectively once implemented.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings.

To the best of our knowledge, we are not currently a party to any legal proceedings that, individually or in the aggregate, are deemed to be material to our financial condition or results of operations.

In the normal course of business, we may be named as a defendant in one or more lawsuits. We are not a party to any outstanding material litigation and management is currently not aware of any legal proceedings that, individually or in the aggregate, are deemed to be material to our financial condition or results of operations.

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 us 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. Specifically, we have filed:

- An arbitration demand with the American Arbitration Association in Los Angeles, California against NantPharma, LLC and Chief Executive Officer Patrick Soon-Shiong, seeking damages in excess of $1 billion, as well as additional punitive damages, related to alleged fraud and breaches of the Stock Sale and Purchase Agreement, dated May 14, 2015, entered into between NantPharma LLC and us, included as Exhibit 10.2 to our Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission (the "SEC") on August 7, 2015. We make no representations as to the likely success or outcome of such arbitration; and

- An action in the Los Angeles Superior Court derivatively on behalf of Immunotherapy NANTibody LLC ("NANTibody") against NantCell, Inc., NANTibody Board Member and NantCell, Inc. Chief Executive Officer Patrick Soon-Shiong, and NANTibody officer Charles Kim, related to several breaches of the June 11, 2015 Limited Liability Company Agreement for NANTibody entered into between us and NantCell, Inc. The suit also alleges breaches of fiduciary duties and seeks, inter alia, a declaration that the Assignment Agreement entered into on July 2, 2017, between NantPharma, LLC and NANTibody is void and an equitable unwinding of the Assignment Agreement. The suit calls for the restoration of $90.05 million to the NANTibody capital account, thereby restoring our equity method investment in NANTibody to its invested amount as of June 30, 2017 amount of $40 million. We make no representations as to the likely success or outcome of such lawsuit.

Item 1A. Risk Factors.

Our Annual Report on Form 10-K for the year ended December 31, 2018, Part I–Item 1A, Risk Factors, describes important risk factors that could cause our business, financial condition, results of operations and growth prospects to differ materially from those indicated or suggested by forward-looking statements made in this Quarterly Report on Form 10-Q or presented elsewhere by management from time to time. Except as set forth below, there have been no material changes in our risk factors since the filing of our Annual Report on Form 10-K for the year ended December 31, 2018. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial may also materially and adversely affect our business.

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"), ZTlido® (lidocaine topical system 5.4%), 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 have incurred significant losses since inception and anticipate that we will incur continued losses for the foreseeable future.

As of March 31, 2019 and December 31, 2018, we had an accumulated deficit of $475.8 million and $367.8 million, respectively. We continue to incur significant research and development and other expenses related to our ongoing operations. We have incurred operating losses since our inception, expect to continue to incur significant operating losses for the foreseeable future, and we expect these losses to increase as we: (i) advance RTX, ZTlido® (lidocaine topical system 5.4%), SP-102 and our other product candidates into further clinical trials and pursue other development, acquire, develop and manufacture clinical trial materials and increase other regulatory operating activities, (ii) incur incremental expenses associated with our efforts to further advance a number of potential product candidates into preclinical development activities, (iii) continue to identify and advance a number of fully human therapeutic antibody and ADC preclinical product candidates, (iv) incur higher salary, lab supply and infrastructure costs incurred in connection with supporting all of our programs, (v) invest in our joint ventures, collaborations or other third party agreements, (vi) incur expenses in conjunction with defending and enforcing our rights in various litigation matters, (vii) expand our corporate, development and manufacturing infrastructure, and (viii) support our subsidiaries, such as Scilex Pharmaceuticals Inc. ("Scilex") and Semnur Pharmaceuticals, Inc. ("Semnur"), in their clinical trial, development and commercialization efforts. As such, we are subject to all risks incidental to the development of new biopharmaceutical products and related companion diagnostics, and we may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our business. Our prior losses, combined with expected future losses, have had and will continue to have an adverse effect on our stockholders' equity and working capital.

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, ZTlido® (lidocaine topical system 5.4%) 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;
- our obligations under our debt arrangements; 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. Non-clinical studies are ongoing and phase II trial is planned to start in 2019 with higher strength ZTlido® (lidocaine topical system 5.4%). 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 ZTlido® (lidocaine topical system 5.4%), 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.

The terms of our outstanding convertible promissory notes place restrictions on our operating and financial flexibility. If we raise additional capital through debt financing, the terms of any new debt could further restrict our ability to operate our business.

On June 13, 2018, we issued and sold convertible promissory notes in an aggregate principal amount of $37.8 million (the "Convertible Notes") to certain accredited investors pursuant to a Securities Purchase Agreement, as amended (the "Securities Purchase Agreement"). The Convertible Notes accrue interest at a rate equal to 5.0% per annum and mature upon the earlier to occur of June 13, 2023 and the date of the closing of a change of control (the "Maturity Date"). At any time and from time to time before the Maturity Date, the holders of the Convertible Notes have the option to convert any portion of the

outstanding principal amount of the Convertible Notes that is equal to or greater than the lesser of: (1) $4,000,000, and (2) the then-outstanding principal amount of the Convertible 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. Any conversion of the Convertible Notes could result in material dilution to our existing stockholders. Accrued but unpaid interest on the Convertible 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 holder elects to convert any of the principal amount of their Convertible Note, then all accrued but unpaid interest on such portion of the principal amount shall become due and payable in cash. The Securities Purchase Agreement and the Convertible Notes contain customary restrictive covenants, which will remain in effect so long as the aggregate outstanding principal amount of the Convertible Notes is at least $18.8 million, including significant limitations on incurring additional indebtedness, liens, declaring cash dividends or making cash distributions and dispositions of our assets, in each case subject to customary exceptions. The breach of such covenants or the occurrence of certain other events would result in the occurrence of an event of default. Upon the occurrence of an event of default and following any applicable cure periods, the interest rate under the Convertible Notes will automatically increase to 12.0% per annum, effective until the day after such default is cured, and the holders of the Convertible Notes may declare all outstanding obligations immediately due and payable and take such other actions as set forth in the Convertible Notes, potentially requiring us to renegotiate our agreement on terms less favorable to us or to immediately cease operations. Any declaration by the holders of the Convertible Notes of an event of default could significantly harm our business and prospects and could cause the price of our common stock to decline.

On September 7, 2018, Scilex issued and sold senior secured notes due 2026 in an aggregate principal amount of $224,000,000 (the "Scilex Notes") for an aggregate purchase price of $140,000,000 (the "Scilex Offering"). In connection with the Scilex Offering, we also entered into an indenture (the "Scilex Indenture") governing the Scilex Notes with U.S. Bank National Association, a national banking association, as trustee (the "Trustee") and collateral agent, and Scilex. Pursuant to the Scilex Indenture, we agreed to irrevocably and unconditionally guarantee, on a senior unsecured basis, the punctual performance and payment when due of all obligations of Scilex under the Scilex Indenture.

The Scilex Indenture governing the Scilex Notes contains customary events of default with respect to the Scilex Notes (including a failure to make any payment of principal on the Scilex Notes when due and payable), and, upon certain events of default occurring and continuing, the Trustee by notice to Scilex, or the holders of at least 25% in principal amount of the outstanding Scilex Notes by notice to Scilex and the Trustee, may (subject to the provisions of the Scilex Indenture) declare 100% of the then-outstanding principal amount of the Scilex Notes to be due and payable. Upon such a declaration of acceleration, such principal will be due and payable immediately. In the case of certain events, including bankruptcy, insolvency or reorganization involving us or Scilex, the Scilex Notes will automatically become due and payable.

Pursuant to the Scilex Indenture, we and Scilex must also comply with certain covenants with respect to the commercialization of ZTlido® (lidocaine topical system 1.8%), as well as customary additional affirmative covenants, such as furnishing financial statements to the holders of the Scilex Notes, minimum cash requirements and net sales reports, and negative covenants, including limitations on the following: the incurrence of debt, the payment of dividends, the repurchase of shares and, under certain conditions, making certain other restricted payments, the prepayment, redemption or repurchase of subordinated debt, a merger, amalgamation or consolidation involving Scilex, engaging in certain transactions with affiliates; and the making of investments other than those permitted by the Scilex Indenture.

On November 7, 2018, we and certain of our domestic subsidiaries (the "Guarantors") entered into a Term Loan Agreement (the "Initial Loan Agreement") with certain funds and accounts managed by Oaktree Capital Management, L.P. (collectively, the "Lenders") and Oaktree Fund Administration, LLC, as administrative and collateral agent (the "Agent"), for an initial term loan of $100.0 million (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 "Original Delayed Draw Term Loan"). The Initial Loan was funded on November 7, 2018. On May 3, 2019, we, the Guarantors, the Lenders and the Agent entered into an amendment to the Initial Loan Agreement (the "Amendment" and, together with the Initial Loan Agreement, the "Loan Agreement"). Under the Amendment, the Lenders funded $20.0 million of the Original Delayed Draw Term Loan on May 3, 2019. The Loan Agreement contains customary affirmative and restrictive covenants and representations and warranties, including financial reporting obligations and minimum liquidity requirements and limitations on indebtedness, liens, negative pledges, certain restricted payments, subsidiary distributions, investments, fundamental transactions, dispositions of assets and transactions with affiliates. The Loan Agreement also contains other customary provisions, such as expense reimbursement and confidentiality obligations, as well as indemnification rights for the benefit of the Lenders.

If we raise any additional debt financing, the terms of such additional debt could further restrict our operating and financial flexibility.

We have significantly restructured our business and implemented a new segment reporting structure. Our two industry segments, designated as Sorrento Therapeutics and Scilex have been in effect for a limited period of time and there are no assurances that we will be able to successfully operate as a restructured business.

We have traditionally focused on the discovery and development of innovative therapies focused on oncology and the treatment of chronic cancer pain as well as immunology and infectious diseases based on our platform technologies.

With our previous acquisition of a majority stake in Scilex, a developer of specialty pharmaceutical products for the treatment of chronic pain, and the subsequent contribution of such stake to our majority-owned subsidiary Scilex Holding Company ("SHC") in connection with SHC's acquisition of Semnur, a pharmaceutical company developing an injectable product for the treatment of lower back pain, SHC will focus on non-opioid pain management.

Our strategy is based on a number of factors and assumptions, some of which are not within our control, such as the actions of third parties. There can be no assurance that we will be able to successfully execute all or any elements of our strategy, or that our ability to successfully execute our strategy will be unaffected by external factors. If we are unsuccessful in growing our business as planned, our financial performance could be adversely affected.

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 SHC in connection with the acquisition of Semnur by SHC in March 2019. These assets, together, constitute our Scilex segment. 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.

In addition, we may issue shares of our common stock or other equity-linked securities in connection with future acquisitions of businesses and technologies. Any such issuances of shares of our common stock could result in material dilution to our existing stockholders.

Risks Related to Ownership of Our Common Stock

The market price of our common stock may fluctuate significantly, and investors in our common stock may lose all or a part of their investment.

The market prices for securities of biotechnology and pharmaceutical companies have historically been highly volatile, and the market has from time to time experienced significant price and volume fluctuations that are unrelated to the operating performance of particular companies. For example, from April 2, 2018 to March 29, 2019, our closing stock price ranged from $1.86 to $8.00 per share. The market price of our common stock may fluctuate significantly in response to numerous factors, some of which are beyond our control, such as:

- actual or anticipated adverse results or delays in our clinical trials;
- our failure to commercialize our product candidates, if approved;
- unanticipated serious safety concerns related to the use of any of our product candidates;
- adverse regulatory decisions;
- changes in laws or regulations applicable to our product candidates, including but not limited to clinical trial requirements for approvals;
- legal disputes or other developments relating to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our product candidates, government investigations and the results of any proceedings or lawsuits, including, but not limited to, patent or stockholder litigation;
- our decision to initiate a clinical trial, not initiate a clinical trial or to terminate an existing clinical trial;
- our dependence on third parties, including CROs;
- announcements of the introduction of new products by our competitors;
- market conditions in the pharmaceutical and biotechnology sectors;
- announcements concerning product development results or intellectual property rights of others;
- future issuances of common stock or other securities;
- the addition or departure of key personnel;
- failure to meet or exceed any financial guidance or expectations regarding development milestones that we may provide to the public;
- actual or anticipated variations in quarterly operating results;
- our failure to meet or exceed the estimates and projections of the investment community;
- overall performance of the equity markets and other factors that may be unrelated to our operating performance or the operating performance of our competitors, including changes in market valuations of similar companies;
- conditions or trends in the biotechnology and biopharmaceutical industries;
- introduction of new products offered by us or our competitors;
- announcements of significant acquisitions, strategic partnerships, joint ventures or capital commitments by us or our competitors;
- issuances of debt or equity securities;
- sales of our common stock by us or our stockholders in the future;
- trading volume of our common stock;
- ineffectiveness of our internal controls;
- publication of research reports about us or our industry or positive or negative recommendations or withdrawal of research coverage by securities analysts;
- failure to effectively integrate the acquired companies' operations;
- general political and economic conditions;
- effects of natural or man-made catastrophic events; and

- other events or factors, many of which are beyond our control.

Further, the equity markets in general have recently experienced extreme price and volume fluctuations. Continued market fluctuations could result in extreme volatility in the price of our common stock, which could cause a decline in the value of our common stock. Price volatility of our common stock might worsen if the trading volume of our common stock is low. The realization of any of the above risks or any of a broad range of other risks, including those described in these "Risk Factors," could have a dramatic and material adverse impact on the market price of our common stock.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

None.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

None.

Item 6. Exhibits.

EXHIBIT INDEX

2.1+	Agreement and Plan of Merger, dated as of March 18, 2019, by and among Sorrento Therapeutics, Inc., Semnur Pharmaceuticals, Inc., Scilex Holding Company, Sigma Merger Sub, Inc. and Fortis Advisors LLC, solely as the Equityholders' Representative (incorporated by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed with the SEC on March 22, 2019).
3.1	Amended and Restated Bylaws of Sorrento Therapeutics, Inc. (incorporated by reference to Exhibit 3.3 to the Registrant's Annual Report on Form 10-K filed with the SEC on March 15, 2019).
4.1	Exchange and Registration Rights Agreement, dated as of March 18, 2019, by and among Sorrento Therapeutics, Inc. and the stockholders and stock option holders of Semnur Pharmaceuticals, Inc. set forth on Schedule A thereto, (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the SEC on March 22, 2019).
4.2	Form of Warrant, dated May 3, 2019, issued by Sorrento Therapeutics, Inc. (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed with the SEC on May 3, 2019).
4.3	Amendment No. 1 to the Registration Rights Agreement, dated as of May 3, 2019, by and among Sorrento Therapeutics, Inc. and the persons party thereto (incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed with the SEC on May 3, 2019).
10.1*+	Amendment No. 1 to Term Loan Agreement, dated as of May 3, 2019, by and among Sorrento Therapeutics, Inc., certain subsidiaries of Sorrento Therapeutics, Inc., as guarantors, certain funds affiliated with Oaktree Capital Management, L.P. and Oaktree Fund Administration, LLC. (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the SEC on May 3, 2019).
31.1	Certification of Henry Ji, Ph.D., Principal Executive Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, as amended.
31.2	Certification of Jiong Shao, Principal Financial Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, as amended.
32.1	Certification of Henry Ji, Ph.D., Principal Executive Officer and Jiong Shao, Principal Financial Officer, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, as amended.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

+ Non-material schedules and exhibits have been omitted pursuant to Item 601(b)(2) of Regulation S-K. The Registrant hereby undertakes to furnish supplementally copies of any of the omitted schedules and exhibits upon request by the SEC.

* Certain identified information has been omitted pursuant to Item 601(b)(10) of Regulation S-K because such information is both (i) not material and (ii) would likely cause competitive harm to the Registrant if publicly disclosed. The Registrant hereby undertakes to furnish supplemental copies of the unredacted exhibit upon request by the SEC.

SIGNATURES

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

Sorrento Therapeutics, Inc.

Date: May 15, 2019

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

Henry Ji, Ph.D.

Chairman of the Board of Directors, Chief Executive Officer & President

(Principal Executive Officer)

Date: May 15, 2019

By: /s/ Jiong Shao

Jiong Shao

Executive Vice President & Chief Financial Officer

(Principal Financial Officer)

Exhibit 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
Pursuant to Rule 13a-14(a) adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Henry Ji, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Sorrento Therapeutics, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Henry Ji, Ph.D.

Henry Ji, Ph.D.
Chairman of the Board of Directors, Chief Executive Officer and President
(Principal Executive Officer)

Dated: May 15, 2019

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
Pursuant to Rule 13a-14(a) adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Jiong Shao, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Sorrento Therapeutics, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Jiong Shao

Jiong Shao
Chief Financial Officer
(Principal Financial Officer)

Dated: May 15, 2019

Exhibit 32.1

CERTIFICATIONS OF
PRINCIPAL EXECUTIVE OFFICER AND PRINCIPAL FINANCIAL OFFICER
PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Henry Ji, principal executive officer of Sorrento Therapeutics, Inc. (the "Company"), certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that to my knowledge:

1. The Quarterly Report on Form 10-Q of the Company for the period ended March 31, 2019 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 15, 2019

By: /s/ Henry Ji, Ph.D.
Henry Ji, Ph.D.
Chairman of the Board of Directors, Chief Executive Officer and President
(Principal Executive Officer)

I, Jiong Shao, principal financial officer of Sorrento Therapeutics, Inc. (the "Company"), certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that to my knowledge:

1. The Quarterly Report on Form 10-Q of the Company for the period ended March 31, 2019 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 15, 2019

By: /s/ Jiong Shao
Jiong Shao
Chief Financial Officer
(Principal Financial Officer)

A signed original of these certifications has been provided to Sorrento Therapeutics, Inc. and will be retained by Sorrento Therapeutics, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

These certifications are being furnished solely to accompany this quarterly report pursuant to 18 U.S.C. Section 1350, and shall not be deemed filed for purposes of Section 18 of the Securities Exchange Act of 1934 and are not to be incorporated by reference into any filing of Sorrento Therapeutics, Inc., whether made before or after the date hereof, regardless of any general incorporation language in such filing.