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 June 30, 2022

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)

(858) 203-4100

(Registrant's Telephone Number, Including Area Code)
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

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 filer, 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 August 8, 2022 was 449,952,163.

Sorrento Therapeutics, Inc.

Form 10-Q for the Quarter Ended June 30, 2022

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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	June 30, 2022	December 31, 2021
Current assets:		
Cash and cash equivalents	$ 70,345	$ 36,665
Marketable investments	63,259	90,217
Accounts receivables, net	24,715	18,715
Inventory	20,697	8,106
Prepaid expenses	8,960	11,804
Other current assets	8,072	7,482
Total current assets	196,048	172,989
Property and equipment, net	42,530	41,325
Operating lease right-of-use assets	86,094	85,173
Intangibles, net	172,566	259,705
Goodwill	81,351	79,525
Equity investments	50,739	51,271
Other assets, net	2,804	4,830
Total assets	$ 632,132	$ 694,818
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 24,937	$ 27,414
Accrued payroll and related benefits	28,394	21,503
Accrued expenses	45,816	37,975
Current portion of deferred revenue	1,018	1,108
Current portion of operating lease liabilities	13,508	11,539
Current portion of contingent consideration	397	397
Acquisition consideration	7,537	7,537
Current portion of debt	23,714	31,980
Total current liabilities	145,321	139,453
Long-term debt, net of discount	83,069	110,627
Deferred tax liabilities, net	2,358	2,426
Deferred revenue	117,445	118,942
Derivative liabilities	500	35,700
Operating lease liabilities	84,316	83,431
Contingent consideration	57,949	124,349
Other long-term liabilities	5,411	1,761
Total liabilities	$ 496,369	$ 616,689
Commitments and contingencies (See Note 10)		
Equity:		
Sorrento Therapeutics, Inc. equity		
Common stock, $0.0001 par value 750,000,000 shares authorized and 436,418,964 and 314,573,225 shares issued and outstanding at June 30, 2022 and December 31, 2021, respectively	18	32
Additional paid-in capital	1,826,810	1,513,758
Accumulated other comprehensive income	837	1,026
Accumulated deficit	(1,646,178)	(1,386,604)
Treasury stock, 7,568,182 shares at cost at June 30, 2022, and December 31, 2021	(49,464)	(49,464)
Total Sorrento Therapeutics, Inc. stockholders' equity	132,023	78,748
Noncontrolling interests	3,740	(619)
Total equity	135,763	78,129
Total liabilities and stockholders' equity	$ 632,132	$ 694,818

See accompanying notes to unaudited consolidated financial statements

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Revenues:				
Net product revenues	$ 8,591	$ 7,854	$ 18,582	$ 14,877
Service revenues	2,870	5,657	11,263	12,889
Total revenues	11,461	13,511	29,845	27,766
Operating costs and expenses:				
Cost of products sold	3,393	525	6,270	1,377
Cost of services	2,311	2,596	5,191	5,130
Research and development	48,467	54,506	112,193	98,339
Acquired in-process research and development	—	4,971	12,272	12,483
Selling, general and administrative	48,136	50,293	92,714	93,687
Intangible amortization	1,035	1,070	2,069	2,105
Increase (decrease) on contingent consideration	(64,300)	100	(66,400)	100
Loss on impairment of intangible assets	90,780	—	90,780	—
Total operating costs and expenses	129,822	114,061	255,089	213,221
Loss from operations	(118,361)	(100,550)	(225,244)	(185,455)
Gain (Loss) on derivative liabilities	(2,700)	(300)	4,800	1,900
Gain (Loss) on marketable investments	(95,492)	(63,901)	(26,958)	30,530
Loss on debt extinguishment	(471)	(584)	(5,732)	(6,695)
Loss on foreign currency exchange	(561)	(1)	(165)	(541)
Interest expense, net	(2,314)	(2,016)	(5,563)	(4,382)
Other income (loss)	(700)	34	(683)	(44)
Loss before income tax	(220,599)	(167,318)	(259,545)	(164,687)
Income tax expense (benefit)	(1,050)	(641)	413	(847)
Gain (loss) on equity method investments	72	(22)	(59)	(441)
Net loss	(219,477)	(166,699)	(260,017)	(164,281)
Net loss attributable to noncontrolling interests	(718)	(84)	(443)	(176)
Net loss attributable to Sorrento	$ (218,759)	$ (166,615)	$ (259,574)	$ (164,105)
Net loss per share - basic per share attributable to Sorrento	$ (0.54)	$ (0.57)	$ (0.70)	$ (0.58)
Net loss per share - diluted per share attributable to Sorrento	$ (0.54)	$ (0.57)	$ (0.70)	$ (0.58)
Weighted-average shares used during period - basic shares attributable to Sorrento	402,801	290,003	370,144	285,330
Weighted-average shares used during period - diluted shares attributable to Sorrento	402,801	290,003	370,144	285,330

See accompanying notes to unaudited consolidated financial statements

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Net loss	$ (219,477)	$ (166,699)	$ (260,017)	$ (164,281)
Other comprehensive income:				
Foreign currency translation adjustments	1,060	688	837	613
Total other comprehensive income	1,060	688	837	613
Comprehensive loss	(218,417)	(166,011)	(259,180)	(163,668)
Comprehensive loss attributable to noncontrolling interests	(718)	(84)	(443)	(176)
Comprehensive loss attributable to Sorrento	$ (217,699)	$ (165,927)	$ (258,737)	$ (163,492)

See accompanying notes to unaudited consolidated financial statements

SORRENTO THERAPEUTICS, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(In thousands; unaudited)

	Six Months Ended June 30, 2022								
	Common Stock		Treasury Stock						
	Shares	Amount	Shares	Amount	Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Noncontrolling Interest	Total
Balance, December 31, 2021	314,573	$ 32	7,568	$ (49,464)	$ 1,513,758	$ 1,026	$ (1,386,604)	$ (619)	$ 78,129
Issuance of common stock under equity compensation plans	438	—	—	—	132	—	—	—	132
Issuance of common stock for equity offerings	58,875	6	—	—	164,431	—	—	—	164,437
Acquisitions consideration paid in equity	1,282	—	—	—	4,435	—	—	—	4,435
Stock-based compensation	—	—	—	—	20,854	—	—	—	20,854
Foreign currency translation adjustment	—	—	—	—	—	(1,249)	—	—	(1,249)
Net loss	—	—	—	—	—	—	(40,815)	275	(40,540)
Balance, March 31, 2022	375,168	$ 38	7,568	$ (49,464)	$ 1,703,610	$ (223)	$ (1,427,419)	$ (344)	$ 226,198
Issuance of common stock under equity compensation plans	544	—	—	—	668	—	—	—	668
Issuance of common stock for equity offerings	60,707	6	—	—	104,163	—	—	—	104,169
Stock-based compensation	—	—	—	—	18,369	—	—	—	18,369
Changes to noncontrolling interests	—	(26)	—	—	—	—	—	4,802	4,776
Foreign currency translation adjustment	—	—	—	—	—	1,060	—	—	1,060
Net loss	—	—	—	—	—	—	(218,759)	(718)	(219,477)
Balance, June 30, 2022	436,419	$ 18	7,568	$ (49,464)	$ 1,826,810	$ 837	$ (1,646,178)	$ 3,740	$ 135,763

	Six Months Ended June 30, 2021								
	Common Stock		Treasury Stock						
	Shares	Amount	Shares	Amount	Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Noncontrolling Interest	Total
Balance, December 31, 2020	275,286	$ 28	7,568	$ (49,464)	$ 1,172,346	$ 520	$ (958,279)	$ (24,420)	$ 140,731
Issuance of common stock under equity compensation plans	500	—	—	—	5,394	—	—	—	5,394
Issuance of common stock upon exercise of warrants	2,550	—	—	—	9,050	—	—	—	9,050
Issuance of common stock for equity offerings	3,901	1	—	—	42,208	—	—	—	42,209
Other acquisitions, license agreements and investments paid in equity	851	—	—	—	7,500	—	—	—	7,500
Changes to noncontrolling interests from increased ownership in Scilex Holding	2,567	—	—	—	(23,963)	—	—	23,963	—
Stock-based compensation	—	—	—	—	23,660	—	—	—	23,660
Foreign currency translation adjustment	—	—	—	—	—	(75)	—	—	(75)
Net Income (loss)	—	—	—	—	—	—	2,510	(92)	2,418
Balance, March 31, 2021	285,655	$ 29	7,568	$ (49,464)	$ 1,236,195	$ 445	$ (955,769)	$ (549)	$ 230,887
Issuance of common stock under equity compensation plans	300	—	—	—	1,377	—	—	—	1,377
Issuance of common stock for equity offerings	5,886	1	—	—	50,751	—	—	—	50,752
Equity issued for the acquisition of ACEA Therapeutics, Inc.	5,519	—	—	—	42,168	—	—	—	42,168
Other acquisitions, license agreements and investments paid in equity	615	—	—	—	5,378	—	—	—	5,378
Stock-based compensation	—	—	—	—	20,984	—	—	—	20,984
Foreign currency translation adjustment	—	—	—	—	—	688	—	—	688
Net loss	—	—	—	—	—	—	(166,615)	(84)	(166,699)
Balance, June 30, 2021	297,975	$ 30	7,568	$ (49,464)	$ 1,356,853	$ 1,133	$ (1,122,384)	$ (633)	$ 185,535

See accompanying notes to unaudited consolidated financial statements

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

	Six Months Ended June 30,	
Operating activities	**2022**	**2021**
Net (loss) income	$ (260,017)	$ (164,281)
Adjustments to reconcile net loss to net cash used for operating activities:		
Depreciation and amortization	6,534	6,056
Non-cash operating lease cost	2,176	1,492
Non-cash interest expense and amortization of debt issuance costs	4,892	4,010
Payment on notes attributed to accreted interest related to the debt discounts	(22,057)	(10,783)
Acquired in-process research and development	12,271	12,524
Stock-based compensation	39,116	46,406
Loss on debt extinguishment	5,732	6,695
Gain on derivative liabilities	(4,800)	(1,900)
Loss on marketable investments	26,958	(30,530)
Loss on equity method investments	59	441
Gain (Loss) on contingent consideration	(66,400)	100
Loss on impairment of intangible assets	90,780	—
Deferred income taxes	(671)	(916)
Changes in operating assets and liabilities, excluding effect of acquisitions:		
Accounts receivable	(2,389)	(1,429)
Inventory	(11,375)	(2,684)
Accrued payroll	6,989	(2,503)
Prepaid expenses, deposits and other assets	4,280	662
Accounts payable	1,427	2,936
Accrued expenses and other liabilities	3,976	5,739
Deferred revenue	(1,587)	776
Other	(242)	617
Net cash used for operating activities	(164,348)	(126,572)
Investing activities		
Proceeds from sale of marketable investment	—	95,171
Purchases of property and equipment	(5,298)	(5,487)
ACEA acquisition consideration paid in cash, net of cash acquired	—	(754)
Virex Health acquisition consideration paid in cash, net of cash acquired	(6,544)	—
Other acquisitions and investments considerations paid in cash, net of cash acquired	(3,550)	(12,274)
Net cash (used for) provided by investing activities	(15,392)	76,656
Financing activities		
Proceeds from equity offerings, net of issuance costs	268,581	92,961
Proceeds from short-term debt, net of issuance costs	57,093	22,456
Proceeds from exercises of stock options and warrants	805	11,974
Repayments of debt and other obligations	(111,339)	(56,976)
Net cash provided by financing activities	215,140	70,415
Net change in cash, cash equivalents and restricted cash	35,400	20,499
Net effect of exchange rate changes on cash	(1,720)	328
Cash, cash equivalents and restricted cash at beginning of period	36,665	56,464
Cash, cash equivalents and restricted cash at end of period	$ 70,345	$ 77,291
Supplemental disclosures:		
Cash paid during the period for:		
Interest	234	88
Income Taxes	(31)	—
Supplemental disclosures of non-cash investing and financing activities:		
Changes to noncontrolling interests from increased ownership in Scilex Holding	—	23,963
ACEA acquisition consideration paid in equity	—	42,168
Virex Health acquisition consideration paid in equity	4,435	—
Deferred consideration for intangible asset acquisition	3,650	—
Other acquisitions, license agreements and investments paid in equity	—	12,877
Property and equipment costs incurred but not paid	950	808
Non-cash additions related to leasehold improvements	—	2,963
Short-term debt	—	7,304

See accompanying notes to unaudited consolidated financial statements

SORRENTO THERAPEUTICS, INC.
NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS
June 30, 2022

1. Basis of Presentation and Summary of Significant Accounting Policies

Basis of Presentation and Principles of Consolidation

The accompanying consolidated financial statements include the accounts of the subsidiaries of Sorrento Therapeutics, Inc. (the "Company"). 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. Certain amounts in the prior period consolidated financial statements have been reclassified to conform with the current period presentation.

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, 2021, filed with the Securities and Exchange Commission (the "SEC") on March 11, 2022. Operating results for interim periods are not expected to be indicative of operating results for the Company's 2022 fiscal year, or any subsequent period. The unaudited interim financial statements included herein reflect all normal and recurring adjustments that are necessary for a fair presentation of the results for the interim periods presented.

Use of Estimates

To prepare consolidated financial statements in conformity with accounting principles generally accepted in the U.S., management must make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ from those estimates.

Significant Accounting Policies

During the six months ended June 30, 2022, there have been no changes to the Company's significant accounting policies as described in its Annual Report on Form 10-K for the fiscal year ended December 31, 2021, filed with the SEC on March 11, 2022.

Revenue Recognition

The following table shows revenue disaggregated by product and service type for the three and six months ended June 30, 2022 and 2021 (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Scilex Pharmaceuticals Inc. product sales	$ 7,926	$ 7,802	$ 14,738	$ 14,788
Sorrento Therapeutics, Inc. product revenues	665	52	3,844	89
Net product revenues	$ 8,591	$ 7,854	$ 18,582	$ 14,877
Concortis Biosystems Corporation	$ 1,983	$ 3,468	$ 6,617	$ 8,930
Bioserv Corporation	592	1,382	1,467	2,581
Other service revenues	295	807	3,179	1,378
Service revenues	$ 2,870	$ 5,657	$ 11,263	$ 12,889

The Company recorded $1.8 million in other service revenues associated with Celularity Inc. ("Celularity") for the six months ended June 30, 2022. The Company held an ownership interest of approximately 14.3% of Celularity on a non-diluted basis at June 30, 2022. See Note 4 for details.

Inventory

The Company had $13.7 million in finished goods and $7.0 million in raw materials and other inventory at June 30, 2022. The Company had $4.7 million in finished goods and $3.3 million in raw materials and other inventory at December 31, 2021.

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

negative working capital and 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, debt servicing 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 for one year after the date the financial statements are issued.

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.

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. Fair Value Measurements

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

	Fair Value Measurements at June 30, 2022			
	Balance	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Marketable investments	$ 63,259	$ 1,700	$ —	$ 61,559
Total assets	$ 63,259	$ 1,700	$ —	$ 61,559
Liabilities:				
Derivative liabilities - non-current	$ 500	$ —	$ —	$ 500
Contingent consideration	397	—	—	397
Contingent consideration - non-current	57,949	—	—	57,949
Total liabilities	$ 58,846	$ —	$ —	$ 58,846

	Fair Value Measurements at December 31, 2021			
	Balance	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Marketable investments	$ 90,217	$ 2,560	$ —	$ 87,657
Total assets	$ 90,217	$ 2,560	$ —	$ 87,657
Liabilities:				
Derivative liabilities - non-current	$ 35,700	$ —	$ —	$ 35,700
Contingent consideration	397	—	—	397
Contingent consideration - non-current	124,349	—	—	124,349
Total liabilities	$ 160,446	$ —	$ —	$ 160,446

Marketable Investments

As disclosed in Note 4, the Company holds 20,422,124 shares of Class A Common Stock of Celularity, of which 19,922,124 shares with a value of approximately $61.6 million as of June 30, 2022 were subject to certain transfer restrictions. The transfer restrictions lapsed on July 16, 2022. The shares held by the Company are measured at fair value at each reporting period based on the closing price of Celularity's common stock on the last trading day of each reporting period, and the shares subject to transfer restrictions are adjusted for a discount for lack of marketability. As of June 30, 2022, the discount for lack of marketability was determined using a Monte Carlo simulation model resulting in an implied discount for lack of marketability of 9%.

Changes in fair value of the Company's investment in Celularity since December 31, 2021 are as follows (Level 3):

(in thousands)	Fair Value
Beginning Balance at December 31, 2021	$ 87,657
Change in fair value measurement of Restricted Shares	(26,098)
Ending Balance at June 30, 2022	$ 61,559

Contingent Consideration

During the three and six months ended June 30, 2022, the Company recorded a gain of $64.3 million and $66.4 million, respectively, which related to the change in fair value of the contingent consideration associated with its acquisition of ACEA Therapeutics, Inc. ("ACEA") (See Note 6 for details). The Company assesses the fair value of contingent consideration using a discounted cash flow method combined with a Monte Carlo simulation model. Significant Level 3 assumptions used in the measurement included revenue projections, a discount rate of 21.5% and estimated probabilities of successful commercialization.

Changes in estimated fair value of contingent consideration liabilities since December 31, 2021 are as follows (Level 3):

(in thousands)	Fair Value
Beginning Balance at December 31, 2021	$ 124,746
Change in fair value measurement	(66,400)
Ending Balance at June 30, 2022	$ 58,346

Derivative liabilities

The Company recorded a loss on derivative liability of $2.7 million and a gain on derivative liability of $4.8 million for the three and six months ended June 30, 2022, respectively, which related to the derivative liability associated with the Scilex Notes. The fair value of the derivative liability associated with the Scilex Notes decreased by $30.4 million immediately after the entry into the Indenture Amendment associated with the Scilex Notes on June 2, 2022 (see Note 7 for additional details). The Indenture Amendment is accounted for as troubled debt restructuring; therefore, the carrying amount of the Scilex Notes, net, was adjusted to reflect the aforementioned change in fair value of the derivative liability. The fair value of the derivative liability associated with the Scilex Notes was estimated using the discounted cash flow method combined with a Monte Carlo simulation model including consideration of the terms of the Indenture Amendment. Significant Level 3 assumptions used in the measurement included a 6.1% risk adjusted net sales forecast and an effective debt yield of 21.5%.

The following table includes a summary of the derivative liabilities measured at fair value using significant unobservable inputs (Level 3) during the six months ended June 30, 2022:

(in thousands)	Fair Value
Beginning Balance at December 31, 2021	$ 35,700
Change in fair value measurement	(35,200)
Ending Balance at June 30, 2022	$ 500

4. Investments

As of June 30, 2022, the Company's equity method investments include an ownership interest in Immunotherapy NANTibody, LLC ("NANTibody"), NantCancerStemCell, LLC ("NantStem"), Deverra Therapeutics, Inc. and ImmuneOncia Therapeutics, LLC, among others. The Company's equity investments without readily determinable fair value include an ownership interest in NantBioScience, Inc., Aardvark Therapeutics, Inc. ("Aardvark") and Elsie Biotechnologies, Inc. ("Elsie"), among others. The Company's equity investments with readily determinable fair value include an ownership interest in Celularity.

Celularity

As of June 30, 2022, the Company owned 19,922,124 shares of Class A Common Stock of Celularity that are subject to transfer restrictions (the "Restricted Shares"). The Company also owned 500,000 shares of Class A Common Stock of Celularity not subject to transfer restrictions (the "Private Placement Shares"). During the three months ended June 30, 2022, the Company recorded unrealized losses on marketable investments of $92.8 million and $2.7 million in connection with the changes in fair value of the Restricted Shares and the Private Placement Shares, respectively. During the six months ended June 30, 2022, the Company recorded unrealized losses on marketable investments of $26.1 million and $0.9 million in connection with the changes in fair value of the Restricted Shares and the Private Placement Shares, respectively. The Company's investment in Celularity is included within marketable investments under current assets within its consolidated balance sheets. The transfer restrictions on the Restricted Shares lapsed on July 16, 2022.

Aardvark

In 2021, the Company paid $10.0 million in cash for an aggregate of 7,777,864 shares of Series B Preferred Stock of Aardvark. The Company accounts for its investment in Aardvark as an equity investment without a readily determinable fair value and carries its investment in Aardvark at cost, less impairment, plus or minus changes resulting from observable price changes in orderly transactions for identical or similar investments. The Company's investment in Aardvark was $10.0 million as of June 30, 2022 and December 31, 2021, respectively. Tien Lee, MD, a member of the board of directors of Scilex Holding Company ("Scilex Holding"), a majority owned subsidiary of the Company, is the founder and chief executive officer of Aardvark. Kim D. Janda, Ph.D., a member of the Board of Directors of the Company, is a member of the advisory board of Aardvark.

Elsie

In 2021, the Company paid $10.0 million in cash for 10,000,000 shares of Series A Preferred Stock of Elsie Biotechnologies, Inc. ("Elsie"). The Company accounts for its investment in Elsie as an equity investment without a readily determinable fair value and carries its investment in Elsie at cost, less impairment, plus or minus changes resulting from observable price changes in orderly transactions for identical or similar investments. The Company's investment in Elsie was $10.0 million as of June 30, 2022 and December 31, 2021, respectively. In connection with the Company's purchase of Series A Preferred Stock of Elsie, Dr. Henry Ji, the Company's Chairman of the Board of Directors, Chief Executive Officer and President, was appointed to the board of directors of Elsie.

NANTibody

As of June 30, 2022, the Company's investment in NANTibody had a carrying value of zero due to the Company's share of cumulative losses. NANTibody recorded a net loss of $0.3 million for the three months ended March 31, 2022. As of March 31, 2022, NANTibody had $2.4 million in current assets, $10.5 million in current liabilities, $0.1 million in noncurrent assets and no noncurrent liabilities.

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 one quarter lag.

NantStem

As of June 30, 2022, the carrying value of the Company's investment in NantStem was approximately $18.7 million. NantStem recorded net income of $0.4 million for the three months ended March 31, 2022. As of March 31, 2022, NantStem had $84.2 million in current assets, no current liabilities, $0.5 million in noncurrent assets and no noncurrent liabilities.

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 one quarter lag.

5. Goodwill and Intangible Assets

Goodwill totaled $81.4 million as of June 30, 2022. Goodwill for the Sorrento Therapeutics segment and Scilex segment was $74.7 million and $6.7 million, respectively, as of June 30, 2022. As of June 30, 2022, intangible assets with indefinite useful lives totaling $127.7 million are included in acquired in-process research and development ("IPR&D") in the table below.

Goodwill and intangible assets are assessed annually for impairment on October 1 and more frequently whenever events or circumstances indicate that the carrying amount of an asset may not be recoverable. If it is determined that the full carrying amount of an asset is not recoverable, an impairment loss is recorded in the amount by which the carrying amount of the asset exceeds its fair value. In June 2022, the Company decided to put on hold for future evaluation the development of Abivertinib, which was acquired from ACEA in 2021 (see Note 6 for details), for the treatment of hospitalized COVID-19 patients. This event led to an assessment to determine if an impairment occurred for the associated IPR&D assets in the second quarter of 2022. Based on a quantitative analysis for impairment, which is considered a Level 3 non-recurring fair value measurement and is based on the discounted cash flow method that estimates the present value of risk adjusted projected cash flow derived from the IPR&D assets using a discount rate of 16%, the Company determined that approximately $90.8 million associated with the IPR&D assets, which are in the Sorrento Therapeutics segment, had been impaired and recorded within the loss on impairment of intangible assets in the consolidated statement of operations for each of the three and six months ended June 30, 2022. The Company also determined that the fair value of the contingent consideration decreased by $64.3 million and $66.4 million for the three and six months ended June 30, 2022, respectively (See Note 3 for details). The Company performed an evaluation, including a qualitative analysis and an assessment of the overall market capitalization in comparison to the carrying value of the reporting units for goodwill, and it determined that it was not more likely than not that an impairment of goodwill existed at the reporting unit at June 30, 2022.

A summary of the Company's identifiable intangible assets as of June 30, 2022 and December 31, 2021 is as follows (in thousands, except for years):

		June 30, 2022			December 31, 2021		
June 30, 2022	**Weighted Average Amortization Period (Years)**	**Gross Carrying Amount**	**Accumulated Amortization**	**Intangibles, Net**	**Gross Carrying Amount**	**Accumulated Amortization**	**Intangibles, Net**
Customer relationships	2	$ 1,585	$ 1,466	$ 119	$ 1,585	$ 1,453	$ 132
Acquired technology	19	3,410	1,500	1,910	3,410	1,412	1,998
Acquired in-process research and development	—	127,650	—	127,650	218,430	—	218,430
Technology placed in service	15	21,940	5,485	16,455	21,940	4,754	17,186
Patent rights	15	32,720	12,373	20,347	32,720	11,283	21,437
Assembled workforce	5	605	404	201	605	343	262
Internally developed software	2	520	347	173	520	260	260
Acquired licenses	15	5,711	—	5,711	—	—	—
Total intangible assets		$ 194,141	$ 21,575	$ 172,566	$ 279,210	$ 19,505	$ 259,705

Aggregate amortization expense was $1.0 million and $1.1 million for the three months ended June 30, 2022 and 2021, respectively. Aggregate amortization expense was $2.1 million for each of the six months ended June 30, 2022 and 2021. Estimated future amortization expense related to intangible assets, excluding indefinite-lived intangible assets, at June 30, 2022 is as follows (in thousands):

Years Ending December 31,	**Amount**
2022 (Remaining six months)	$ 2,253
2023	4,416
2024	4,239
2025	4,214
2026	4,214
Thereafter	25,580
Total expected future amortization	$ 44,916

6. Significant Agreements and Contracts

2022 Acquisitions

Romeg License Agreement

On June 14, 2022, the Company's majority-owned subsidiary, Scilex Holding, entered into a License Agreement (the “License Agreement”) with RxOmeg Therapeutics, LLC (a/k/a Romeg Therapeutics, Inc.) (“Romeg”). Pursuant to the License Agreement, among other things, Romeg granted Scilex Holding (a) a transferable license, with the right to sublicense, under the patents and know-how specified therein (with such license to know-how being exclusive for the limited purposes specified therein) to (i) commercialize the pharmaceutical product comprising liquid formulations of colchicine for the prophylactic treatment of gout in adult humans (the “Initial Licensed Product”) in the United States of America (including its territories) (the “Territory”), (ii) develop other products comprising the Initial Licensed Product as an active pharmaceutical ingredient (the “Licensed Products”) and commercialize any such products and (iii) manufacture Licensed Products anywhere in the world, solely for commercialization in the Territory; and (b) an exclusive, transferable license, with right to sublicense, to use the trademark GLOPERBA and logos, designs, translations, and modifications thereof in connection with the commercialization of the Initial Licensed Product solely in the Territory.

As consideration for the license under the License Agreement, Scilex Holding paid Romeg an up-front license fee of $2.0 million, and has agreed to pay Romeg (a) upon Scilex Holding's achievement of certain net sales milestones, certain milestone payments in the aggregate amount of up to $13.0 million, (b) certain royalties in the mid-single digit to low-double digit percentages based on annual net sales of the Licensed Product by Scilex Holding during the applicable royalty term under the License Agreement, and (c) a minimum quarterly royalty payment commencing on the first year anniversary of the effective date of the License Agreement and ending on the later of (i) expiration of the last to expire of the licensed patents covering the Licensed Products in the Territory or (ii) the tenth anniversary of the effective date of the License Agreement.

The transaction was accounted for as an asset acquisition since the Initial Licensed Product was approved and made available in the United States in 2020 and substantially all the value of the gross assets was concentrated in a single asset, which is the Initial Licensed Product. In connection with the License Agreement, Scilex Holding recorded an intangible asset for the acquired license of $5.7 million, which is comprised of the upfront license fee of $2.0 million and a deferred consideration of $3.7 million that is the present value of the future minimum royalty payments and immaterial transaction costs. The contingent sales milestones and sale volume-based future royalties were determined to meet a scope exception for derivative under Accounting Standards Codification (“ASC”) Topic 815, *Derivatives and Hedging*, and not to be probable at June 30, 2022; therefore, they were not recognized as a liability or included in the fair value of the asset as of June 30, 2022. The Company determined the useful life of the intangible asset to be 15 years, which approximates the life of the licensed patents covering the Initial Licensed Product.

Zhengzhou Fortune Bioscience Co., Ltd.

In May 2022, the Company completed an acquisition of 51% of the equity interests of Zhengzhou Fortune Bioscience Co., Ltd (“ZFB”) for $5.0 million in cash under a joint venture agreement and equity subscription agreement, as amended (collectively, the “ZFB Agreements”). ZFB is a manufacturer in China of lateral flow diagnostic tests, including COVISTIX, the Company’s COVID-19 virus rapid antigen detection test kit currently being sold in Mexico. Under the ZFB Agreements, the Company has the option to acquire from the minority equity holder the remaining 49% of the aggregate equity interests of ZFB for $50.0 million before December 31, 2022 (the “Subsequent Transaction”). If the Subsequent Transaction does not occur, the Company or ZFB may terminate the ZFB Agreements, and the Company’s 51% of equity interest in ZFB will be redeemed by ZFB for $5.0 million.

The Company determined that it holds a variable interest in ZFB at completion of the transaction based on its investment in equity interests and its right to acquire the remaining equity interests of ZFB. The Company also determined that ZFB is a variable interest entity (“VIE”) and that the Company is the primary beneficiary of the VIE as the Company has control over ZFB through its control over ZFB’s board of directors, the Company’s ownership of a majority of voting equity interests as well as other sole decision-making rights under the ZFB Agreements to direct the most important activities of ZFB. As such, the Company accounted for the transaction as a business combination and applied the acquisition method of accounting. The Company recorded the tangible and intangible assets acquired and liabilities assumed and the non-controlling interest at their estimated fair values as of the acquisition date.

The Company’s initial accounting for the transaction has not been completed as of June 30, 2022 due to the insufficiency of the information the Company has obtained to identify and measure the fair value of the assets acquired and liabilities assumed, non-controlling interest in ZFB as well as any potential goodwill to be recognized. The Company recorded a provisional purchase price allocation based on its best estimates using information obtained as of the date of this report. The initial purchase price of $0.2 million represents $5.0 million cash consideration net of $4.8 million in pre-acquisition inter-company payables to ZFB that was preliminarily

deemed settled upon acquisition; the accounting for the pre-existing relationship is still under evaluation. The preliminary allocation of the purchase price consisted of (1) $8.5 million of fair value of tangible assets acquired, (2) $5.5 million of liabilities assumed, and (3) $1.9 million of goodwill and intangibles. The fair value of non-controlling interest of $4.8 million at acquisition date was derived from the $5.0 million consideration paid for the 51% equity interest in ZFB, which was preliminarily deemed to approximate the fair value. The preliminary purchase price allocation falls within the measurement period and therefore the Company may adjust these provisional amounts to reflect new information obtained about facts and circumstances that existed as of the acquisition date.

Acquisition of Virex

On February 1, 2022, the Company completed the acquisition of Virex Health, Inc. (“Virex”), a developer of at-home diagnostic platforms based in Boston, Massachusetts. In accordance with Accounting Standards Codification Topic 805, the Company recorded consideration transferred totaling $11.4 million, including $6.8 million in cash, $0.1 million in transaction costs paid in cash and 1,281,662 shares of the Company's common stock, or $4.5 million of consideration based on the Company's closing share price on February 1, 2022. In connection with the acquisition of Virex, the Company may pay up to $10.0 million in contingent consideration in a combination of cash and stock subject to the achievement of certain regulatory milestones.

The transaction was accounted for as an asset acquisition since substantially all the value of the gross assets was concentrated in a single asset. No contingent consideration was recorded as of June 30, 2022. The Company fully expensed an amount of $11.7 million, representing the consideration transferred, net of short-term liabilities assumed, to acquired IPR&D.

2021 Acquisitions

Acquisition of ACEA

On June 1, 2021, the Company completed the acquisition of ACEA, which is developing multiple clinical and preclinical-stage new chemical entity compounds, including the late clinical drug candidate, Abivertinib. The final purchase price allocation was calculated based on an upfront consideration of $44.1 million, which was based on the Company’s closing share price on June 1, 2021, and resulted in separate and distinct intangible assets comprised of acquired IPR&D of $190.8 million, of which $90.8 million associated with Abivertinib for the treatment of hospitalized COVID-19 patients was deemed impaired and written off during the second quarter of 2022 (see Note 5 for details), goodwill of $36.0 million, fair value of debt assumed of approximately $32.1 million, deferred tax liabilities of $31.4 million and other net assets of approximately $2.9 million. Pursuant to the terms of the merger agreement entered into with ACEA, a portion of the upfront consideration equal to $38.1 million was used to repay certain existing indebtedness of ACEA, which amount was paid to the holders thereof in the form of shares of common stock of the Company and an aggregate of 5.5 million shares (“Indebtedness Shares”) of the Company’s common stock were issued in respect thereof based on a price per share equal to $6.8955. The Indebtedness Shares are subject to a true-up, as set forth in the merger agreement entered into with ACEA, if the price at which such shares were issued is greater than the closing price of the Company’s common stock on the date that is six months after June 1, 2021. The Company recorded $7.5 million associated with the true-up as a current liability at June 30, 2022.

In addition to the Closing Consideration, the Company may pay the ACEA equityholders contingent consideration of (i) up to $450.0 million in additional payments, subject to the receipt of certain regulatory approvals and achievement of certain net sales targets with respect to the assets acquired from ACEA and (ii) five to ten percent of the annual net sales on specified royalty-bearing products. See Note 3 for details.

7. Debt

2018 Purchase Agreements and Indenture for Scilex Pharmaceuticals Inc. (“Scilex Pharma”)

On September 7, 2018, Scilex Pharma 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 Pharma issued and sold to the Scilex Note Purchasers senior secured notes due 2026 in an aggregate principal amount of $224.0 million (the “Scilex Notes”) for an aggregate purchase price of $140.0 million (the “Scilex Notes Offering”). In connection with the Scilex Notes Offering, Scilex Pharma also entered into an Indenture (the “Indenture”) governing the Scilex Notes with U.S. Bank National Association, a national banking association, as trustee and collateral agent, and the Company. Pursuant to the Indenture, the Company agreed to irrevocably and unconditionally guarantee, on a senior unsecured basis, the punctual performance and payment when due of all obligations of Scilex Pharma under the Indenture.

Actual cumulative net sales of ZTlido from the issue date of the Scilex Notes through December 31, 2021 did not equal or exceed 95% of a predetermined target sales threshold for such period, which resulted in a $28.0 million increase in the principal

amount of the Scilex Notes, effective February 15, 2022. As a result, the Company recorded the increase of $28.0 million in principal and non-operating expense at December 31, 2021. Pursuant to the Indenture, if actual cumulative net sales of ZTlido 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. In accordance with ASC Topic 815, *Derivatives and Hedging*, the Company accounted for this feature as an embedded derivative (the "Scilex Notes Derivative") that is required to be bifurcated from the Scilex Notes and measured at fair value in each reporting period (see Note 3 for details).

Effective February 14, 2022, Scilex Pharma issued to the Company a draw notice under the Letter of Credit as required under the terms of the Indenture because actual cumulative net sales of ZTlido from the issue date of the Scilex Notes through December 31, 2021 were less than a specified sales threshold for such period. As a result of the draw notice being issued, the Company paid to Scilex Pharma $35.0 million in a single lump-sum amount as a subordinated loan. In February 2022, Scilex Pharma repurchased Scilex Notes from the holders thereof on a pro rata basis in an aggregate amount equal to $20.0 million.

On June 2, 2022, the Company and Scilex Pharma entered into a Consent Under and Amendment No. 4 to Indenture (the "Indenture Amendment") with U.S. Bank Trust Company, National Association (as successor in interest to U.S. Bank National Association) and the Scilex Note Purchasers. Pursuant to the Indenture Amendment, (1) on June 3, 2022, Scilex Pharma repurchased approximately $41.4 million of the aggregate principal amount of the outstanding Scilex Notes at 100% of the principal amount thereof, (2) the Scilex Note Purchasers agreed that Scilex Pharma can repurchase the remaining principal amount of the Scilex Notes at any time on or before September 30, 2022 for $41.4 million (subject to reduction for any quarterly royalty payments) and upon such repurchase the Scilex Note Purchasers will forgive and discharge $28.0 million of the aggregate principal amount of the Scilex Notes (the "Early Paydown Provision"), (3) the minimum cash requirement under the Indenture was reduced to $5.0 million in aggregate unrestricted cash equivalents at the end of each calendar month, and (4) the maximum aggregate principal amount of that certain Intercompany Promissory Note issued by Scilex Pharma to the Company on October 5, 2018 was increased from up to $25.0 million to up to $50.0 million. The Company concluded that the Indenture Amendment was a troubled debt restructuring for accounting purposes. The future undiscounted cash flows of the Scilex Notes were higher than the carrying value of the Scilex Notes at the time of the entry into the Indenture Amendment, and accordingly, no gain was recognized in the quarter ended June 30, 2022. Due to a decrease of $30.4 million in the fair value of the Scilex Notes Derivative caused by the Indenture Amendment, the carrying value of the Scilex Notes was increased by $30.4 million.

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

	June 30, 2022	December 31, 2021
Principal	$ 74,877	$ 133,998
Unamortized debt discount	—	(30,601)
Unamortized debt issuance costs	—	(2,235)
Carrying value	$ 74,877	$ 101,162
Estimated fair value	$ 39,500	$ 115,400

Future minimum payments under the Scilex Notes, based on a percentage of projected net sales of ZTlido, are estimated as follows (in thousands):

Year Ending December 31,	
2022 (Remaining six months)	$ 4,413
2023	12,005
2024	13,637
2025	14,746
2026	30,076
Total future minimum payments	74,877
Current portion	(10,131)
Long-term portion of Scilex Notes	$ 64,746

The Company made principal payments of $64.6 million and $42.4 million during the six months ended June 30, 2022 and 2021, respectively. The amount of debt discount and debt issuance costs included in interest expense for the three months ended June 30, 2022 and 2021 was approximately $1.2 million and $1.9 million, respectively. The amount of debt discount and debt issuance costs included in interest expense for the six months ended June 30, 2022 and 2021 was approximately $3.1 million and $4.0 million,

respectively. The Company recorded a loss on debt extinguishment of $4.8 million and $14.0 million in connection with its repayments of principal made during the six months ended June 30, 2022 and 2021, respectively.

Bridge Loan Agreement

On February 16, 2022, the Company entered into a Bridge Loan Agreement pursuant to which the Company borrowed $45.0 million in the form of a bridge loan (the "Bridge Loan"), which bore no interest and matured on June 16, 2022. Upon the occurrence and during the continuance of an "Event of Default" under the Loan Agreement, the Bridge Loan was to bear interest at the rate of 15% per annum. An "Event of Default" under the Loan Agreement included, among other things, the Company's failure to pay any principal of, or interest on, the Bridge Loan when such principal or interest became due and payable or to otherwise perform or observe the terms of the Loan Agreement (subject to cure periods), a material inaccuracy of the Company's representations and warranties under the Loan Agreement, a failure by the Company to generally pay its debts as they become due or a bankruptcy, insolvency or similar event involving the Company. The amount of debt discount and debt issuance costs included in interest expense for the six months ended June 30, 2022 was $0.9 million. The Company recorded a loss on debt extinguishment of $0.9 million in connection with its repayments of principal made during the six months ended June 30, 2022. The Company fully repaid the Bridge Loan during the six months ended June 30, 2022.

ACEA Significant Debt Arrangements

Borrowings under significant debt arrangements assumed in connection with the Company's acquisition of ACEA consisted of the following (in thousands):

	June 30, 2022	December 31, 2021
Principal	$ 27,555	$ 29,048
Unamortized debt discount	(9,154)	(10,642)
Carrying value	$ 18,401	$ 18,406
Estimated fair value	$ 14,200	$ 17,100

8. Stockholders' Equity

At-the-Market Sales Agreement

On December 3, 2021, the Company entered into an amended and restated sales agreement, which was amended on December 22, 2021 (as amended, the "ATM Sales Agreement"), pursuant to which the Company may issue and sell shares of its common stock by any method permitted by law deemed to be an "at the market offering" as defined in Rule 415 promulgated under the Securities Act of 1933, as amended, through Cantor Fitzgerald & Co., B. Riley Securities, Inc. and H.C. Wainwright & Co., LLC, as sales agents. During the six months ended June 30, 2022, the Company sold an aggregate of 119,581,775 shares of its common stock pursuant to the ATM Sales Agreement for aggregate net proceeds to the Company of approximately $268.6 million. Subsequent to June 30, 2022 and through August 8, 2022, the Company sold an aggregate of 13,523,033 shares of its common stock pursuant to the Amended Sales Agreement for aggregate net proceeds to the Company of approximately $34.0 million.

9. Stock Based Compensation

2019 Stock Incentive Plan ("2019 Plan")

Total stock-based compensation expense under the 2019 Plan was $6.9 million and $6.8 million for the three months ended June 30, 2022 and 2021, respectively, and $13.8 million and $15.4 million for the six months ended June 30, 2022 and 2021, respectively. The total unrecognized compensation expense related to unvested stock option grants as of June 30, 2022 was $45.2 million, with a weighted average remaining vesting period of 2.5 years. Total unrecognized compensation expense related to unvested restricted stock unit ("RSU") grants as of June 30, 2022 was $23.5 million, with a weighted average remaining vesting period of 3.4 years.

A summary of stock option activity under the 2019 Plan for the six months ended June 30, 2022 is as follows:

	Options Outstanding	Weighted-Average Exercise Price	Aggregate Intrinsic Value (in thousands)
Outstanding at December 31, 2021	22,515,513	$ 6.19	$ —
Options Granted	550,000	1.61	
Options Canceled	(1,453,020)	6.56	
Options Exercised	(15,499)	2.37	
Outstanding at June 30, 2022	21,596,994	$ 6.05	$ 539

A summary of RSU activity under the 2019 Plan for the six months ended June 30, 2022 is as follows:

	Number of Shares	Weighted-Average Grant Date Fair Value Per Share
Outstanding at December 31, 2021	3,433,896	$ 9.50
RSUs Granted	2,355,500	1.41
RSUs Released	(471,999)	10.02
RSUs Canceled	(460,069)	9.44
Outstanding at June 30, 2022	4,857,328	$ 5.53

Scilex Holding Company

Under the Scilex Holding Company 2019 Stock Option Plan, total stock-based compensation expense was $1.4 million and $1.0 million for the three months ended June 30, 2022 and 2021, respectively, and $2.8 million and $2.9 million for the six months ended June 30, 2022 and 2021, respectively. The total unrecognized compensation expense related to unvested stock option grants as of June 30, 2022 was $5.6 million, with a weighted average vesting period of 1.4 years.

Employee Stock Purchase Plan

Total stock-based compensation recorded as operating expense for the Company's 2020 Employee Stock Purchase Plan was $0.2 million for the six months ended June 30, 2022 and was not material for the three months ended June 30, 2022.

CEO Performance Award

Total stock-based compensation recorded as operating expense for the 10-year CEO performance award that was granted to the Company's chief executive officer in 2020 and tied solely to the Company achieving market capitalization milestones (the "CEO Performance Award") was $10.2 million and $22.4 million during the three and six months ended June 30, 2022, respectively. As of June 30, 2022, the Company had approximately $65.3 million of total unrecognized stock-based compensation expense remaining under the CEO Performance Award.

10. Commitments and Contingencies

Litigation

In the normal course of business, the Company may be named as a defendant in one or more lawsuits. Other than as set forth below, 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 Dr. Soon-Shiong's purchase of the drug Cynviloq™ from the Company in May 2015. The actions allege that Dr. 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 ("NantPharma") and Chief Executive Officer Patrick Soon-Shiong, related to alleged fraud and breaches of the Stock Sale and Purchase Agreement, dated May 14, 2015, entered into between NantPharma and the Company, filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 7, 2015. On May 24, 2019, NantCell, Inc., Dr. Soon-Shiong and Immunotherapy NANTibody LLC ("NANTibody") General Counsel Charles Kim filed a motion in the Los Angeles Superior Court to stay or dismiss the Company's arbitration demand. On October 9, 2019, the Los Angeles Superior Court denied the motion to stay or dismiss the arbitration demand, and the arbitration is ongoing against NantPharma ("NantPharma Arbitration"). On March 5, 2020, the Company filed a legal action against Dr. Soon-Shiong in Los Angeles Superior Court, asserting claims for fraudulent inducement and common law fraud, arising out of Dr. Soon-Shiong's purchase of the drug Cynviloq™ from the Company in May 2015. The action alleges that, among other things, Dr. Soon-Shiong acquired the drug Cynviloq™ for the purpose of halting its progression to the market. In connection with filing this civil action in the Los Angeles Superior Court, where the Company will have the right to a jury trial against Dr. Soon-Shiong, the Company has dismissed Dr. Soon-Shiong from the related, ongoing arbitration against NantPharma; and
- An action in the Los Angeles Superior Court derivatively on behalf of 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 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 of $40.0 million. On May 24, 2019, NantCell, Inc. and Dr. Soon-Shiong filed a cross-complaint against the Company and its President, Chief Executive Officer and Chairman of the Board of Directors, Dr. Henry Ji, Ph.D., seeking unspecified damages, as well as additional punitive damages and specific performance, related to alleged fraud, alleged breaches of the Exclusive License Agreement for certain antibodies (dated June 11, 2015 and entered into between NANTibody, LLC and the Company), and alleged tortious interference with contract. On May 24, 2019, NANTibody and NantPharma filed a new complaint in the action against the Company and Dr. Ji, seeking unspecified damages, as well as additional punitive damages and specific performance, related to alleged fraud, alleged breaches of the Stock Sale and Purchase Agreement, alleged breaches of the Exclusive License Agreement for certain antibodies (dated April 21, 2015 and entered into between NantCell, Inc. and the Company), and alleged tortious interference with contract. On July 8, 2019, the Company and Dr. Ji filed motions to compel the cross-complaint and new action to arbitration. On October 9, 2019, the Los Angeles Superior Court granted the motions to compel to arbitration all of the claims brought by NANTibody, NantCell, Inc. and NantPharma, and denied the motions to compel as to the claims brought by Dr. Soon-Shiong. Subsequently, NANTibody, NantCell, Inc., and NantPharma have re-filed their claims in arbitration with the American Arbitration Association. On May 4, 2020, the Company filed counterclaims against NANTibody and NantPharma related to breaches of the April 21, 2015 and June 11, 2015 Exclusive License Agreements. With the counterclaims, the Company is seeking money damages in an amount yet to be determined. On August 2, 2022, Sorrento, NantCell and NANTibody presented closing arguments in the arbitration concerning the parties' claims and counterclaims under the April 21, 2015 and June 11, 2015 Exclusive License Agreements, a decision on which is currently pending. Closing arguments in the NantPharma Arbitration are scheduled for September 8, 2022, after which the claims asserted in that arbitration will be submitted to the arbitrator for a decision. The Los Angeles Superior Court claims against Dr. Soon-Shiong have been stayed pending resolution of the claims filed in arbitration. The original derivative action is no longer stayed, and the parties are currently engaged in discovery in the suit.

On May 26, 2020, Wasa Medical Holdings filed a putative federal securities class action in the U.S. District Court for the Southern District of California, Case No. 3:20-cv-00966-AJB-DEB, against the Company, Dr. Ji, and its SVP of Regulatory Affairs, Mark R. Brunswick, Ph.D. The action alleges that the Company, Dr. Ji and Dr. Brunswick made materially false and/or misleading statements to the investing public by publicly issuing false and/or misleading statements regarding STI-1499 and its ability to inhibit the SARS-CoV-2 virus infection and that such statements violated Section 10(b) of the Securities Exchange Act of 1934, as amended, and Rule 10b-5 promulgated thereunder. The suit seeks to recover damages caused by the alleged violations of federal securities laws, along with the plaintiffs' reasonable costs and expenses incurred in the lawsuit, including counsel fees and expert fees. On June 11, 2020, Jeannette Calvo filed a second putative federal securities class action in the U.S. District Court for the Southern District of California, Case No. 3:20-cv-01066-JAH-WVG, against the same defendants alleging the same claims and seeking the same relief. On February 12, 2021, the U.S. District Court for the Southern District of California issued an order consolidating the cases and appointing a lead plaintiff, Andrew Zenoff ("Plaintiff"), and lead counsel. On April 5, 2021, Plaintiff filed a consolidated amended complaint in accordance with the U.S. District Court for the Southern District of California's scheduling order. Pursuant to that scheduling order, the defendants filed a motion to dismiss on May 20, 2021 and Plaintiff filed its opposition to the motion on July 2, 2021. The defendants' reply was filed on August 4, 2021. On or about November 18, 2021, the U.S. District Court for the Southern District of California issued an order granting the motion to dismiss with leave to amend. On November 30, 2021, Plaintiff filed a first amended consolidated complaint. On December 30, 2021, the defendants filed a motion to dismiss the first amended consolidated complaint. Pursuant to a stipulated scheduling order, Plaintiff filed its opposition to the motion on February 7, 2022, and the defendants filed their reply on February 28, 2022. On April 11, 2022, the U.S. District Court for the Southern District of California issued an order granting the motion to dismiss with leave to file an amended complaint by April 22, 2022. Plaintiff did not file an amended complaint by April 22, 2022. On June 2, 2022, the U.S. District Court for the Southern District of California directed the clerk of the court to enter judgment in favor of defendants and close the case. On June 3, 2022, judgment was entered in favor of defendants, and the case was closed. On June 30, 2022, Plaintiff filed a notice of appeal to the United States Court of Appeals for the Ninth Circuit (Case No. 22-55641). On July 1, 2022, the United States Court of Appeals for the Ninth Circuit entered a time schedule order. Pursuant to the time schedule order, appellant's opening brief shall be filed on September 2, 2022, and appellees' answering brief shall be filed on October 3, 2022. Appellant may also file an optional reply brief within 21 days of appellees' answering brief. The Company is defending these matters vigorously.

On July 26, 2021, Sachin Chaudhari filed a verified stockholder derivative complaint in the U.S. District Court for the Southern District of California, Case No. 0723211, against Dr. Ji, Dr. Brunswick, and the Company's Board of Directors as defendants, and against the Company as a nominal defendant. The action alleges, among other things, that defendants breached their fiduciary duties, violated Section 20(a) of the Securities Exchange Act of 1934, as amended, engaged in waste and were unjustly enriched in connection with the alleged false and misleading statements referenced above. The suit seeks to recover on behalf of the Company those damages caused by the alleged breaches of duty and related claims, along with the plaintiffs' reasonable costs and expenses incurred in the lawsuit, including counsel fees and expert fees. On July 27, 2021, Michael Sabatina filed a verified stockholder derivative complaint in the Delaware Chancery Court, Case No. 2021-0654 against Dr. Ji and Dr. Brunswick as defendants and against the Company as a nominal defendant alleging the same general claims and seeking the same general relief. Both of these derivative cases have been stayed by their respective courts pending resolution of the motion to dismiss the federal securities class action described above. The Company is defending these matters vigorously.

Operating Leases

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Cash paid for amounts included in the measurement of lease liabilities:				
Operating cash outflows from operating leases	$ 3,422	$ 2,567	$ 6,304	$ 5,054
ROU assets obtained in exchange for new and amended operating lease liabilities	$ 2,328	$ 173	$ 2,961	$ 173
Weighted average remaining lease term in years	14.4	7.9	14.4	7.9
Weighted average discount rate	12.8%	12.2%	12.8%	12.2%

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

Years ending December 31,	Operating leases
2022 (Remaining six months)	$ 7,542
2023	15,411
2024	15,342
2025	13,992
2026	13,659
2027	13,860
Thereafter	152,988
Total lease payments	232,794
Less imputed interest	(134,970)
Total lease liabilities as of June 30, 2022	$ 97,824

11. 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 schedulable deferred tax liabilities.

The Company's income tax expense of $0.4 million and income tax benefit of $0.8 million reflect effective tax rates of 0.2% and 0.5% for the six months ended June 30, 2022 and 2021, respectively. The Company's income tax benefit of $1.1 million and $0.6 million reflect effective tax rates of 0.5% and 0.4% for the three months ended June 30, 2022 and 2021, respectively.

The difference between the expected statutory federal tax rate of 21.0% and the 0.2% effective tax rate for the six months ended June 30, 2022 was primarily attributable to income tax expense associated with changes in valuation allowance and shortfalls on stock-based compensation benefits. For the six months ended June 30, 2022, when compared to the same period in 2021, the decrease in the tax benefit and change in effective income tax rate was primarily attributable to the impact of the Company's valuation allowance against current net loss and increase in shortfalls on stock-based compensation benefits.

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 net operating loss and research credit carryforwards.

12. Net Loss Per Share

For the three and six months ended June 30, 2022 and 2021, basic loss per common share is computed by dividing net loss by the weighted average number of common shares outstanding during the period.

The following table sets forth the reconciliation of basic and diluted loss per share for the three and six months ended June 30, 2022 and 2021 (in thousands, except per share amounts):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Numerator				
Net loss attributable to the Company	$ (218,759)	$ (166,615)	$ (259,574)	$ (164,105)
Net loss used for diluted earnings per share	$ (218,759)	$ (166,615)	$ (259,574)	$ (164,105)
Denominator for loss income per share	402,801	290,003	370,144	285,330
Denominator for diluted loss per share	402,801	290,003	370,144	285,330
Basic loss per share	$ (0.54)	$ (0.57)	$ (0.70)	$ (0.58)
Diluted loss per share	$ (0.54)	$ (0.57)	$ (0.70)	$ (0.58)

Shares of common stock issuable pursuant to stock options and warrants that were excluded because the effect is anti-dilutive consisted of the following (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Anti-dilutive shares for outstanding options and RSUs	24,065	2,987	23,177	2,654

13. Segment Information

The Company operates in two operating and reportable segments, Sorrento Therapeutics and Scilex. With the exception of unrestricted cash balances, the Company's Chief Operating Decision Maker 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 and six months ended June 30, 2022 and 2021 (in thousands):

	Three Months Ended June 30,					
	2022			2021		
	Sorrento Therapeutics	Scilex	Total	Sorrento Therapeutics	Scilex	Total
External revenues	$ 3,535	$ 7,926	$ 11,461	$ 5,709	$ 7,802	$ 13,511
Operating expenses	109,709	20,113	129,822	98,553	15,508	114,061
Operating loss	(106,174)	(12,187)	(118,361)	(92,844)	(7,706)	(100,550)
Unrestricted cash	63,470	6,875	70,345	72,252	5,039	77,291

	Six Months Ended June 30,					
	2022			2021		
(in thousands)	Sorrento Therapeutics	Scilex	Total	Sorrento Therapeutics	Scilex	Total
External revenues	$ 15,107	$ 14,738	$ 29,845	$ 12,978	$ 14,788	$ 27,766
Operating expenses	219,359	35,730	255,089	180,430	32,791	213,221
Operating loss	(204,252)	(20,992)	(225,244)	(167,452)	(18,003)	(185,455)
Unrestricted cash	63,470	6,875	70,345	72,252	5,039	77,291

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. (collectively, "Sorrento," the "Company," "we," "us," and "our") is a clinical and commercial stage biopharmaceutical company developing next generation treatments for three major therapeutic areas: cancer, infectious disease and pain.

Cancer. Our best-in-category strategy is enabled by combining our fully human G-MAB™ antibody library with our ability to rapidly screen for highly potent and targeted treatments and to enhance the target product profile for these antibodies by leveraging our extensive proprietary immuno-oncology platforms such as immuno-cellular therapies ("DAR-T™"), antibody-drug conjugates ("ADCs"), oncolytic virus ("Seprehvec™") and lymphatic drug delivery ("Sofusa™").

Infectious Disease. We have applied our antibody capability in the fight against COVID-19. We are developing highly sensitive and rapid diagnostics, and multi-model treatments for the SARS-CoV-2 virus and its variants. Our diagnostics platforms include the COVIMARK™ lateral flow antigen test (launched as COVISTIX™ in Mexico and Brazil), COVITRACK, a LAMP-based pathogen nucleic acid detection assay, and the VIREX™ platform, which leverages existing worldwide manufacturing infrastructure for glucometers and glucose strip tests to provide affordable and highly scalable, next-generation diagnostic solutions for infectious diseases, liver cancer and other biomarkers. We are also focused on bringing forward effective therapeutic solutions, including a next generation protease inhibitor antiviral pill, COVISHIELD™ IN (neutralizing antibody nasal drops) and variant agnostic rescue therapies, FUJOVEE ™ (Abivertinib) and OQORY™ (mesynstromal stem cells).

Pain. We are focusing our efforts on non-opioid and non-addictive pain treatments. The flagship product of our pain programs, ZTlido®, is being marketed by Scilex Pharmaceuticals Inc. ("Scilex Pharma"), our majority-owned subsidiary. ZTlido was launched in October of 2018 as a prescription lidocaine topical product and has demonstrated superior adhesion and bioavailability compared to current lidocaine patches. Scilex Pharma has now built a full commercial organization, which includes sales, marketing, market access and medical affairs, and will leverage capability for the potential launch of next-generation products that are currently in development. The first of these product candidates, SEMDEXA™, is an injectable viscous gel formulation of a widely used corticosteroid designed to address the limitations associated with off label corticosteroid epidural injections. We announced positive final results for the Phase 3 trial for SEMDEXA™ in March 2022.

We are also developing Resiniferatoxin ("RTX"), a naturally occurring and ultra-potent transient receptor potential vanilloid-1 agonist. When injected peripherally, a sustained desensitization occurs, resulting in reduction of noxious chronic pain symptoms that can last for months. RTX has the potential to be a multi-indication franchise asset and is nearing pivotal studies in intractable pain associated with cancer and moderate to severe knee osteoarthritis pain.

Second quarter pipeline product development and business updates

- In June 2022, Scilex Holding entered into a license and commercialization agreement with RxOmeg Therapeutics, LLC for the exclusive right to market and distribute in the US Gloperba, an oral solution for adults suffering from gout.
- In June 2022, Scilex Holding repaid $41.4 million of the principal amount of its senior secured notes in connection with the Indenture Amendment as described below.

- In May 2022, Scilex Holding received clearance from the Food and Drug Administration ("FDA") to initiate a Phase 2 clinical trial of SP-103 (lidocaine topical system) 5.4% in subjects with moderate to severe acute lower back pain.
- In May 2022, we received FDA clearance to initiate a Phase 2 clinical trial of FUJOVEE™ (Abivertinib) to treat metastatic castrate resistant prostate cancer (MAVERICK Trial).
- In May 2022, Scilex Holding and Vickers Vantage Corp. I (Nasdaq: VCKA, "Vickers") announced the filing of a Registration Statement on Form S-4 by Vickers with the SEC on May 13, 2022, relating to the previously announced proposed business combination between Scilex Holding and Vickers.
- In May 2022, we completed enrollment for the Phase I study of intranasal (IN) COVISHIELD™ IN (STI-9199).
- In April 2022, we received FDA clearance to initiate a Phase 1 clinical trial of intravenous (IV) COVISHIELD™ (STI-9167).

Impact of COVID-19 on Our Business

We are closely monitoring the COVID-19 pandemic and its potential impact on our business. In an effort to protect the health of our employees we continue to enforce standard safety protocols at our facilities and have implemented employee travel policies. For further information, refer to Part, II, Item 1A of this Quarterly Report on Form 10-Q and "Part I –Item 1A - Risk Factors" of our Annual Report on Form 10-K for the fiscal year ended December 31, 2021, filed with the SEC on March 11, 2022.

Results of Operations

Comparison of the three and six months ended June 30, 2022 and 2021

Revenues.

Dollars in thousands	Three Months Ended June 30,		Increase (decrease)	
Sorrento Therapeutics segment	**2022**	**2021**	**$**	**%**
Product revenues	$ 665	$ 52	$ 613	1179%
Service revenues	2,870	5,657	(2,787)	(49%)
Total revenues	$ 3,535	$ 5,709	$ (2,174)	(38%)
Scilex segment				
Product revenues	$ 7,926	$ 7,802	$ 124	2%
Total revenues	$ 11,461	$ 13,511	$ (2,050)	(15%)

Dollars in thousands	Six Months Ended June 30,		Increase (decrease)	
Sorrento Therapeutics segment	**2022**	**2021**	**$**	**%**
Product revenues	$ 3,844	$ 89	$ 3,755	4219%
Service revenues	11,263	12,889	(1,626)	(13%)
Total revenues	$ 15,107	$ 12,978	$ 2,129	16%
Scilex segment				
Product revenues	$ 14,738	$ 14,788	$ (50)	(0%)
Total revenues	$ 29,845	$ 27,766	$ 2,079	7%

The decrease in revenues in our Sorrento Therapeutics segment ("Sorrento segment") during the three months ended June 30, 2022 was attributed to lower contract manufacturing service revenues compared to the same period of the prior year.

The increase in revenues in our Sorrento segment during the six months ended June 30, 2022 was attributed to $3.2 million in COVISTIX™ product sales, $0.6 million in other product sales and $1.8 million in other service revenues associated with Celularity Inc. ("Celularity"). Contract manufacturing service revenues were $3.4 million lower compared to the same period of the prior year.

Cost of Revenues.

Dollars in thousands	Three Months Ended June 30, 2022	2021	Increase $	Increase %
Sorrento segment	$ 4,175	$ 2,596	1,579	61%
Scilex segment	1,529	526	1,003	191%
Total cost of revenues	$ 5,704	$ 3,122	$ 2,582	83%

Dollars in thousands	Six Months Ended June 30, 2022	2021	Increase $	Increase %
Sorrento segment	$ 8,788	$ 5,130	$ 3,658	71%
Scilex segment	2,673	1,377	1,296	94%
Total cost of revenues	$ 11,461	$ 6,507	$ 4,954	76%

Cost of revenues relate to product sales, the sale of customized reagents and providing contract manufacturing services. These costs generally include employee-related expenses, including salary and benefits, direct materials and overhead costs including rent, depreciation, utilities, facility maintenance and insurance.

For the three months ended June 30, 2022 the increase in cost of revenues in our Sorrento segment was driven by a higher share of product sales and approximately $0.6 million in inventory write-offs.

For the six months ended June 30, 2022 the increase in cost of revenues in our Sorrento segment was primarily attributed to COVISTIX™ and other product sales.

For the three and six months ended June 30, 2022, the increases in cost of revenues in our Scilex segment were driven by higher provisions for excess inventories as compared to each of the same periods of the prior year.

Research and Development ("R&D") Expenses.

Dollars in thousands	Three Months Ended June 30, 2022	2021	Increase (decrease) $	Increase (decrease) %
Sorrento segment	$ 45,876	$ 52,088	$ (6,212)	(12%)
Scilex segment	2,591	2,418	173	7%
Total research and development expenses	$ 48,467	$ 54,506	$ (6,039)	(11%)

Dollars in thousands	Six Months Ended June 30, 2022	2021	Increase (decrease) $	Increase (decrease) %
Sorrento segment	$ 106,971	$ 93,203	$ 13,768	15%
Scilex segment	5,222	5,136	86	2%
Total research and development expenses	$ 112,193	$ 98,339	$ 13,854	14%

R&D expenses include expenses associated with isolating and advancing human antibody drug candidates derived from our libraries, as well as advancing our COVID-19, SP-102, SP-103, RTX, oncolytic virus, ADC and oncology programs. 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. We track external development costs by program; however, we do not allocate laboratory supplies, R&D materials, personnel costs, share-based payments, facilities costs or other internal costs to specific development programs.

The following table summarizes our research and development expenses for the three months ended June 30, 2022 and 2021:

Type of expense	Three months ended June 30, 2022	2021	Increase (decrease) $	%
Third party clinical and pre-clinical R&D expenses by program				
Abivertinib	$ 2,169	$ 432	$ 1,737	402 %
Resiniferatoxin (“RTX”)	612	2,006	(1,394)	-69 %
COVID-19 therapies and diagnostics, excluding Abivertinib	4,715	10,170	(5,455)	-54 %
Immuno-oncology and other programs	5,183	6,944	(1,761)	-25 %
Total third party clinical and pre-clinical R&D expenses by program	12,679	19,552	(6,873)	-35 %
Laboratory supplies and R&D materials expenses	2,751	6,964	(4,213)	-60 %
Salary, consulting and other personnel costs	16,140	12,572	3,568	28 %
Non-cash share-based compensation expenses	2,947	5,052	(2,105)	-42 %
Facility, depreciation and other expenses	11,359	7,948	3,411	43 %
Total research and development expenses - Sorrento segment	45,876	52,088	(6,212)	-12 %
Total research and development expenses - Scilex segment	2,591	2,418	173	7 %
Total research and development expenses	$ 48,467	$ 54,506	$ (6,039)	-11 %

The following table summarizes our research and development expenses, for the six months ended June 30, 2022 and 2021:

Type of expense	Six months ended June 30, 2022	2021	Increase (decrease) $	%
Third party clinical and pre-clinical R&D expenses by program				
Abivertinib	$ 4,382	$ 432	$ 3,950	914 %
Resiniferatoxin (“RTX”)	2,132	4,339	(2,207)	-51 %
COVID-19 therapies and diagnostics, excluding Abivertinib	14,041	24,120	(10,079)	-42 %
Immuno-oncology and other programs	14,575	12,096	2,479	20 %
Total third party clinical and pre-clinical R&D expenses by program	35,130	40,987	(5,857)	-14 %
Laboratory supplies and R&D materials expenses	12,280	10,001	2,279	23 %
Salary, consulting and other personnel costs	30,821	18,892	11,929	63 %
Non-cash share-based compensation expenses	6,136	7,886	(1,750)	-22 %
Facility, depreciation and other expenses	22,604	15,437	7,167	46 %
Total research and development expenses - Sorrento segment	106,971	93,203	13,768	15 %
Total research and development expenses - Scilex segment	5,222	5,136	86	2 %
Total research and development expenses	$ 112,193	$ 98,339	$ 13,854	14 %

Third party clinical and pre-clinical R&D expenses for our Sorrento segment largely fluctuated as a result of the timing of clinical trial spend and the timing of our acquisition of ACEA Therapeutics, Inc. (“ACEA”) (Abivertinib), which occurred in June 2021. Salaries, personnel costs and facilities expenses increased as compared to the same periods in the prior year as we continue expanding our R&D personnel headcount and infrastructure to support our R&D programs.

Acquired In-process Research and Development (“IPR&D”) Expenses. Acquired IPR&D expenses during the three months ended June 30, 2021 totaled $5.0 million and related to an asset purchase agreement (“Aardvark Asset Purchase Agreement”) entered into with Aardvark Therapeutics, Inc. (“Aardvark”) whereby we acquired Aardvark’s Delayed Burst Release Low Dose Naltrexone (DBR-LDN) asset and intellectual property rights during the period.

Acquired IPR&D expenses during the six months ended June 30, 2022 totaled $12.3 million, which included $11.7 million related to our acquisition of Virex.

Acquired IPR&D expenses during the six months ended June 30, 2021 totaled $12.5 million and related to the Aardvark Asset Purchase Agreement and the entry into an exclusive license agreement with Icahn School of Medicine at Mount Sinai (“Mount Sinai”) whereby we acquired a worldwide, exclusive, sublicensable license to certain of Mount Sinai’s patents and monoclonal antibodies as well as certain related technical information during the period.

Selling, General and Administrative (“SG&A”) Expenses.

Dollars in thousands	Three Months Ended June 30, 2022	Three Months Ended June 30, 2021	Increase (decrease) $	Increase (decrease) %
Sorrento segment	$ 33,078	$ 38,663	$ (5,585)	(14%)
Scilex segment	15,058	11,630	3,428	29%
Total sales, general and administrative expenses	$ 48,136	$ 50,293	$ (2,157)	(4%)

Dollars in thousands	Six Months Ended June 30, 2022	Six Months Ended June 30, 2021	Increase (decrease) $	Increase (decrease) %
Sorrento segment	$ 66,747	$ 69,278	$ (2,531)	(4%)
Scilex segment	25,967	24,409	1,558	6%
Total sales, general and administrative expenses	$ 92,714	$ 93,687	$ (973)	(1%)

SG&A expenses relate to salaries and personnel-related expenses, stock-based compensation expense, professional fees, infrastructure expenses, legal and other general corporate expenses.

The decrease in SG&A expenses in our Sorrento segment during the three months ended June 30, 2022 was attributed to lower professional fees, including a decrease in legal and consulting costs by approximately $6.4 million, and lower stock-based compensation expenses of $2.9 million. Personnel costs and infrastructure-related expenses increased by $2.1 million and $1.6 million, respectively, compared to the same period of the prior year.

The decrease in SG&A expenses in our Sorrento segment during the six months ended June 30, 2022 was attributed to lower professional fees, including a decrease in legal and consulting costs, by approximately $4.8 million, and lower stock-based compensation expenses of $5.7 million. Personnel costs and infrastructure-related expenses increased by $6.9 million and $1.1 million, respectively, compared to the same period of the prior year.

For the three and six months ended June 30, 2022, the increases in SG&A expenses in our Scilex segment were attributed to increases in personnel costs and professional fees compared to the same periods of the prior year.

Gain (loss) on contingent consideration. Gain on contingent consideration for the three months ended June 30, 2022 was $64.3 million and was attributed to the change in fair value of the contingent consideration associated with our acquisition of ACEA.

Gain on contingent consideration for the six months ended June 30, 2022 was $66.4 million and was attributed to the change in fair value of the contingent consideration associated with our acquisition of ACEA.

Loss on impairment of intangible assets. Loss on impairment of assets for each of the three and six months ended June 30, 2022 and 2021 was $90.8 million and was attributed to the impairment of IPR&D assets acquired from ACEA in 2021, as further described in Note 6 of the accompanying notes to the consolidated financial statements in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Loss (Gain) on Derivative Liabilities. Loss on derivative liabilities for the three months ended June 30, 2022 was $2.7 million compared to $0.3 million for the three months ended June 30, 2021 and was attributed to the change in fair value of the derivatives ascribed to the Scilex Notes as further described in Note 3 of the accompanying notes to the consolidated financial statements in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Gain on derivative liabilities for the six months ended June 30, 2022 was $4.8 million compared to $1.9 million for the six months ended June 30, 2021 and was also attributed to the change in fair value of the derivatives ascribed to the Scilex Notes as further described in Note 3 of the accompanying notes to the consolidated financial statements in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Loss on Marketable Investments. Loss on marketable investments for each of the three and six months ended June 30, 2022 and 2021 reflects $95.5 million and $27.0 million of unrealized losses, respectively, related to the change in fair value of our shares of Celularity.

Loss on debt extinguishment, net. During the three months ended June 30, 2022, we recorded a loss on debt extinguishment of $0.5 million, which was attributed to repayments made on the Bridge Loan (as defined below) during the period.

During the six months ended June 30, 2022, we recorded a loss of debt extinguishment of $4.8 million related to repurchases of the aggregate principal amount of the Scilex Notes and a loss of debt extinguishment of $0.9 million attributed to repayments made on the Bridge Loan during the six months ended June 30, 2022.

Loss on debt extinguishment during the three and six months ended June 30, 2021 totaled $0.6 million and $6.8 million, respectively, and was attributed to the repurchases of the outstanding principal on the Scilex Notes, and was partially offset by short-term debt forgiveness.

Interest Expense, net. Interest expense, net for the three months ended June 30, 2022 and 2021 was $2.3 million and $2.0 million, respectively. We recorded an increase in interest expense attributed to the ACEA significant debt arrangements as described below, which was offset by a decrease in interest expense attributed to the Scilex Notes as a result of the repurchases of aggregate principal as further described in Note 7 of the accompanying notes to the consolidated financial statements in Part I, Item 1 of this Quarterly Report on Form 10-Q. Interest income for both periods was immaterial.

Interest expense for the six months ended June 30, 2022 and 2021 was $5.6 million and $4.4 million, respectively. The increase in interest expense resulted from interest expense related to the ACEA significant debt arrangements and the Bridge Loan as discussed below. Interest expense for the six months ended June 30, 2022 was offset by a decrease in interest expense attributed to the Scilex Notes.

Income Tax Expense/Benefit. Income tax benefit for the three months ended June 30, 2022 and 2021 was $1.1 million and $0.6 million, respectively. The increase in income tax benefit was primarily attributable to the impact of valuation allowance on earnings in the current period.

Income tax expense for the six months ended June 30, 2022 was $0.4 million as compared to income tax benefit of $0.8 million for the six months ended June 30, 2021. The decrease in income tax benefit was primarily attributable to the impact of our valuation allowance against current net loss and an increase in shortfalls on stock-based compensation benefits.

Net Loss. Net loss for the three months ended June 30, 2022 and 2021 was $219.5 million and $166.7 million, respectively. Net loss for the six months ended June 30, 2022 and 2021 was $260.0 million and $164.3 million, respectively.

Liquidity and Capital Resources

As of June 30, 2022, we had $70.3 million in cash and cash equivalents. We have principally financed our operations through the liquidation of our short-term investments, underwritten public offerings, at-the-market facilities and private debt and equity financings, as we have not generated any significant product related revenue from our principal operations to date. 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.

We will seek to raise additional funds through various potential sources, such as the liquidation of our marketable investments, equity and debt financings or through corporate collaboration, grant agreements 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.

We anticipate that we will continue to incur net losses into the foreseeable future as we: (i) advance our product pipeline and other product candidates into clinical trials, (ii) continue our development of, and seek regulatory approvals for, our product candidates in clinical trials, (iii) expand our corporate infrastructure, (iv) incur our share of joint venture and collaboration costs, and (v) expand our business through the acquisition of new businesses, technologies and license agreements.

Marketable Investments

As of June 30, 2022, we owned 19,922,124 shares of Class A Common Stock of Celularity (Nasdaq: CELU) that were subject to transfer restrictions that lapsed on July 16, 2022. We also owned 500,000 shares of Class A common Stock of Celularity not subject to transfer restrictions.

Equity Offerings

In December 2021, we amended the amended and restated sales agreement (as amended, the "ATM Sales Agreement") whereby we may issue and sale shares of our common stock by any method permitted by law deemed to be an "at the market offering" as defined in Rule 415 promulgated under the Securities Act of 1933, as amended, through Cantor Fitzgerald & Co., B. Riley Securities, Inc. and H.C. Wainwright & Co., LLC, as sales agents, to increase the amount of shares of our common stock that we may sell thereunder by an additional $5.0 billion in shares of our common stock. During the six months ended June 30, 2022, we sold an aggregate of 119,581,775 shares of our common stock pursuant to the ATM Sales Agreement for aggregate net proceeds to us of approximately $268.6 million. Subsequent to June 30, 2022 and through August 8, 2022, we sold an aggregate of 13,523,033 shares of our common stock pursuant to the Amended Sales Agreement for aggregate net proceeds to us of approximately $34.0 million.

Scilex Notes

On June 2, 2022, we and Scilex Pharma entered into a Consent Under and Amendment No. 4 to Indenture (the "Indenture Amendment") with U.S. Bank Trust Company, National Association (as successor in interest to U.S. Bank National Association), as trustee (the "Trustee") and collateral agent (the "Agent"), and the beneficial owners of those certain senior secured notes due 2026 issued by Scilex Pharma in September 2018 (the "Scilex Notes") listed on the signature pages thereto (the "Holders"), which amended that certain Indenture, dated September 7, 2018, by and among Scilex Pharma, us, the Trustee and the Agent, as amended (the "Indenture").

Pursuant to the Indenture Amendment, (1) on June 3, 2022, Scilex Pharma repurchased approximately $41.4 million of the aggregate principal amount of the outstanding Scilex Notes at 100% of the principal amount thereof, (2) the Holders agreed that Scilex Pharma can repurchase the remaining principal amount of the Scilex Notes at any time on or before September 30, 2022 for $41.4 million (subject to reduction for any quarterly royalty payments) and upon such repurchase the Holders will forgive and discharge $28.0 million of the aggregate principal amount of the Scilex Notes, (3) the minimum cash requirement under the Indenture was reduced to $5.0 million in aggregate unrestricted cash equivalents at the end of each calendar month, and (4) the maximum aggregate principal amount of that certain Intercompany Promissory Note issued by Scilex Pharma to us on October 5, 2018 was increased from up to $25.0 million to up to $50.0 million.

Bridge Loan Agreement ("Bridge Loan")

On February 16, 2022, we entered into a Bridge Loan pursuant to which we borrowed $45.0 million. As of June 30, 2022, the Bridge Loan has been fully repaid.

ACEA Significant Debt Arrangements

The outstanding principal amount under ACEA significant debt arrangements assumed in connection with our 2021 acquisition of ACEA was $27.6 million as of June 30, 2022. The ACEA significant debt arrangements are comprised of a series of loans with maturity dates that range from August 15, 2023 to August 15, 2028. Each loan is interest free for the first five years, after which time the interest rate is 5.39% per annum.

Contingent Consideration

We have contingent consideration obligations in connection with certain acquisition and licensing transactions that are contingent upon achieving certain specified milestones or the occurrence of certain events. Upon the achievement of such milestones or the occurrence of such events, we will be obligated to make certain cash or stock payments in accordance with the terms of such acquisition and license agreements.

Cash Flow Summary

	June 30, 2022	June 30, 2021
	(in thousands)	
Net cash provided by (used by)		
Operating activities	$ (164,348)	$ (126,572)
Investing activities	(15,392)	76,656
Financing activities	215,140	70,415

Use of Cash

Cash Flows from Operating Activities. Net cash used reflects the cash spent on our research activities and cash spent to support the commercial launch of our products.

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 preclinical development and research activities, support the commercial launch of our products and fund our joint ventures, collaborations and other third-party agreements.

Cash Flows from Investing Activities. Net cash used by investing activities was $15.4 million, of which $6.5 million was related to the Virex acquisition consideration paid in cash , approximately $5.3 million was primarily attributed to expenditures on laboratory equipment, and $3.6 million related to other acquisitions and investments.

Cash Flows from Financing Activities. During the six months ended June 30, 2022, we received $268.6 million from sales of shares of our common stock pursuant to the ATM Sales Agreement, proceeds from short-term debt of $57.1 million and proceeds of $0.1 million from common stock option exercises. We repaid an aggregate of $64.6 million of the principal of the Scilex Notes, of which $43.4 million was attributed to principal included within financing activities and $21.2 million was attributed to effective interest included in operating activities. We also repaid $68.0 million in other short-term debt.

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 accounting principles generally accepted in the U.S. 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, derivative liabilities, revenue recognition, leases, contingent liabilities and 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. Our critical accounting policies and estimates are discussed in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021, filed with the SEC on March 11, 2022, and there have been no material changes during the three months ended June 30, 2022.

Material Cash Requirements

As of June 30, 2022, there were no material changes outside of the ordinary course of business, in our outstanding material contractual obligations from those disclosed under the heading "Material Cash Requirements" within "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021, filed with the SEC on March 11, 2022.

New Accounting Pronouncements

None.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

There have been no material changes in our market risk during the three months ended June 30, 2022 compared to the disclosures in Part II, Item 7A of our Annual Report on Form 10-K for the year ended December 31, 2021, filed with the SEC on March 11, 2022, other than as described below.

Concentration Risk. During the fiscal years ended December 31, 2021, 2020 and 2019 and the three months ended March 31, 2022, Cardinal Health 105, LLC ("Cardinal Health"), which was the third-party logistics distribution provider for Scilex Pharma, was the sole customer of Scilex Pharma and sales to Cardinal Health represented 100% of the net revenue of Scilex Pharma. We obtain our commercial supply of ZTlido and our clinical supply of SP-103 exclusively from Oishi Koseido Co., Ltd. and ITOCHU CHEMICAL FRONTIER Corporation in Japan. This exposes us to concentration of customer and supplier risk. We monitor the financial condition of our customers, limit our credit exposure by setting credit limits, and have not experienced any credit losses for the years ended December 31, 2021, 2020 and 2019 or the three or six months ended June 30, 2022. As we continue to expand the commercialization of ZTlido, we are not limited to the current customer and have elected to expand our distribution network. On April 2, 2022, Scilex Holding announced the expansion of its direct distribution network to national and regional wholesalers and pharmacies. Cardinal Health will continue to provide traditional third-party logistics functions for Scilex Pharma but was no longer the sole customer of Scilex Pharma during the three or six months ended June 30, 2022.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures. Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of our disclosure controls and procedures, as such terms are defined under Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, as amended. In designing and evaluating our disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can only provide reasonable assurance of achieving the desired control objectives and in reaching a reasonable level of assurance. As a result, management was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on that evaluation, management has concluded that as of March 31, 2022 and June 30, 2022, our disclosure controls and procedures were not effective at the reasonable assurance level. However, we believe the consolidated financial statements included in this Form 10-Q for the three and six months ended June 30, 2022 present, in all material respects, our financial position, results of operations, comprehensive loss and cash flows for the periods presented in conformity with U.S. generally accepted accounting principles.

As described in Item 9A of our Annual Report on Form 10-K for the fiscal year ended December 31, 2021, filed with the SEC on March 11, 2022, as a result of our former Chief Financial Officer`s passing in early 2022 as well as other considerations, management concluded that we did not employ sufficient accounting resources with appropriate experience and technical expertise to effectively execute controls over certain judgmental accounting areas. As a result, we identified certain of our control activities in the areas of revenue, business combinations, investments, debt, derivative liabilities and leases did not operate effectively and have been deemed deficient and the combination of the aforementioned deficiencies represents a material weakness in our internal control over financial reporting as of December 31, 2021.

To remediate the material weakness described above and to prevent similar deficiencies in the future, we are currently evaluating and implementing additional controls and procedures, which may include, but are not limited to:

- engaging additional independent third-party technical consultants to assist in performing the accounting analysis of complex transactions in the above mentioned accounting areas;
- recruiting and employing personnel with appropriate experience and technical expertise to enhance management's review significant activities in the above-mentioned accounting areas; and
- conducting additional training for staff involved in the transactions in the above-mentioned accounting areas.

Our management will continue to improve the respective process and controls over the accounting areas affected by the identified material weakness. However, the material weakness will not be considered remediated until the applicable remedial controls operate for a sufficient period of time and management has concluded, through testing, that these controls are operating effectively.

Changes in Internal Control over Financial Reporting. Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we carried out an evaluation of any potential changes in our internal control over financial reporting during the fiscal quarter covered by this Quarterly Report on Form 10-Q. Except for the evaluation and implementation of additional controls and procedures as described above, there has been no change to our internal control over financial reporting during our most recent fiscal quarter that our certifying officers concluded materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings.

The information under the caption "Litigation" set forth in Note 10 in the accompanying notes to the consolidated financial statements in Part I, Item 1 of this Quarterly Report on Form 10-Q is incorporated herein by reference.

Item 1A. Risk Factors.

Our Annual Report on Form 10-K for the year ended December 31, 2021, filed with the SEC on March 11, 2022, in 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, 2021, filed with the SEC on March 11, 2022. 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 have incurred significant losses since inception and anticipate that we will incur continued losses for the foreseeable future.

As of June 30, 2022 and December 31, 2021, we had an accumulated deficit of $1,646.0 million and $1,386.6 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, STI-6129 (anti-CD38 ADC), STI-1492 (anti-CD38 DAR-T), STI-6643 (anti-CD47 antibody), SP-103, SEMDEXATM and our other product candidates, including our COVID-19 related product candidates, STI-2099 (COVIDROPS), STI-9167 (COVISHIELD), STI-8282 (COVI-MSC) and STI-5656 (Abivertinib), into further clinical trials and pursue other development, acquire, develop and manufacture clinical trial materials and increase other regulatory operating activities, (ii) conduct further studies for our preclinical COVID-19 related product candidates to advance to clinical trials and seek regulatory approval; (iii) incur incremental expenses associated with our efforts to further advance a number of potential product candidates into preclinical development activities, (iv) continue to identify and advance a number of fully human therapeutic antibody and ADC preclinical product candidates, (v) incur higher salary, lab supply and infrastructure costs incurred in connection with supporting all of our programs, (vi) invest in our joint ventures, collaborations or other third party agreements, (vii) incur expenses in conjunction with defending and enforcing our rights in various litigation matters, (viii) expand our corporate, development and manufacturing infrastructure, and (ix) support our subsidiaries, including Bioserv Corporation, Levena Biopharma US Inc., Scilex Holding Company ("Scilex Holding") and SmartPharm Therapeutics, Inc., 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.

Risks Related to our Business and Industry

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 Dr. Soon-Shiong's purchase of the drug Cynviloq™ from our company in May 2015. The actions allege that Dr. Soon-Shiong and the other defendants, among other things, acquired the drug Cynviloq™ for the purpose of halting its progression to the market. As an additional example, on May 26, 2020, Wasa Medical Holdings filed a putative federal securities class action against us, our President, Chief Executive Officer and Chairman of the Board of Directors, Henry Ji, Ph.D., and our SVP of Regulatory Affairs, Mark R. Brunswick, Ph.D., alleging that we, Dr. Ji and Dr. Brunswick made materially false and/or misleading statements to the investing public regarding STI-1499 and its ability to inhibit the SARS-CoV-2 virus infection. A second putative federal securities class action was filed in the U.S. District Court for the Southern District of California against the same defendants alleging the same claims and seeking the same relief. 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. While we intend to pursue any claims made by us, or defend against any claims brought against us, vigorously,

we cannot predict the outcomes of such claims. 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.

Our plan to complete the transaction contemplated by the business combination agreement between Scilex Holding Company and Vickers Vantage Corp. I is subject to various risks and uncertainties and may not be completed in accordance with the expected plans or anticipated timeline, or at all and may not achieve the intended benefits, and will involve significant time, expense and management attention, any of which could negatively impact our businesses, financial condition and results of operations.

While we have previously announced that our majority owned subsidiary, Scilex Holding Company, entered into an agreement and plan of merger (the "Business Combination Agreement") with Vickers Vantage Corp. I, a Cayman Islands exempted company ("Vickers") and Vantage Merger Sub Inc., a Delaware corporation and wholly-owned subsidiary of Vickers, there is no assurance that the transaction will be consummated. If the transactions contemplated by the Business Combination Agreement are not completed on favorable terms or at all, or during the prescribed time period set forth in the Business Combination Agreement, we may experience negative reactions from the financial markets and from our stockholders. Moreover, even if the business combination is ultimately completed, there is no assurance that we will realize the intended benefits from such transaction. Further, we will be required to devote significant management and employee attention and resources to matters relating to the business combination. These matters have the potential to disrupt us from conducting business operations or pursuing other business strategies and could adversely affect our business, financial condition, results of operations and cash flows.

Impairment charges pertaining to goodwill, identifiable intangible assets or other long-lived assets from our mergers and acquisitions could have an adverse impact on our financial condition and results of operations.

The total purchase price pertaining to our acquisitions in recent years have been allocated to net tangible assets, identifiable intangible assets, in-process research and development and goodwill. We evaluate goodwill and indefinite-lived intangible assets for impairment annually in our fiscal fourth quarter, or more frequently if events or changes in circumstances indicate that the carrying value of a reporting unit may not be recoverable. We evaluate finite-lived intangible assets and long-lived assets for impairment if events or changes in circumstances indicate that the carrying value of the long-lived asset may not be recoverable. The assessment of impairment involves significant judgment and projections about future performance.

Future declines in the results of our acquisitions and other factors could cause us to record an impairment of all or a portion of the relevant goodwill in the future. We may not be able to achieve our business targets for businesses we previously acquired or will acquire in the future, which could result in our incurring additional goodwill and other intangible assets impairment charges. Further declines in our market capitalization increase the risk that we may be required to perform another goodwill impairment analysis, which could result in an impairment of up to the entire balance of our goodwill based on the quantitative assessment performed.

Moreover, to the extent the value of goodwill or identifiable intangible assets or other long-lived assets become impaired, we will be required to incur material charges relating to the impairment. For example, in June 2022, we decided to put on hold for future evaluation the development of Abivertinib, which was acquired from ACEA Therapeutics, Inc. in 2021, for the treatment of hospitalized COVID-19 patients, which resulted in us determining that approximately $90.8 million associated with the acquired in-process research and development assets had been impaired and recorded within the loss on impairment of intangible assets in our consolidated statement of operations for the three months ended June 30, 2022. See Note 6 of the accompanying notes to the consolidated financial statements in Part I, Item 1 of this Quarterly Report on Form 10-Q for additional details. Any other impairment charges could have a material adverse impact on our results of operations and the market value of our common stock.

Investors' expectations of our performance relating to environmental, social and governance factors may impose additional costs and expose us to new risks.

There is an increasing focus from certain investors, employees, regulators and other stakeholders concerning corporate responsibility, specifically related to environmental, social and governance ("ESG") factors. Some investors and investor advocacy groups may use these factors to guide investment strategies and, in some cases, investors may choose not to invest in our company if they believe our policies relating to corporate responsibility are inadequate. Third-party providers of corporate responsibility ratings and reports on companies have increased to meet growing investor demand for measurement of corporate responsibility performance, and a variety of organizations currently measure the performance of companies on such ESG topics, and the results of these assessments are widely publicized. Investors, particularly institutional investors, use these ratings to benchmark companies against their peers and if we are perceived as lagging with respect to ESG initiatives, certain investors may engage with us to improve ESG disclosures or performance and may also make voting decisions, or take other actions, to hold us and our board of directors accountable. In addition, the criteria by which our corporate responsibility practices are assessed may change, which could result in greater expectations of us and cause us to undertake costly initiatives to satisfy such new criteria. If we elect not to or are unable to satisfy such new criteria, investors may conclude that our policies with respect to corporate responsibility are inadequate. We may face reputational damage in the event that our corporate responsibility procedures or standards do not meet the standards set by various constituencies. In addition, the SEC has announced proposed rules that, among other matters, will establish a framework for reporting of climate-related risks. To the extent the proposed rules impose additional reporting obligations, we could face increased costs. Separately, the SEC has also announced that it is scrutinizing existing climate-change related disclosures in public filings, increasing the potential for enforcement if the SEC were to allege our existing climate disclosures are misleading or deficient.

We may face reputational damage in the event our corporate responsibility initiatives or objectives do not meet the standards set by our investors, stockholders, lawmakers, listing exchanges or other constituencies, or if we are unable to achieve an acceptable ESG or sustainability rating from third-party rating services. A low ESG or sustainability rating by a third-party rating service could also result in the exclusion of our common stock from consideration by certain investors who may elect to invest with our competition instead. Ongoing focus on corporate responsibility matters by investors and other parties as described above may impose additional costs or expose us to new risks. Any failure or perceived failure by us in this regard could have a material adverse effect on our reputation and on our business, share price, financial condition, or results of operations, including the sustainability of our business over time.

The market opportunity for our products and product candidates or any we develop may be smaller than we estimate.

The potential market opportunity for our products and product candidates is difficult to precisely estimate. Our estimates of the potential market opportunity for our products and product candidates include several key assumptions of the current market size and current pricing for commercially available products and are based on industry and market data obtained from industry publications, studies conducted by us, our industry knowledge, third-party research reports and other surveys. While we believe our estimates are reasonable and reliable, they may prove to be incorrect. Further, new studies may change the estimated incidence or prevalence of diseases and disorders. The number of patients may turn out to be lower than expected. Additionally, the potentially addressable patient population for any product or product candidate we develop may be limited or may not be amenable to treatment with such product candidate, and new patients may become increasingly difficult to identify or gain access to, which would adversely affect our results of operations and our business.

Unstable market and economic conditions, including any that may be created by the conflict between Russia and Ukraine, may have serious adverse consequences on our business and financial condition.

Our business, financial condition and results of operations could be adversely affected by general conditions in the global economy and in the global financial markets. For example, the COVID-19 pandemic resulted in businesses suspending or terminating global operations and travel, self-imposed or government-mandated quarantines, and an overall slowdown of economic activity in many areas. In addition, U.S. and global markets are experiencing volatility and disruption following the escalation of geopolitical tensions and the start of the military conflict between Russia and Ukraine, and the adoption of comprehensive sanctions in response thereto by, among others, the EU, the U.S., and the UK, which sanctions restrict a wide range of trade and financial dealings with Russia and Russian persons, as well as certain regions in Ukraine. A severe or prolonged economic downturn could result in a variety of risks to our business, including our ability to raise additional capital when needed on acceptable terms, if at all. A weak or declining economy could also strain our suppliers, service providers, manufacturers or other partners and there is a risk that one or more would not survive or be able to meet their commitments to us under such circumstances. Any of the foregoing could harm our business and we cannot anticipate all of the ways in which the current economic climate and financial market conditions could adversely impact our business.

We are subject to recently enacted state laws in California that require gender and diversity quotas for boards of directors of public companies headquartered in California.

In September 2018, California enacted Senate Bill 826 ("SB 826"), which generally requires public companies with principal executive offices in California to have at least two female directors on its board of directors if the company has at least five directors, and at least three female directors on its board of directors if the company has at least six directors. On May 13, 2022, Los Angeles Superior Court declared SB 826 unconstitutional and, although the California Secretary of State has directed counsel to file an appeal of decision, the State of California is currently precluded from enforcing SB 826.

Additionally, on September 30, 2020, California enacted Assembly Bill 979 ("AB 979"), which generally requires public companies with principal executive offices in California to include specified numbers of directors from "underrepresented communities". A director from an "underrepresented community" means a director who self-identifies as Black, African American, Hispanic, Latino, Asian, Pacific Islander, Native American, Native Hawaiian, Alaska Native, gay, lesbian, bisexual or transgender. By December 31, 2021, each public company with principal executive offices in California was required to have at least one director from an underrepresented community. By December 31, 2022, a public company with more than four but fewer than nine directors will be required to have a minimum of two directors from underrepresented communities, and a public company with nine or more directors will need to have a minimum of three directors from underrepresented communities. On April 1, 2022, the Los Angeles Superior Court declared AB 979 unconstitutional and, although the California Secretary of State has filed a notice of appeal in the case, the State of California is currently precluded from enforcing AB 979.

If the State of California successfully appeals the court decisions regarding SB 826 or AB 979, we cannot assure that we can recruit, attract and/or retain qualified members of the board and meet gender or diversity quotas as previously required by SB 826 or AB 979, and our board of directors does not currently satisfy the quota previously required under SB 826 and, as currently constituted, would not satisfy the quota previously required under SB 826 or under AB 979 by December 31, 2022. A failure to comply with any such quota requirement could result in fines from the California Secretary of State, and our reputation may be adversely affected.

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 January 3, 2022 to July 29, 2022, our closing stock price ranged from $1.24 to $4.90 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;
- effects of public health crises, pandemics and epidemics, such as the COVID-19 pandemic; 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.

Our investors could experience substantial dilution of their investments as a result of subsequent exercises of our outstanding options, including the CEO Performance Award, or the grant of future equity awards by us.

As of June 30, 2022, 34.9 million shares of our common stock were reserved for issuance under our equity incentive plans, of which 21.6 million shares of our common stock were subject to options outstanding at such date at a weighted-average exercise price of $6.05 per share, 4.9 million shares of our common stock were subject to outstanding restricted stock units, 1.7 million shares of our common stock were reserved for issuance pursuant to our 2019 Stock Incentive Plan and 6.7 million shares of our common stock were reserved for issuance pursuant to our 2020 Employee Stock Purchase Plan. In addition, 24,935,882 shares of our common stock are subject to the 10-year CEO performance award granted to Dr. Ji that is tied solely to achieving market capitalization milestones and has an exercise price of $17.30 per share. To the extent outstanding options are exercised, our existing stockholders may incur dilution.

We rely on equity awards to motivate current employees and to attract new employees. The grant of future equity awards by us to our employees and other service providers may further dilute our stockholders.

We have identified a material weakness in our internal control over financial reporting, and our financial controls and procedures may not in the future be sufficient to ensure timely and reliable reporting of financial information, which could, if not remediated, result in a material misstatement in our financial statements and could adversely affect our future results of operations, our stock price, and our ability to raise capital.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim consolidated financial statements will not be prevented or detected on a timely basis.

As previously disclosed on our Current Report on Form 8-K filed with the Securities and Exchange Commission on January 7, 2022, our former Chief Financial Officer passed away unexpectedly on January 6, 2022. Due in large part to the unexpected passing of our former Chief Financial Officer, our management has identified that we did not employ sufficient accounting resources with appropriate experience and technical expertise to effectively execute controls over certain judgmental accounting areas. As a result, certain of our control activities in the areas of revenue, business combinations, investments, debt, derivative liabilities and leases did not operate effectively and have been deemed deficient and the combination of the aforementioned deficiencies represented a material weakness in our internal control over financial reporting as of December 31, 2021. The material weakness did not result in a restatement of previously issued annual consolidated financial statements or condensed interim consolidated financial statements.

As a result of the material weakness, we are in the process of evaluating and implementing remediation measures including, but not limited to, engagement of: (1) engaging additional independent third-party technical consultants to assist in performing the accounting analysis of complex transactions in the above mentioned accounting areas; (2) recruiting and employing personnel with appropriate experience and technical expertise to enhance management's review significant activities in the above-mentioned accounting areas; and (3) conducting additional training for staff involved in the transactions in the above-mentioned accounting areas. We believe that our remediation measures, if effectively implemented, will provide reasonable assurance regarding the reliability of financial reporting and the preparation of our financial statements for external purposes in accordance with generally accepted accounting principles ("GAAP"). We cannot assure you that the measures we have taken to date or any measures we may take in response to the material weakness in the future will be sufficient to remediate such material weakness or to avoid potential future material weaknesses. Any failure to implement these improvements to our internal control over financial reporting would result in a continued material weakness 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. Even if we develop effective controls, these new controls may become inadequate because of changes in conditions or the degree of compliance with these policies or procedures may deteriorate. If we experience future material weaknesses or deficiencies in internal controls and we are unable to correct them in a timely manner, our ability to record, process, summarize and report financial information accurately and within the time periods specified in the rules and forms of the SEC, will be adversely affected. Any such failure could negatively affect the market price and trading liquidity of our common stock, lead to delisting, cause investors to lose confidence in our reported financial information, subject us to civil and criminal investigations and penalties, and generally materially and adversely impact our business and financial condition.

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

Exhibit No.	Description
2.1*^	Agreement and Plan of Merger, dated January 14, 2022, by and among Sorrento Therapeutics, Inc., VH Merger Sub I, Inc., VH Merger Sub II, LLC, Virex Health, Inc. and Fortis Advisors LLC, as representative of the stockholders of Virex Health, Inc. (incorporated by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed with the SEC on February 17, 2022).
2.2*	Agreement and Plan of Merger, dated as of March 17, 2022, by and among Vickers Vantage Corp. I, Vantage Merger Sub Inc. and Scilex Holding Company (incorporated by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed with the SEC on March 18, 2022.).
3.1	Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q filed with the SEC on May 15, 2013).
3.2	Certificate of Amendment of the Restated Certificate of Incorporation of Sorrento Therapeutics, Inc. (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed with the SEC on August 1, 2013).
3.3	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	Specimen Common Stock Certificate (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed with the SEC on October 23, 2009).
4.2	Voting Agreement, dated as of April 29, 2016, by and between Sorrento Therapeutics, Inc. and Yuhan Corporation (incorporated by reference to Exhibit 4.12 to the Registrant's Registration Statement on Form S-3 filed with the SEC on June 29, 2016).
4.3	Form of Common Stock Purchase Warrant issued to investors pursuant to the Securities Purchase Agreement, dated as of December 11, 2017, by and among Sorrento Therapeutics, Inc. and the purchasers identified on Schedule A thereto (incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed with the SEC on December 21, 2017).
4.4	Form of Common Stock Purchase Warrant issued to investors pursuant to the Securities Purchase Agreement, dated as of June 13, 2018, by and among Sorrento Therapeutics, Inc. and the purchasers identified on Schedule A thereto (incorporated by reference to Exhibit 4.2 to the Registrant's Quarterly Report on Form 10-Q filed with the SEC on August 9, 2018).
4.5	Registration Rights Agreement, dated June 13, 2018, by and among Sorrento Therapeutics, Inc. and the purchasers identified on Schedule A thereto (incorporated by reference to Exhibit 4.3 to the Registrant's Quarterly Report on Form 10-Q filed with the SEC on August 9, 2018).
4.6	Form of Warrant, dated November 7, 2018, issued by Sorrento Therapeutics, Inc. (incorporated by reference to Exhibit 4.1 to the Registrant's Quarterly Report on Form 10-Q filed with the SEC on November 9, 2018).

4.7	Registration Rights Agreement, dated November 7, 2018, by and among Sorrento Therapeutics, Inc. and the parties identified on Schedule A thereto (incorporated by reference to Exhibit 4.2 to the Registrant's Quarterly Report on Form 10-Q filed with the SEC on November 9, 2018).
4.8	Agreement and Consent, dated November 7, 2018, by and among Sorrento Therapeutics, Inc. and the Warrant Holders party thereto (incorporated by reference to Exhibit 10.6 of the Registrant's Quarterly Report on Form 10-Q filed with the SEC on November 9, 2018).
4.9	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).
4.10	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).
4.11	Form of Series A Warrant (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed with the SEC on June 28, 2019).
4.12	Form of Series C Warrant (incorporated by reference to Exhibit 4.3 to the Registrant's Current Report on Form 8-K filed with the SEC on June 28, 2019).
4.13	Form of Warrant (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed with the SEC on October 8, 2019).
4.14	Amendment No. 2 to the Registration Rights Agreement, dated as of December 6, 2019, by and among Sorrento Therapeutics, Inc. and the persons party thereto (incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed with the SEC on December 9, 2019).
4.15	Registration Rights Agreement, dated as of March 4, 2021, by and between Sorrento Therapeutics, Inc. and the Icahn School of Medicine at Mount Sinai (incorporated by reference to Exhibit 4.19 to the Registrant's Registration Statement on Form S-3 filed with the SEC on April 9, 2021).
10.1#	Offer Letter, dated April 27, 2022, between Sorrento Therapeutics, Inc. and Elizabeth A. Czerepak (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the SEC on April 28, 2022).
10.2#	Offer Letter, dated April 27, 2022, between Scilex Holding Company and Elizabeth A. Czerepak (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed with the SEC on April 28, 2022).
10.3+	Consent Under and Amendment No. 4 to Indenture, dated June 3, 2022, by and among Sorrento Therapeutics, Inc., Scilex Pharmaceuticals Inc., U.S. Bank Trust Company, National Association, as trustee and collateral agent, and the beneficial owners of the senior secured notes due 2026 and the holders of such securities listed on the signature pages thereto (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the SEC on June 3, 2022).
10.4^+	License and Commercialization Agreement, dated June 14, 2022, between Scilex Holding Company and RxOmeg Therapeutics, LLC (incorporated by reference to Exhibit 10.44 to the Registration Statement on Form S-4/A filed by Vickers Vantage Corp. I with the SEC on June 27, 2022).
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 Elizabeth Czerepak, 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 Elizabeth Czerepak, Principal Financial Officer, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, as amended.
101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because XBRL tags are embedded within the Inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File, formatted in Inline Extensible Business Reporting Language (iXBRL) (embedded within the Inline XBRL 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 supplemental copies of any of the omitted schedules and exhibits upon request by the SEC.

+ Non-material schedules and exhibits have been omitted pursuant to Item 601(a)(5) of Regulation S-K. The Company hereby undertakes to furnish supplemental 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) information that the Registrant treats as private or confidential. The Registrant hereby undertakes to furnish supplemental copies of the unredacted exhibit upon request by the SEC.

Management contract or compensatory plan.

† Furnished herewith.

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: August 15, 2022

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

Date: August 15, 2022

By: /s/ Elizabeth Czerepak
Elizabeth Czerepak
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, Ph.D., 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: August 15, 2022

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, Elizabeth Czerepak, 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.

Dated: August 15, 2022

/s/ Elizabeth Czerepak

Elizabeth Czerepak
Chief Financial Officer
(Principal Financial Officer)

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 June 30, 2022 (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: August 15, 2022

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, Elizabeth Czerepak, principal financial officer of 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 June 30, 2022 (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: August 15, 2022

By: /s/ Elizabeth Czerepak
Elizabeth Czerepak
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.