
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, DC 20549

FORM 10-Q

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

for the quarterly period ended March 31, 2019

OR

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

COMMISSION FILE NUMBER: 001-37590

CERECOR INC.

(Exact name of registrant as specified in its charter)

Delaware

(State of incorporation)

540 Gaither Road, Suite 400

Rockville, Maryland 20850

(Address of principal executive offices)

45-0705648

(I.R.S. Employer Identification No.)

(410) 522-8707

(Registrant's telephone number,
including area code)

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, \$0.001 par value	CERC	Nasdaq Capital Market

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

Non-accelerated filer

Emerging growth company

Accelerated filer

Smaller reporting 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

As of May 3, 2019, the registrant had 42,753,659 shares of common stock outstanding.

CERECOR INC.

FORM 10-Q

For the Quarter Ended March 31, 2019

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PART I - FINANCIAL INFORMATION

Item 1. Financial Statements.

CERECOR INC. and SUBSIDIARIES
Condensed Consolidated Balance Sheets

	March 31, 2019 (unaudited)	December 31, 2018
Assets		
Current assets:		
Cash and cash equivalents	\$ 16,121,388	\$ 10,646,301
Accounts receivable, net	2,718,396	3,157,555
Other receivables	5,531,025	5,469,011
Inventory, net	1,046,982	1,110,780
Prepaid expenses and other current assets	1,248,465	1,529,516
Restricted cash, current portion	77,846	18,730
Total current assets	26,744,102	21,931,893
Property and equipment, net	1,477,067	586,512
Intangibles assets, net	30,160,621	31,239,468
Goodwill	16,411,123	16,411,123
Restricted cash, net of current portion	77,118	81,725
Total assets	<u>\$ 74,870,031</u>	<u>\$ 70,250,721</u>
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	\$ 1,249,470	\$ 1,446,141
Accrued expenses and other current liabilities	21,815,097	19,731,373
Income taxes payable	1,814,650	2,032,258
Long-term debt, current portion	1,050,000	1,050,000
Contingent consideration, current portion	2,205,647	1,956,807
Total current liabilities	28,134,864	26,216,579
Long-term debt, net of current portion	14,303,540	14,327,882
Contingent consideration, net of current portion	6,796,641	7,093,757
Deferred tax liability, net	75,179	69,238
License obligations	1,250,000	1,250,000
Other long-term liabilities	1,189,277	385,517
Total liabilities	51,749,501	49,342,973
Stockholders' equity:		
Common stock—\$0.001 par value; 200,000,000 shares authorized at March 31, 2019 and December 31, 2018; 42,753,659 and 40,804,189 shares issued and outstanding at March 31, 2019 and December 31, 2018, respectively	42,754	40,804
Preferred stock—\$0.001 par value; 5,000,000 shares authorized at March 31, 2019 and December 31, 2018; 2,857,143 shares issued and outstanding at March 31, 2019 and December 31, 2018	2,857	2,857
Additional paid-in capital	128,747,037	119,082,157
Accumulated deficit	(105,672,118)	(98,218,070)
Total stockholders' equity	23,120,530	20,907,748
Total liabilities and stockholders' equity	<u>\$ 74,870,031</u>	<u>\$ 70,250,721</u>

See accompanying notes to the condensed consolidated financial statements.

CERECOR INC. and SUBSIDIARIES
Condensed Consolidated Statements of Operations (Unaudited)

	Three Months Ended	
	March 31,	
	2019	2018
Revenues		
Product revenue, net	\$ 5,411,443	\$ 4,260,119
Sales force revenue	—	222,656
Total revenues, net	<u>5,411,443</u>	<u>4,482,775</u>
Operating expenses:		
Cost of product sales	1,947,892	863,624
Research and development	3,401,189	1,649,778
General and administrative	2,716,983	2,918,916
Sales and marketing	3,108,902	1,524,816
Amortization expense	1,078,847	1,017,408
Change in fair value of contingent consideration	180,402	262,769
Total operating expenses	<u>12,434,215</u>	<u>8,237,311</u>
Loss from operations	(7,022,772)	(3,754,536)
Other (expense) income:		
Change in fair value of warrant liability and unit purchase option liability	(47,577)	(23,251)
Other (expense) income, net	(9,400)	18,655
Interest expense, net	(207,941)	(100,402)
Total other expense, net	<u>(264,918)</u>	<u>(104,998)</u>
Net loss before taxes	(7,287,690)	(3,859,534)
Income tax expense	166,358	23,313
Net loss	<u>\$ (7,454,048)</u>	<u>\$ (3,882,847)</u>
Net loss per share of common stock, basic and diluted	<u>\$ (0.13)</u>	<u>\$ (0.12)</u>
Net loss per share of preferred stock, basic and diluted	<u>\$ (0.67)</u>	<u>\$ —</u>

See accompanying notes to the condensed consolidated unaudited financial statements.

CERECOR INC. and SUBSIDIARIES

Condensed Consolidated Statements of Cash Flows (Unaudited)

	Three Months Ended March 31,	
	2019	2018
Operating activities		
Net loss	\$ (7,454,048)	\$ (3,882,847)
Adjustments to reconcile net loss provided by (used in) to net cash used in operating activities:		
Depreciation and amortization	1,098,478	1,023,040
Stock-based compensation	596,693	242,824
Deferred taxes	5,941	15,913
Amortization of inventory fair value associated with acquisition of TRx and Avadel	22,603	45,450
Non-cash interest expense	—	105,451
Change in fair value of warrant liability and unit purchase option liability	47,577	23,251
Change in fair value of contingent consideration and long-term royalty obligation	180,402	262,769
Other	21,412	—
Changes in assets and liabilities:		
Accounts receivable, net	439,159	104,671
Other receivables	(62,014)	371,663
Inventory, net	41,195	(554,445)
Prepaid expenses and other assets	281,051	(71,085)
Escrowed cash receivable	—	(2,065)
Accounts payable	(196,671)	1,866,960
Income taxes payable	(217,608)	7,400
Accrued expenses and other liabilities	2,074,278	160,627
Net cash used in operating activities	(3,121,552)	(280,423)
Investing activities		
Acquisition of business	—	(1)
Purchase of property and equipment	(165,969)	(19,224)
Net cash used in investing activities	(165,969)	(19,225)
Financing activities		
Proceeds from exercise of stock options and warrants	94,177	363,390
Proceeds from underwritten public offering, net	8,975,960	—
Payment of contingent consideration	(228,678)	—
Payment of long-term debt	(24,342)	—
Net cash provided by financing activities	8,817,117	363,390
Increase in cash, cash equivalents and restricted cash	5,529,596	63,742
Cash, cash equivalents, and restricted cash at beginning of period	10,746,756	2,605,499
Cash, cash equivalents, and restricted cash at end of period	\$ 16,276,352	\$ 2,669,241
Supplemental disclosures of cash flow information		
Cash paid for interest	\$ 262,500	\$ 44,003
Cash paid for taxes	\$ 378,025	\$ —
Supplemental disclosures of non-cash activities		
Leased asset obtained in exchange for new operating lease liability	\$ 743,025	\$ —
Debt assumed in Avadel Pediatric Products acquisition	\$ —	\$ (15,075,000)

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the condensed consolidated balance sheets that sum to the total of the same such amounts shown in the condensed consolidated statements of cash flows:

	March 31,	
	2019	2018
Cash and cash equivalents	\$ 16,121,388	\$ 2,523,927
Restricted cash, current	77,846	13,955
Restricted cash, non-current	77,118	131,359
Total cash, cash equivalents and restricted cash	<u>\$ 16,276,352</u>	<u>\$ 2,669,241</u>

See accompanying notes to the condensed consolidated financial statements.

CERECOR INC. and SUBSIDIARIES

Condensed Consolidated Statements of Changes in Stockholders' Equity

	Stockholders' Equity							Total stockholders' equity
	Common stock		Preferred Stock		Additional paid-in capital	Contingently issuable stock Amount	Accumulated deficit	
	Shares	Amount	Shares	Amount				
Three Months Ended March 31, 2018:								
Balance, December 31, 2017	31,266,989	\$ 31,268	—	\$ —	\$83,338,136	\$ 2,655,464	\$(58,165,260)	\$ 27,859,608
Exercise of stock options and warrants	143,346	143	—	—	363,247	—	—	363,390
Stock-based compensation	—	—	—	—	242,824	—	—	242,824
Net loss	—	—	—	—	—	—	(3,882,847)	(3,882,847)
Balance, March 31, 2018	<u>31,410,335</u>	<u>\$ 31,411</u>	<u>—</u>	<u>\$ —</u>	<u>\$83,944,207</u>	<u>\$ 2,655,464</u>	<u>\$(62,048,107)</u>	<u>\$ 24,582,975</u>
Three Months Ended March 31, 2019:								
Balance, December 31, 2018	40,804,189	\$ 40,804	2,857,143	\$ 2,857	\$119,082,157	\$ —	\$(98,218,070)	\$ 20,907,748
Issuance of shares of common stock in underwritten public offering, net of offering costs	1,818,182	1,818	—	—	8,974,142	—	—	8,975,960
Exercise of stock options and warrants	31,288	31	—	—	94,146	—	—	94,177
Stock-based compensation	—	—	—	—	596,693	—	—	596,693
Restricted Stock Units vested during period	100,000	101	—	—	(101)	—	—	—
Net loss	—	—	—	—	—	—	(7,454,048)	(7,454,048)
Balance, March 31, 2019	<u>42,753,659</u>	<u>\$ 42,754</u>	<u>2,857,143</u>	<u>\$ 2,857</u>	<u>\$128,747,037</u>	<u>\$ —</u>	<u>\$(105,672,118)</u>	<u>\$ 23,120,530</u>

See accompanying notes to the condensed consolidated financial statements.

CERECOR INC. and SUBSIDIARIES

Notes to Unaudited Condensed Consolidated Financial Statements

1. Business

Cerecor Inc. (the "Company" or "Cerecor") is a fully integrated biopharmaceutical company with commercial operations and research and development capabilities. The Company is building a pipeline of innovative therapies in neurology, pediatric healthcare, and orphan rare diseases. The Company's neurology pipeline is led by CERC-301, which recently received positive interim results from the Phase I safety study of Neurogenic Orthostatic Hypotension ("nOH"). The Company is also developing two other neurological compounds, one of which is in preclinical testing and the other is in the clinical ready stage. The Company's pediatric orphan rare disease pipeline is led by CERC-801, CERC-802, and CERC-803. All three of these compounds are therapies for inherited metabolic disorders known as Congenital Disorders of Glycosylation ("CDGs") by means of substrate replacement therapy. The U.S. Food and Drug Administration ("FDA") has granted Rare Pediatric Disease designation ("RPDD") and Orphan Drug Designation ("ODD") to all three compounds. Under the FDA's Rare Pediatric Disease Priority Review Voucher ("PRV") program, upon the approval of a new drug application ("NDA") for the treatment of a rare pediatric disease, the sponsor of such application would be eligible for a PRV that can be used to obtain priority review for a subsequent new drug application or biologics license application. The PRV may be sold or transferred an unlimited number of times. The Company plans to leverage the 505(b)(2) NDA pathway for all three compounds to accelerate development and approval. The Company is also in the process of developing one other preclinical pediatric orphan rare disease compound.

The Company also has a diverse portfolio of marketed products. Our marketed products are led by our prescribed dietary supplements and prescribed drugs. Our prescribed dietary supplements include Poly-Vi-Flor and Tri-Vi-Flor, which are prescription vitamin and fluoride supplements used in infants and children to treat or prevent deficiency of essential vitamins and fluoride. The Company also markets a number of prescription drugs that treat a range of pediatric diseases, disorders and conditions. Cerecor's prescription drugs include Millipred®, Ulesfia®, Karbinal™ ER, AcipHex® Sprinkle™, and Cefaclor for Oral Suspension. Finally, the Company has one marketed medical device, Flexichamber™.

Cerecor was incorporated in 2011, commenced operations in the second quarter of 2011 and completed an initial public offering in October 2015.

On November 17, 2017, the Company acquired TRx Pharmaceuticals, LLC ("TRx") and its wholly-owned subsidiaries (see "TRx Acquisition" in Note 5 below for a description of this transaction).

On February 16, 2018, Cerecor acquired all rights to Avadel Pharmaceuticals PLC's ("Avadel") marketed pediatric products (the "Acquired Products") in exchange for Cerecor assuming certain financial obligations of Avadel (see "Avadel Pediatric Products Acquisition" in Note 5 below for a description of this transaction).

On September 25, 2018, the Company acquired Ichorion Therapeutics, Inc., a privately-held biopharmaceutical company focused on developing treatments and increasing awareness of inherited metabolic disorders known as CDGs (see "Ichorion Asset Acquisition" in Note 5 below for a description of this transaction).

Liquidity

In order to meet its cash flow needs, the Company applies a disciplined decision-making methodology as it evaluates the optimal allocation of the Company's resources between investing in the Company's current commercial product line, the Company's development portfolio and acquisitions or in-licensing of new assets. For the three months ended March 31, 2019, Cerecor generated a net loss of \$7.5 million and negative cash flow from operations of \$3.1 million. As of March 31, 2019, Cerecor had an accumulated deficit of \$105.7 million and a balance of \$16.1 million in cash and cash equivalents. During the first quarter of 2019, the Company closed an underwritten public offering of common stock for 1,818,182 shares of common stock of the Company, at a price to the public of \$5.50 per share ("public price"). Armistice Capital Master Fund Ltd. ("Armistice"), our largest stockholder, participated in the offering by purchasing 363,637 shares of common stock of the Company from the underwriter at the public price. Cerecor director Steven J. Boyd is Armistice's Chief Investment Officer. The net proceeds of the offering were approximately \$9.0 million (see "Common Stock Offering" in Note 9 below for description of the transaction).

The Company plans to use cash and the anticipated cash flows from the Company's existing product sales to offset costs related to its neurology programs, pediatric rare disease programs, business development, costs associated with its organizational

infrastructure, and debt principal and interest payments. Cerecor expects to continue to incur significant expenses and operating losses for the immediate future as it continues to invest in the Company's pipeline assets. Our ability to achieve and maintain profitability in the future is dependent on, among other things, the development, regulatory approval, and commercialization of our new product candidates and achieving a level of revenues from our existing product sales adequate to support our cost structure, which includes significant investment in our pipeline assets.

The Company believes it will require additional financing to continue to execute its clinical development strategy and fund future operations. The Company plans to meet its capital requirements through operating cash flows from product sales and some combination of equity or debt financings, collaborations, out-licensing arrangements, strategic alliances, federal and private grants, marketing, distribution, or licensing arrangements, or the sale of current or future assets. If the Company is not able to secure adequate additional funding, the Company may be forced to make reductions in spending, extend payment terms with suppliers, liquidate assets where possible, or suspend or curtail planned programs. If the Company raises additional funds through collaborations, strategic alliances, or licensing arrangements with third parties, the Company may have to relinquish valuable rights to our technologies, future revenue streams, research programs, or product candidates.

Our plan to aggressively develop our pipeline will require substantial cash inflows in excess of what the Company expects our current commercial operations to generate. However, the Company expects that our existing cash and cash equivalents, together with anticipated revenue, will enable us to fund our operating expenses, capital expenditure requirements, and other non-operating cash payments, such as fixed quarterly payments on our outstanding debt balances, through at least May 2020.

2. Basis of Presentation and Significant Accounting Policies

Basis of Presentation

The Company's unaudited condensed consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP"). Any reference in these notes to applicable guidance is meant to refer to the authoritative GAAP as found in the Accounting Standards Codification ("ASC") and Accounting Standards Updates ("ASU") of the Financial Accounting Standards Board ("FASB").

In the opinion of management, the accompanying unaudited condensed consolidated financial statements include all adjustments, consisting of normal recurring adjustments, which are necessary to present fairly the Company's financial position, results of operations, and cash flows. The condensed consolidated balance sheet at December 31, 2018 has been derived from audited financial statements at that date. The interim results of operations are not necessarily indicative of the results that may occur for the full fiscal year. Certain information and footnote disclosure normally included in the financial statements prepared in accordance with GAAP have been condensed or omitted pursuant to instructions, rules, and regulations prescribed by the United States Securities and Exchange Commission ("SEC"). Certain prior period amounts have been reclassified to conform to the current year presentation.

The Company believes that the disclosures provided herein are adequate to make the information presented not misleading when these unaudited condensed consolidated financial statements are read in conjunction with the December 31, 2018 audited consolidated financial statements.

Reclassification

During the fourth quarter of 2018, the Company concluded that going forward it would include change in fair value of contingent consideration within its own stand-alone line in operating expenses in the Company's statements of operations. The Company has reclassified \$0.3 million from other expenses to operating expenses in the March 31, 2018 statement of operations to conform with current period presentation.

Significant Accounting Policies

During the three months ended March 31, 2019, there have been no significant changes to the Company's summary of significant accounting policies contained in the Company's Annual Report on Form 10-K for the year ended December 31, 2018, as filed with the SEC on March 18, 2019 and amended on April 23, 2019, except for the recently adopted accounting standards described below.

The following significant accounting policy was updated in 2019 to reflect changes upon our adoption of ASU No. 2016-02 *Leases* (Topic 842) ("ASU 2016-02").

Leases

The Company determines if an arrangement is a lease at inception. If an arrangement contains a lease, the Company performs a lease classification test to determine if the lease is an operating lease or a finance lease. The Company has identified one operating lease for its corporate headquarters. Right-of-use ("ROU") assets represent the right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. Operating lease liabilities are recognized on the commencement date of the lease based on the present value of the future lease payments over the lease term and are included in other long-term liabilities on our condensed consolidated balance sheet. Right-of-use assets are valued at the initial measurement of the lease liability, plus any indirect costs or rent prepayments, and reduced by any lease incentives and any deferred lease payments. Operating right-of-use assets are recorded in property and equipment, net on the condensed consolidated balance sheet and are amortized over the lease term. To determine the present value of lease payments on lease commencement, we use the implicit rate when readily determinable, however as most leases do not provide an implicit rate, we use our incremental borrowing rate based on information available at commencement date. Our lease terms may include options to extend or terminate the lease when it is reasonably certain that we will exercise that option. Furthermore, the Company has elected the practical expedient to account for the lease and non-lease components as a single lease component for the leased property asset class. Lease expense is recognized on a straight-line basis over the life of the lease and is included within general and administrative expenses.

Recently Adopted Accounting Pronouncements

Adoption of ASC 842

In February 2016, FASB issued ASU No. 2016-02, *Leases* (Topic 842) ("ASU 2016-02"). This guidance revises existing practice related to accounting for leases under ASC No. 840, *Leases* ("ASC 840") for both lessees and lessors. The new guidance in ASU 2016-02 requires lessees to recognize a right-of-use asset and a lease liability for nearly all leases (other than leases that meet the definition of a short-term lease). The lease liability will be equal to the present value of lease payments and the right-of-use asset will be based on the lease liability, subject to adjustment such as for initial direct costs. For income statement purposes, the new standard retains a dual model similar to ASC 840, requiring leases to be classified as either operating leases or finance leases. For lessees, operating leases will result in straight-line expense (similar to current accounting by lessees for operating leases under ASC 840) while finance leases will result in a front-loaded expense pattern (similar to current accounting by lessees for capital leases under ASC 840).

The Company adopted the standard using the simplified transition method on its effective date of January 1, 2019 and therefore did not adjust prior comparative periods as permitted by the codification improvements issued by FASB in July 2018. Additionally, the Company elected the package of practical expedients permitted under the transition guidance within the new standard, which among other things, allows the Company to carryforward the historical lease classification. As a result of the standard, the Company recorded a lease liability of \$1.2 million and a right-of-use asset of \$0.7 million, which is equal to the initial measurement of the lease liability reduced by the unamortized balance of lease incentive received and deferred rent. There was no material impact to our condensed consolidated income statement (see Note 12 below for more information).

Other Adopted Accounting Pronouncements

In August 2018, the SEC adopted the final rule under SEC Release No. 33-10532 Disclosure Update and Simplification, to eliminate or modify certain disclosure rules that are redundant, outdated, or duplicative of GAAP or other regulatory requirements. Among other changes, the amendments provide that disclosure requirements related to the analysis of stockholders' equity are expanded for interim financial statements. An analysis of the changes in each caption of stockholders' equity presented in the balance sheet must be provided in a note or separate statement. The Company has provided this disclosure beginning in the first quarter of 2019.

3. Revenue from Contracts with Customers

The Company generates substantially all of its revenue from sales of prescription pharmaceutical products to its customers. The following table presents net revenues disaggregated by type (in thousands):

	Three Months Ended March 31,	
	2019	2018
Prescribed dietary supplements	\$ 1,791	\$ 2,231
Prescription drugs	3,620	2,029
Sales force revenue	—	223
Total revenue	\$ 5,411	\$ 4,483

As is typical in the pharmaceutical industry, the Company sells its prescription pharmaceutical products (which include prescribed dietary supplements and prescription drugs) in the United States primarily through wholesale distributors and a specialty contracted pharmacy. Wholesale distributors account for substantially all of the Company's net product revenues and trade receivables. In addition, the Company earns revenue from sales of its prescription pharmaceutical products directly to retail pharmacies. For the three months ended March 31, 2019, the Company's three largest customers accounted for approximately 35%, 33%, and 25%, respectively, of the Company's total net product revenues from sale of prescription pharmaceutical products.

4. Net Loss Per Share

The Company computes earnings per share ("EPS") using the two-class method. The two-class method of computing EPS is an earnings allocation formula that determines EPS for common stock and any participating securities according to dividends declared and participation rights in undistributed earnings. The Company has two classes of stock outstanding, common stock and preferred stock. The preferred stock was issued in the fourth quarter of 2018 upon Armistice exercising preferred stock warrants to acquire an aggregate of 2,857,143 shares of the Series B Convertible Preferred Stock ("convertible preferred stock"). The convertible preferred stock has the same rights and preferences as common stock other than being non-voting and convertible to shares of common stock on a 1-to-5 ratio.

Under the two-class method, the convertible preferred stock is considered a separate class of stock for EPS purposes and therefore basic and diluted EPS is provided below for both common stock and preferred stock. EPS for common stock and EPS for preferred stock is computed by dividing the sum of distributed earnings and undistributed earnings for each class of stock by the weighted average number of shares outstanding for each class of stock for the period. In applying the two-class method, undistributed earnings are allocated to common stock and preferred stock based on the weighted average shares outstanding during the period, which assumes the convertible preferred stock has been converted to common stock.

Diluted net (loss) income per share includes the potential dilutive effect of common stock equivalents as if such securities were converted or exercised during the period, when the effect is dilutive. Common stock equivalents include: (i) outstanding stock options and restricted stock units, which are included under the "treasury stock method" when dilutive; (ii) common stock to be issued upon the assumed conversion of the Company's unit purchase option shares, which are included under the "if-converted method" when dilutive; (iii) prior to issuance, the contingently issuable shares in the TRx acquisition, if contingencies would have been satisfied if the end of the contingency period were as of the balance sheet date under the "if-converted method" when dilutive; and (iv) common stock to be issued upon the exercise of outstanding warrants, which are included under the "treasury stock method" when dilutive. Because the impact of these items is generally anti-dilutive during periods of net loss, there is no difference between basic and diluted loss per common share for periods with net losses. In periods of net loss, losses are allocated to the participating security only if the security has not only the right to participate in earnings, but also a contractual obligation to share in the Company's losses.

The following table sets forth the computation of basic and diluted net loss per share of common stock and preferred stock for the three months ended March 31, 2019 and 2018, which includes both classes of participating securities:

	Three Months Ended		Three Months Ended	
	March 31,		March 31,	
	2019		2018	
	Common stock	Preferred stock	Common stock	Preferred stock
Net loss per share, basic and diluted				
Numerator:				
Allocation of undistributed net loss	\$ (5,537,787)	\$ (1,916,261)	\$ (3,882,847)	\$ —
Denominator:				
Weighted average shares	41,284,168	2,857,143	31,316,246	—
Basic and diluted net loss per share	<u>\$ (0.13)</u>	<u>\$ (0.67)</u>	<u>\$ (0.12)</u>	<u>\$ —</u>

The following outstanding securities at March 31, 2019 and 2018 have been excluded from the computation of diluted weighted shares outstanding, as they could have been anti-dilutive:

	Three Months Ended	
	March 31,	
	2019	2018
Stock options	4,345,305	3,909,384
Warrants on common stock	4,024,708	18,986,659
Restricted Stock Units	345,000	—
Underwriters' unit purchase option	40,000	40,000

5. Acquisitions

Ichorion Asset Acquisition

On September 24, 2018, the Company entered into, and subsequently consummated the transactions contemplated by, an agreement and plan of merger (the "Merger Agreement") by and among the Company and Ichorion Therapeutics, Inc., a Delaware corporation (the "Ichorion Asset Acquisition"), with Ichorion surviving as a wholly owned subsidiary of the Company. The consideration for the Ichorion Asset Acquisition consisted of approximately 5.8 million shares of the Company's common stock, par value \$0.001 per share, as adjusted for Estimated Working Capital as defined in the Merger Agreement. The shares of common stock issued as part of the acquisition may not be resold until January 2020. Consideration for the Ichorion Asset Acquisition includes certain development milestones worth up to an additional \$15 million, payable either in shares of the Company's common stock or in cash, at the election of the Company.

The fair value of the common stock shares transferred at closing was approximately \$20 million based on the Company's stock price close on September 24, 2018 and offset by an estimated discount for lack of marketability calculated using guideline public company volatility for comparable companies. The assets acquired consisted primarily of \$18.7 million of IPR&D, \$1.6 million of cash and \$0.2 million assembled workforce. The Company recorded this transaction as an asset purchase as opposed to a business combination as management concluded that substantially all of the value received was related to one group of similar identifiable assets, which was the IPR&D for the three preclinical therapies for inherited metabolic disorders known as CDGs (CERC-801, CERC-802, and CERC-803). The Company has considered these assets similar due to similarities in the risks for development, compound type, stage of development, regulatory pathway, patient population and economics of commercialization. The fair value of the IPR&D was immediately recognized as Acquired In-Process Research and Development expense as the IPR&D asset has no other alternate use due to the stage of development. The \$0.2 million of transaction costs incurred were recorded to acquired IPR&D expense. The assembled workforce asset recorded to intangible assets will be amortized over an estimated useful life of two years.

The contingent consideration of up to an additional \$15 million relates to three future development milestones. The first milestone is the first product being approved for marketing by the FDA on or prior to December 31, 2021. If this milestone is met, the Company is required to make a milestone payment of \$6 million. The second milestone is the second product being approved for marketing by the FDA on or prior to December 31, 2021. If this milestone is met, the Company is required to make a milestone payment of \$5 million. The third milestone is a protide molecule being approved by the FDA on or prior to December 31, 2023. If this milestone is met, the Company is required to make a milestone payment of \$4 million. All milestones are payable in either shares of the Company's common stock or cash, at the election of the Company.

The contingent consideration related to the development milestones will be recognized if and when such milestones are probable and can be reasonably estimated. As of March 31, 2019, no contingent consideration related to the development milestone has been recognized. The Company will continue to monitor the development milestones at each reporting period.

Avadel Pediatric Products Acquisition

On February 16, 2018, the Company entered into an Asset Purchase Agreement (the "Purchase Agreement") with Avadel US Holdings, Inc., Avadel Pharmaceuticals (USA), Inc., Avadel Pediatrics, Inc., Avadel Therapeutics, LLC and Avadel Pharmaceuticals PLC (collectively, the "Sellers") to purchase and acquire all rights to the Sellers' pediatric products. Total consideration transferred to the Sellers consisted of: (1) a cash payment of one dollar, (2) the Company's assumption of existing seller debt due in January 2021 with a fair value of \$15.1 million, and (3) contingent consideration relating to royalty obligations through February 2026 with a fair value at acquisition date of approximately \$7.9 million. As a result of the Avadel pediatric products acquisition, the Company recorded goodwill of \$3.8 million, which is deductible over 15 years for income tax purposes.

The transaction was accounted for as a business combination under the acquisition method of accounting. Accordingly, the tangible and identifiable intangible assets acquired and liabilities assumed were recorded at fair value as of the date of acquisition,

with the remaining purchase price recorded as goodwill. The goodwill recognized is attributable primarily to strategic opportunities related to an expanded commercial footprint and diversified pediatric product portfolio that is expected to provide revenue and cost synergies.

During the second quarter of 2018, the Company identified and recorded measurement period adjustments to the preliminary purchase price allocation. These adjustments are reflected in the tables below. The measurement period adjustments were the result of additional analysis performed and information identified during the second quarter of 2018 based on facts and circumstances that existed as of the purchase date. There were no additional measurement adjustments recorded in 2018.

The following table summarizes the preliminary fair values of the assets acquired and liabilities assumed at the date of acquisition and as adjusted for measurement period adjustments identified during the second quarter of 2018:

	At February 16, 2018 (preliminary)	Measurement Period Adjustments	At February 16, 2018 (as adjusted)
Inventory	\$ 2,549,000	\$ (1,831,000)	\$ 718,000
Prepaid assets	—	570,000	570,000
Intangible assets	16,453,000	1,838,000	18,291,000
Accrued expenses	—	(362,000)	(362,000)
Fair value of debt assumed	(15,272,303)	197,303	(15,075,000)
Fair value of contingent consideration	(7,875,165)	(44,835)	(7,920,000)
Total net liabilities assumed	(4,145,468)	367,468	(3,778,000)
Consideration exchanged	241,000	(240,999)	1
Goodwill	\$ 4,386,468	\$ (608,467)	\$ 3,778,001

The purchase price allocation related to the acquisition of Avadel's pediatric products was finalized in 2018. The fair values of intangible assets, including marketing rights, licenses, and developed technology, were determined using variations of the income approach. Varying discount rates were also applied to the projected net cash flows. The Company believes the assumptions are representative of those a market participant would use in estimating fair value. The fair value of intangible assets, both as of the date of acquisition and as adjusted by measurement period adjustments identified during the second quarter of 2018, includes the following:

	At February 16, 2018 (preliminary)	Measurement Period Adjustments	At February 16, 2018 (as adjusted)	Useful Life
Acquired Product Marketing Rights - Karbinal	\$ 6,221,000	\$ (21,000)	\$ 6,200,000	10 years
Acquired Product Marketing Rights - AcipHex	2,520,000	283,000	2,803,000	10 years
Acquired Product Marketing Rights - Cefaclor	6,291,000	1,320,000	7,611,000	7 years
Acquired Developed Technology - Flexichamber	1,131,000	546,000	1,677,000	10 years
Acquired IPR&D - LiquiTime formulations	290,000	(290,000)	—	Indefinite
Total	\$ 16,453,000	\$ 1,838,000	\$ 18,291,000	

TRx Acquisition

On November 17, 2017, the Company entered into, and consummated the transactions contemplated by, an equity interest purchase agreement (the "TRx Purchase Agreement") by and among the Company, TRx, Fremantle Corporation, and LRS International LLC, the selling members of TRx (collectively, the "TRx Sellers"), which provided for the purchase of all of the equity and ownership interests of TRx by the Company (the "TRx Acquisition"). The consideration for the TRx Acquisition consisted of \$18.9 million in cash,

as adjusted for estimated working capital, estimated cash on hand, estimated indebtedness and estimated transaction expenses, as well as 7,534,884 shares of the Company's common stock having an aggregate value on the closing date of \$8.5 million (the "Equity Consideration") and certain potential contingent payments. Upon closing, the Company issued 5,184,920 shares of its common stock to the TRx Sellers. Pursuant to the TRx Purchase Agreement, the issuance of the remaining 2,349,968 shares was subject to the Company's stockholder approval. In May 2018, stockholder approval was obtained and the remaining shares were issued to the TRx Sellers. The contingent shares were initially recorded to contingently issuable shares, which is recorded within stockholder's equity and were reclassified to common stock and additional paid in capital upon issuance, on the consolidating balance sheet date. As a result of the TRx Acquisition, the Company has currently recorded goodwill of \$12.6 million, of which \$8.7 million was deductible for income taxes.

During the third quarter of 2018, the Company identified and recorded measurement period adjustments to our preliminary purchase price allocation that was disclosed in prior periods. These adjustments are reflected in the tables below. The measurement period adjustments were the result of an arbitration ruling discussed in further detail in Note 13, the facts and circumstances of which existed as of the acquisition date.

The following table summarizes the preliminary acquisition-date fair value of the consideration transferred at the date of acquisition both as disclosed in periods prior to the third quarter of 2018 and as adjusted for measurement period adjustments identified during the third quarter of 2018:

	At November 17, 2017 (preliminary)	Measurement Period Adjustments	At November 17, 2017 (as adjusted)
Cash	\$ 18,900,000	\$ —	\$ 18,900,000
Common stock (including contingently issuable shares)	8,514,419	—	8,514,419
Contingent payments	2,576,633	(1,210,000)	1,366,633
Total consideration transferred	\$ 29,991,052	(1,210,000)	28,781,052

The TRx Acquisition was accounted for as a business combination under the acquisition method of accounting. Accordingly, the tangible and identifiable intangible assets acquired and liabilities assumed were recorded at fair value as of the date of acquisition, with the remaining purchase price recorded as goodwill. The goodwill recognized is attributable primarily to strategic opportunities related to leveraging TRx's research and development, intellectual property, and processes.

The following table summarizes the preliminary fair values of the assets acquired and liabilities assumed at the date of acquisition both as disclosed in periods prior to the third quarter of 2018 and as adjusted for measurement period adjustments identified during the third quarter of 2018:

	At November 17, 2017 (preliminary)	Measurement Period Adjustments	At November 17, 2017 (as adjusted)
Fair value of assets acquired:			
Cash and cash equivalents	\$ 11,068	\$ —	\$ 11,068
Accounts receivable, net	2,872,545	—	2,872,545
Inventory	495,777	—	495,777
Prepaid expenses and other current assets	134,281	—	134,281
Other receivables	—	2,764,515	2,764,515
Identifiable Intangible Assets:			—
Acquired product marketing rights - Metafolin	10,465,000	1,522,000	11,987,000
PAI sales and marketing agreement	2,334,000	219,000	2,553,000
Acquired product marketing rights - Millipred	4,714,000	342,000	5,056,000
Acquired product marketing rights - Ulesfia	555,000	(555,000)	—
Total assets acquired	21,581,671	4,292,515	25,874,186
Fair value of liabilities assumed:			
Accounts payable	192,706	—	192,706
Accrued expenses and other current liabilities	4,850,422	3,764,515	8,614,937
Deferred tax liability	839,773	78,840	918,613
Total liabilities assumed	5,882,901	3,843,355	9,726,256
Total identifiable net assets	15,698,770	449,160	16,147,930
Fair value of consideration transferred	29,991,052	(1,210,000)	28,781,052
Goodwill	\$ 14,292,282	\$ (1,659,160)	\$ 12,633,122

The purchase price allocation related to the acquisition of TRx was finalized in 2018. The fair values of intangible assets, including marketing rights, licenses and developed technology, were determined using variations of the income approach, specifically the multi-period excess earnings method. Varying discount rates were also applied to the projected net cash flows. The Company believes the assumptions are representative of those a market participant would use in estimating fair value. The final fair value of intangible assets both as disclosed in prior periods and as adjusted by measurement period adjustments identified during the third quarter of 2018 includes the following:

	At November 17, 2017 (preliminary)	Measurement Period Adjustments	At November 17, 2017 (as adjusted)	Useful Life
Acquired product marketing rights - Metafolin	\$ 10,465,000	\$ 1,522,000	\$ 11,987,000	15 years
PAI sales and marketing agreement	2,334,000	219,000	2,553,000	2 years
Acquired product marketing rights - Millipred	4,714,000	342,000	5,056,000	4 years
Acquired product marketing rights - Ulesfia	555,000	(555,000)	—	
Total	\$ 18,068,000	\$ 1,528,000	\$ 19,596,000	

The Company received written notice to terminate the PAI sales and marketing agreement in the second quarter of 2018. As a result, the Company reassessed the fair value of the PAI sales and marketing agreement on that date (a level III non-recurring fair value measurement) and concluded due to the absence of future cash flows beyond the date of termination that the fair value was \$0. An

impairment charge was recognized in the second quarter of 2018 in the amount of \$1.9 million, representing the remaining net book value of the PAI sales and marketing agreement intangible asset.

Pro Forma Impact of Business Combinations

The following supplemental unaudited pro forma information presents Cerecor's financial results as if the acquisition of the Avadel pediatric products, which was completed on February 16, 2018, had occurred on January 1, 2018:

	Three Months Ended	
	March 31,	
	2018	
Total revenues, net	\$	6,187,775
Net loss	\$	(4,928,446)
Basic and diluted net loss per share of common stock	\$	(0.16)
Basic and diluted net loss per share of preferred stock	\$	—

The above unaudited pro forma information was determined based on the historical GAAP results of Cerecor and Avadel's pediatric products. The unaudited pro forma consolidated results are provided for informational purposes only and are not necessarily indicative of what Cerecor's consolidated results of operations would have been had the acquisition of Avadel's pediatric products been completed on the date indicated or what the consolidated results of operations will be in the future.

6. Fair Value Measurements

ASC No. 820, *Fair Value Measurements and Disclosures* ("ASC 820"), defines fair value as the price that would be received to sell an asset, or paid to transfer a liability, in the principal or most advantageous market in an orderly transaction between market participants on the measurement date. The fair value standard also establishes a three-level hierarchy, which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The valuation hierarchy is based upon the transparency of inputs to the valuation of an asset or liability on the measurement date. The three levels are defined as follows:

- Level 1—inputs to the valuation methodology are quoted prices (unadjusted) for an identical asset or liability in an active market.
- Level 2—inputs to the valuation methodology include quoted prices for a similar asset or liability in an active market or model-derived valuations in which all significant inputs are observable for substantially the full term of the asset or liability.
- Level 3—inputs to the valuation methodology are unobservable and significant to the fair value measurement of the asset or liability.

The following table presents, for each of the fair value hierarchy levels required under ASC 820, the Company's assets and liabilities that are measured at fair value on a recurring basis:

	March 31, 2019		
	Fair Value Measurements Using		
	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
	(Level 1)	(Level 2)	(Level 3)
Assets			
Investments in money market funds*	\$ 13,965,626	\$ —	\$ —
Liabilities			
Contingent consideration	\$ —	\$ —	\$ 9,002,288
Warrant liability	\$ —	\$ —	\$ 17,750
Unit purchase option liability	\$ —	\$ —	\$ 39,993

	December 31, 2018		
	Fair Value Measurements Using		
	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
	(Level 1)	(Level 2)	(Level 3)
Assets			
Investments in money market funds*	\$ 7,324,932	\$ —	\$ —
Liabilities			
Contingent consideration	\$ —	\$ —	\$ 9,050,564
Warrant liability**	\$ —	\$ —	\$ 2,950
Unit purchase option liability**	\$ —	\$ —	\$ 7,216

*Investments in money market funds are reflected in cash and cash equivalents on the accompanying condensed consolidated balance sheets.

**Warrant liability and unit purchase option liability are reflected in accrued expenses and other current liabilities on the accompanying condensed consolidated balance sheets.

As of March 31, 2019 and December 31, 2018, the Company's financial instruments included cash and cash equivalents, restricted cash, accounts receivable, accounts payable, accrued expenses and other current liabilities, short term and long-term debt, warrant liability, the underwriters' unit purchase option liability, and contingent consideration. The carrying amounts reported in the accompanying condensed consolidated financial statements for cash and cash equivalents, restricted cash, accounts receivable, accounts payable, accrued expenses, and other current liabilities approximate their respective fair values because of the short-term nature of these accounts. The estimated fair value of the Company's long-term debt of \$14.9 million as of March 31, 2019 was based on current interest rates for similar types of borrowings and is in Level 2 of the fair value hierarchy.

Level 3 Valuation

The tables presented below are a summary of changes in the fair value of the Company's Level 3 valuations for the warrant liability, unit purchase option liability, and contingent consideration for the three months ended March 31, 2019 and 2018:

	Warrant liability	Unit purchase option liability	Contingent consideration	Total
Balance at December 31, 2018	\$ 2,950	\$ 7,216	\$ 9,050,564	\$ 9,060,730
Payment of contingent consideration	—	—	(228,678)	(228,678)
Change in fair value	14,800	32,777	180,402	227,979
Balance at March 31, 2019	\$ 17,750	\$ 39,993	\$ 9,002,288	\$ 9,060,031

	Warrant liability	Unit purchase option liability	Contingent consideration	Royalty Obligation	Total
Balance at December 31, 2017	\$ 8,185	\$ 26,991	\$ 2,576,633	\$ —	\$ 2,611,809
Issuance of contingent consideration and royalty	—	—	7,875,165	240,744	8,115,909
Change in fair value	7,405	15,846	199,283	63,486	286,020
Balance at March 31, 2018	<u>\$ 15,590</u>	<u>\$ 42,837</u>	<u>\$ 10,651,081</u>	<u>\$ 304,230</u>	<u>\$ 11,013,738</u>

In 2014, the Company issued warrants to purchase 625,208 shares of convertible preferred stock. Upon the closing of our initial public offering ("IPO") in October 2015 these warrants became warrants to purchase 22,328 shares of common stock, in accordance with their terms. The warrants expire in October 2020. The warrants represent a freestanding financial instrument that is indexed to an obligation, which the Company refers to as the warrant liability. The warrant liability is marked-to-market each reporting period with the change in fair value recorded to other income, net in the accompanying statements of operations until the warrants are exercised, expire or other facts and circumstances lead the warrant liability to be reclassified to stockholders' equity. The fair value of the warrant liability is estimated using a Black-Scholes option-pricing model. The significant assumptions used in preparing the option pricing model for valuing the warrant liability as of March 31, 2019, include (i) volatility of 50%, (ii) risk free interest rate of 2.33%, (iii) strike price \$8.40, (iv) fair value of common stock \$5.84, and (v) expected life of 1.60 years years.

The underwriters' unit purchase option (the "UPO") was issued to the underwriters of the Company's IPO in 2015 and provides the underwriters the option to purchase up to a total of 40,000 units. The units underlying the UPO will be, immediately upon exercise, separated into shares of common stock, underwriters' Class A warrants, and underwriters' Class B warrants (such warrants together referred to as the Underwriters' Warrants). The Underwriters' Warrants were warrants to purchase shares of common stock. The Class B warrants expired in April 2017 and the Class A warrants expired in October 2018, while the UPO expires in October 2020. The Company classifies the UPO as a liability, as it is a freestanding marked-to-market derivative instrument that is precluded from being classified in stockholders' equity. The UPO liability is marked-to-market each reporting period with the change in fair value recorded to other income, net in the accompanying statements of operations until the UPO is exercised, expires or other facts and circumstances lead the UPO to be reclassified to stockholders' equity. The fair value of the UPO liability is estimated using a Black-Scholes option-pricing model. The significant assumptions used in preparing the simulation model for valuing the UPO as of March 31, 2019, include (i) volatility of 50%, (ii) risk free interest rate of 2.33%, (iii) unit strike price \$7.47, (iv) fair value of underlying equity \$5.84, and (v) expected life of 1.6 years.

The Company's business acquisitions of Avadel's pediatric products and TRx (see Note 5) involve the potential for future payment of consideration that is contingent upon the achievement of operation and commercial milestones and royalty payments on future product sales. The fair value of contingent consideration was determined at the acquisition date utilizing unobservable inputs such as the estimated amount and timing of projected cash flows, the probability of success (achievement of the contingent event), and the risk-adjusted discount rate used to present value the probability-weighted cash flows. Subsequent to the acquisition date, at each reporting period, the contingent consideration liabilities are remeasured at the current fair value with changes recorded in the condensed consolidated statement of operations.

As part of the acquisition of Avadel's pediatric products, the Company will pay a 15% annual royalty on net sales of the acquired Avadel pediatric products through February 2026, up to an aggregate amount of \$12.5 million. The fair value of the future royalty is the expected future value of the contingent payments discounted to a present value. The estimated fair value of the royalty payments as of March 31, 2019 was \$7.7 million. The significant assumptions used in estimating the fair value of the royalty payment as of March 31, 2019 include (i) the expected net sales of the acquired Avadel pediatric products for that are subject to the 15% royalty based on the Company's net sales forecast and (ii) the risk-adjusted discount rate of 8.4%, which is comprised of the risk-free interest rate of 2.3% and a counterparty risk of 6.1% utilized to discount the expected royalty payments. The liability is reduced by periodic payments.

Additionally, as part of the initial purchase price allocation for the acquisition of Avadel's pediatric products performed during the first quarter of 2018, contingent consideration of \$240,744 was assigned to future royalty obligations for the use of the Sellers' LiquiTime process technology. In the second quarter of 2018, we identified measurement period adjustments which included the adjustment of the fair value of the LiquiTime intangible asset down to \$0.

The consideration for the TRx acquisition includes certain potential contingent payments. First, pursuant to the TRx Purchase Agreement, the Company would have been required to pay \$3.0 million to the Sellers if the gross profit related to TRx products equaled or exceeded \$12.6 million in 2018. The Company did not achieve this contingent event in 2018 and therefore no value was assigned to the contingent payout as of December 31, 2018. Additionally, the Company is required to pay \$2.0 million upon the transfer of the Ulesfia

NDA to the Company ("NDA Transfer Milestone"). Finally, the Company will pay \$2.0 million upon FDA approval of a new dosage of Ulesfia ("FDA Approval Milestone"). The main inputs utilized to determine the fair value of each milestone is the probability of the milestone's success, the expected time to successfully reach the milestone, and the risk-adjusted discount rate. The estimated fair value of the NDA Transfer Milestone as of March 31, 2019 was \$0.9 million and the significant assumptions used in estimating the fair value include (i) probability of milestone success of 45.0%, (ii) expected time to milestone of 0.2 years, and (iii) risk-adjusted discount rate of 8.5%, which is comprised of the risk-free rate of 2.4% and a counterparty risk of 6.1%. The estimated fair value of the FDA Approval Milestone as of March 31, 2019 was \$0.4 million. The significant assumptions used in estimating the fair value of the FDA Approval Milestone as of March 31, 2019 include (i) probability of milestone success at 22.5%, (ii) expected time to milestone of 1.3 years, and (iii) risk-adjusted discount rate of 8.4%, which is comprised of the risk-free rate of 2.3% and a counterparty risk of 6.1%.

No other changes in valuation techniques or inputs occurred during the three months ended March 31, 2019 and 2018. No transfers of assets between Level 1 and Level 2 of the fair value measurement hierarchy occurred during the three months ended March 31, 2019 and 2018.

7. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities as of March 31, 2019 and December 31, 2018 consisted of the following:

	As of	
	March 31, 2019	December 31, 2018
Sales returns and allowances	\$ 4,249,977	\$ 3,972,510
Medicaid rebates	2,758,384	2,237,269
Minimum sales commitments, royalties payable, and purchase obligations	10,808,083	9,662,901
Compensation and benefits	1,679,572	1,953,065
Research and development expenses	1,123,051	278,132
Sales and marketing	938,437	1,112,378
General and administrative	187,465	235,721
Other	70,128	279,397
Total accrued expenses and other current liabilities	\$ 21,815,097	\$ 19,731,373

8. Deerfield Obligation

In relation to the Company's acquisition of Avadel's pediatric products on February 16, 2018, the Company assumed an obligation that Avadel had to Deerfield CSF (the "Deerfield Obligation"). Beginning in July 2018 through October 2020, the Company is required to pay a quarterly payment of \$262,500 to Deerfield. In January 2021, a balloon payment of \$15,250,000 is due. The difference between the gross value and fair value of these payments will be recorded as interest expense in the Company's condensed consolidated statements of operations through January 2021 using the effective interest method. Interest expense for the three months ended March 31, 2019 was \$0.2 million and is included in interest expense, net on the accompanying condensed consolidated statements of operations. The amounts due within the next year are included in current portion of long-term debt on the Company's condensed consolidated balance sheets. The amounts due in greater than one year are included in long-term debt, net of current portion, on the Company's condensed consolidated balance sheets. The Deerfield Obligation was \$15.4 million as of March 31, 2019, of which \$1.1 million is recorded as a current liability.

9. Capital Structure

According to the Company's amended and restated certificate of incorporation, the Company is authorized to issue two classes of stock, common stock and preferred stock. At March 31, 2019, the total number of shares of capital stock the Company was authorized to issue was 205,000,000 of which 200,000,000 was common stock and 5,000,000 was preferred stock. All shares of common and preferred stock have a par value of \$0.001 per share.

On December 26, 2018, the Company filed a Certificate of Designation of Preferences of Series B Non-Voting Convertible Preferred Stock ("Series B Convertible Preferred Stock" or "convertible preferred stock") of Cerecor Inc. (the "Certificate of Designation of the Series B Preferred Stock") classifying and designating the rights, preferences and privileges of the Series B Convertible Preferred Stock. The Certificate of Designation of the Series B Convertible Preferred Stock authorized 2,857,143 shares of convertible preferred stock. The Series B Convertible Preferred Stock converts to shares of common stock on a 1-for-5 ratio and has the same rights, preferences, and privileges as common stock other than it holds no voting rights.

Convertible Preferred Stock

December 2018 Armistice Private Placement

On December 27, 2018, the Company entered into a series of transactions as part of a private placement with Armistice in order to generate cash to continue to develop our pipeline assets and for general corporate purposes. The transactions are considered one transaction for accounting purposes. As part of the transaction, the Company exchanged common stock warrants issued on April 27, 2017 to Armistice for the purchase up to 14,285,714 shares of the Company's common stock at an exercise price of \$0.40 per share (the "original warrants") for like-kind warrants to purchase up to 2,857,143 shares of the Company's newly designated Series B Convertible Preferred Stock with an exercise price of \$2.00 per share (the "exchanged warrants"). Armistice immediately exercised the exchanged warrants and acquired an aggregate of 2,857,143 shares of the convertible preferred stock. Net proceeds of the transaction were approximately \$5.7 million for the year ended December 31, 2018.

In order to provide Armistice an incentive to exercise the exchanged warrants, the Company also entered into a securities purchase agreement with Armistice pursuant to which the Company issued warrants for 4,000,000 shares of common stock of the Company with a term of 5.5 years and an exercise price of \$12.50 per share (the "incentive warrants"). For accounting purposes, the Company calculated the fair value of the incentive warrants of \$1.7 million, which was considered a deemed distribution to Armistice for the year ended December 31, 2018.

Voting

Holders of the Company's convertible preferred stock are not entitled to vote.

Dividends

The holders of convertible preferred stock are entitled to receive dividends, if any, as may be declared from time to time by the board of directors out of legally available funds.

Liquidation

In the event of the Company's liquidation, dissolution or winding up, holders of the Company's convertible preferred stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all debts and other liabilities.

Rights and Preferences

Each share of convertible preferred stock converts to shares of common stock on a 1-for-5 ratio. There are no other preemptive or subscription rights and there are no redemption or sinking fund provisions applicable to the Company's common stock.

Common Stock

Common Stock Offering

On March 8, 2019, the Company closed on an underwritten public offering of common stock for 1,818,182 shares of common stock of the Company, at a price to the public of \$5.50 per share. Armistice participated in the offering by purchasing 363,637 shares of common stock of the Company from the underwriter at the public price. The gross proceeds to the Company, before deducting underwriting discounts and commissions and offering expenses, were approximately \$10.0 million. The net proceeds were approximately \$9.0 million.

December 2018 Armistice Private Placement

As discussed in detail above, on December 27, 2018 the Company exchanged previously outstanding warrants for like-kind warrants for 2,857,143 shares of the Company's convertible preferred stock with an exercise price of \$2.00 per share. Armistice immediately exercised these warrants for 2,857,143 shares of convertible preferred stock for net proceeds to the Company of \$5.7 million. The convertible preferred stock converts to common stock on a 1-for-5 ratio (or to 14,285,714 shares of common stock in total). Additionally, on December 27, 2018, in order to provide Armistice an incentive to exercise the exchanged warrants, the Company entered into a securities purchase agreement with Armistice pursuant to which the Company issued warrants for 4,000,000 shares of common

stock of the Company with a term of 5.5 years and an exercise price of \$12.50 per share (the "incentive warrants"). See "December 2018 Armistice Private Placement" above for more details.

August 2018 Armistice Private Placement

On August 17, 2018, the Company entered into a securities purchase agreement with Armistice, pursuant to which the Company sold 1,000,000 shares of the Company's common stock, \$0.001 par value per share for a purchase price of \$3.91 per share, which was the closing price of shares of the Common Stock on August 16, 2018. Net proceeds of this securities purchase agreement were approximately \$3.9 million.

Ichorion Asset Acquisition

On September 25, 2018, under the terms of the Ichorion Asset Acquisition noted above in Note 5, the Company issued 5.8 million common stock shares upon closing.

Contingently Issuable Shares

Under the terms of TRx acquisition noted above in Note 5, the Company was required to issue common stock having an aggregate value as calculated in the TRx Purchase Agreement on the Closing Date of \$8.1 million (the "Equity Consideration"). Upon closing, the Company issued 5,184,920 shares of its common stock. Pursuant to the TRx Purchase Agreement, the issuance of the remaining 2,349,968 shares as a part of the Equity Consideration was subject to stockholder approval at the Company's 2018 Annual Stockholder's Meeting. This approval was obtained in May 2018 and the remaining shares were issued to the TRx Sellers.

Voting

Common stock is entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders, including the election of directors, and does not have cumulative voting rights. Accordingly, the holders of a majority of the shares of common stock entitled to vote in any election of directors can elect all of the directors standing for election.

Dividends

The holders of common stock are entitled to receive dividends, if any, as may be declared from time to time by the board of directors out of legally available funds.

Liquidation

In the event of the Company's liquidation, dissolution or winding up, holders of the Company's common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all debts and other liabilities.

Rights and Preferences

Holders of the Company's common stock have no preemptive, conversion or subscription rights, and there are no redemption or sinking fund provisions applicable to the Company's common stock.

Common Stock Warrants

At March 31, 2019, the following common stock warrants were outstanding:

Number of shares underlying warrants	Exercise price per share	Expiration date
22,328*	\$ 8.40	October 2020
2,380*	\$ 8.68	May 2022
4,000,000	\$ 12.50	June 2024
4,024,708		

*Accounted for as a liability instrument (see Note 6)

10. Stock-Based Compensation

2016 Equity Incentive Plan

On April 5, 2016, the Company's board of directors adopted the 2016 Equity Incentive Plan (the "2016 Plan") as the successor to the 2015 Omnibus Plan (the "2015 Plan"). The 2016 Plan was approved by the Company's stockholders and became effective on May 18, 2016 (the "2016 Plan Effective Date").

Upon the 2016 Plan Effective Date, the 2016 Plan reserved and authorized up to 600,000 additional shares of common stock for issuance, as well as 464,476 unallocated shares remaining available for grant of new awards under the 2015 Plan. An Amended and Restated 2016 Equity Incentive Plan (the "2016 Amended Plan") was approved by the Company's stockholders in May 2018, which increased the share reserve by an additional 1.4 million shares. During the term of the 2016 Amended Plan, the share reserve will automatically increase on the first trading day in January of each calendar year, by an amount equal to 4% of the total number of outstanding shares of common stock of the Company on the last trading day in December of the prior calendar year. As of March 31, 2019, there were 2.1 million shares available for future issuance under the 2016 Amended Plan.

Option grants to employees and directors typically expire after ten years. Employee options with service based vesting conditions typically vest over three or four years. Options granted to directors typically vest over three years. Directors may also elect to receive stock options in lieu of cash board compensation, which vest immediately. For stock options granted to employees and non-employee directors, the estimated grant date fair market value of the Company's stock-based awards is amortized ratably over the individuals' service periods, which is the period in which the awards vest. Stock-based compensation expense includes expense related to stock options, restricted stock unit awards, and ESPP shares. The amount of stock-based compensation expense recognized for the three months ended March 31, 2019 and 2018 was as follows:

	Three Months Ended March 31,	
	2019	2018
Research and development	\$ 57,376	\$ 11,497
General and administrative	489,953	207,382
Sales and marketing	49,364	23,945
Total stock-based compensation	\$ 596,693	\$ 242,824

Stock options with service-based vesting conditions

The Company has granted awards that contain service-based vesting conditions. The compensation cost for these options is recognized on a straight-line basis over the vesting periods. A summary of option activity for the three months ended March 31, 2019 is as follows:

	Options Outstanding			Weighted average remaining contractual term (in years)
	Number of shares	Weighted average exercise price	Grant date fair value of options	
Balance at December 31, 2018	3,746,597	\$ 4.16		7.79
Granted	134,379	\$ 4.78	\$ 334,624	
Exercised	(31,288)	\$ 3.01		
Forfeited	(4,383)	\$ 4.25	\$ 11,297	
Balance at March 31, 2019	3,845,305	\$ 4.19		7.61
Exercisable at March 31, 2019	2,269,081	\$ 4.56		6.76

The aggregate intrinsic value of stock options is calculated as the difference between the exercise price of the stock options and the fair value of the Company's common stock for those stock options that had exercise prices lower than the fair value of the Company's common stock. As of March 31, 2019, the aggregate intrinsic value of options outstanding and currently exercisable was \$8.1 million and \$4.6 million, respectively. The total intrinsic value of options exercised during the three months ended March 31, 2019 was \$0.1 million. The total grant date fair value of shares which vested during the three months ended March 31, 2019 was \$0.6 million. The

per-share weighted-average grant date fair value of the options granted during the three months ended March 31, 2019 was estimated at \$2.49. There were 302,901 options that vested during the three months ended March 31, 2019 with a weighted average grant date fair value of \$2.09.

At March 31, 2019, there was \$3.1 million of total unrecognized compensation cost related to unvested service-based vesting conditions awards. The unrecognized compensation cost is expected to be recognized over a weighted-average period of 2.9 years.

Stock options with market-based vesting conditions

During 2018, the Company granted awards that vest upon the Company's common stock closing at or above \$12.50 per share for three consecutive days. A summary of option activity with market-based vesting conditions for the three months ended March 31, 2019 is as follows:

	Options Outstanding			
	Number of shares	Weighted average exercise price	Weighted average contractual term remaining (in years)	Aggregate intrinsic value (1)
Balance at December 31, 2018	500,000	\$ 4.24	9.24	
Granted	—			
Balance at March 31, 2019	500,000	\$ 4.24	8.99	\$ 800,000
Exercisable at March 31, 2019	—			

(1) The aggregate intrinsic value in the above table represents the total pre-tax amount that a participant would receive if the option had been exercised on the last day of the respective fiscal period. Options with a market value less than its exercise value are not included in the intrinsic value amount.

At March 31, 2019, there was \$805,068 of total unrecognized compensation cost related to unvested market-based vesting conditions awards. This compensation cost is expected to be recognized over a weighted-average period of 1.8 years.

Stock-based compensation assumptions

The following table shows the assumptions used to compute stock-based compensation expense for stock options with service-based vesting conditions granted to employees and members of the board of directors under the Black-Scholes valuation model for the three months ended March 31, 2019. There were no stock options granted with market-based vesting conditions for the three months ended March 31, 2019.

Service-based options	
Expected dividend yield	—%
Expected volatility	55%
Expected life (in years)	5.0 - 6.25
Risk-free interest rate	2.23 - 2.59%

Restricted Stock Units

During 2018, the Company granted restricted stock units ("RSU") to certain employees. The Company measures the fair value of the restricted units using the stock price at the date of the grant. The restricted shares vest annually over a four-year period beginning on the first anniversary of the award. A summary of RSU grants activity for the three months ended March 31, 2019 is as follows:

	RSUs outstanding	
	Number of shares	Weighted average grant date fair value
Non-vested RSUs at December 31, 2018	445,000	\$ 4.27
Vested	(100,000)	\$ 4.24
Non-vested RSUs at March 31, 2019	345,000	\$ 4.27

The stock compensation expense related to RSUs for the three months ended March 31, 2019 was \$118,656. At March 31, 2019, there was \$1,433,329 of total unrecognized compensation cost related to the RSU grants. The compensation cost is expected to be recognized over a weighted-average period of 3.0 years.

Employee Stock Purchase Plan

On April 5, 2016, the Company's board of directors approved the 2016 Employee Stock Purchase Plan (the "ESPP"). The ESPP was approved by the Company's stockholders and became effective on May 18, 2016 (the "ESPP Effective Date").

Under the ESPP, eligible employees can purchase common stock through accumulated payroll deductions at such times as are established by the administrator. The ESPP is administered by the compensation committee of the Company's board of directors. Under the ESPP, eligible employees may purchase stock at 85% of the lower of the fair market value of a share of the Company's common stock (i) on the first day of an offering period or (ii) on the purchase date. Eligible employees may contribute up to 15% of their earnings during the offering period. The Company's board of directors may establish a maximum number of shares of the Company's common stock that may be purchased by any participant, or all participants in the aggregate, during each offering or offering period. Under the ESPP, a participant may not accrue rights to purchase more than \$25,000 of the fair market value of the Company's common stock for each calendar year in which such right is outstanding.

Upon the ESPP Effective Date, the Company reserved and authorized up to 500,000 shares of common stock for issuance under the ESPP. On January 1 of each calendar year, the aggregate number of shares that may be issued under the ESPP shall automatically increase by a number equal to the lesser of (i) 1% of the total number of shares of the Company's capital stock outstanding on December 31 of the preceding calendar year, and (ii) 500,000 shares of the Company's common stock, or (iii) a number of shares of the Company's common stock as determined by the Company's board of directors or compensation committee. The number of shares increased by 408,042 on January 1, 2019. As of March 31, 2019, 1,192,025 shares remained available for issuance.

In accordance with the guidance in ASC 718-50, the ability to purchase shares of the Company's common stock at the lower of the offering date price or the purchase date price represents an option and, therefore, the ESPP is a compensatory plan under this guidance. Accordingly, stock-based compensation expense is determined based on the option's grant-date fair value and is recognized over the requisite service period of the option. The Company used the Black-Scholes valuation model and recognized stock-based compensation expense of \$35,298 for the three months ended March 31, 2019, which is included in the table above with stock-based compensation from stock options.

Subsequent Equity Grants

On April 1, 2019, the Company granted 1.8 million options with service-based vesting conditions at an exercise price of \$6.22 per share to its employees as part of its annual stock option award. One-quarter of the shares subject to the stock option will vest on the first anniversary of the grant date and the remaining three-quarters of the shares will vest in equal monthly installments over the following 36 months.

Furthermore, on April 15, 2019, the Company granted 300,000 options with service-based vesting conditions at an exercise price of \$5.17 to its newly appointed Executive Chairman of the Board. One-third of the shares subject to the stock option will vest on the first anniversary of the date of grant and the remaining two-thirds of the shares will vest in equal monthly installments over the following 24 months, based on continuous service.

Additionally, the Company agreed to grant the Executive Chairman of the Board an option to purchase 300,000 additional shares of Company common stock with market-based vesting conditions. The exercise price will equal the market value on the date of the grant with one-third of the shares vesting upon the Company's common stock closing at or above \$8.00 per share for three consecutive days, one-third of the shares vesting upon the Company's stock closing at or above \$10.50 per share for three consecutive days, and one-

held of these shares vesting upon the Company's stock closing at or above \$13.00 per share for three consecutive days. The Company also agreed to grant the Executive Chairman of the Board 250,000 RSUs, of which 50,000 shares will vest immediately on the grant date and the remainder will vest in three equal annual increments based on continued service. These two equity awards will be granted upon the Company having an adequate share reserve available for future issuance under the 2016 Amended Plan as a result of either an increase to the total share reserve subject to shareholder approval or as a result of an increase to the existing available share reserve due to future forfeitures and expirations.

11. Income Taxes

The provision for income taxes was \$166,358 for the three months ended March 31, 2019 and is comprised of several components including current year state income tax related to one of the Company's wholly owned subsidiaries and current year amortization of tax-deductible goodwill that gives rise to indefinite lived deferred tax liability impacting the amount of valuation allowance required. Additionally, discrete to the quarter, the Company recorded interest and penalties on the outstanding taxes payable to the IRS and various state authorities.

12. Leases

Corporate Headquarter Lease

The Company identified one operating lease for its corporate headquarters located in Rockville, Maryland. The annual base rent for the office space is \$161,671, subject to annual 2.5% increases over the term of the lease. The lease provides for a rent abatement for a period of 12 months following the Company's date of occupancy. The lease has an initial term of 10 years from the date the Company makes its first annual fixed rent payment, which is expected to occur in January 2020. The Company has the option to extend the lease two times, each for a period of five years, and may terminate the lease as of the sixth anniversary of the first annual fixed rent payment, upon the payment of a termination fee. As of the lease commencement date, it is not reasonably certain that the Company will exercise the renewal periods or early terminate the lease and therefore the end date of the lease for accounting purposes is January 31, 2030. The remaining term of the lease at March 31, 2019 is 10.83 years.

Supplemental balance sheet information related to the lease is as follows:

	Three Months Ended March 31,	
	2019	2018
Property and equipment, net	\$ 737,658	\$ —
Other long-term liabilities	\$ 1,189,277	\$ —

The operating lease right-of-use asset is included in property and equipment and the lease liability is included in other long-term liabilities in our condensed consolidated balance sheets. In order to determine the present value of lease payments, the Company utilized a discount rate of 7.7%. This rate was determined based on available information of the rate of interest the Company would pay to borrow on a collateralized basis at an amount equal to the lease payments in a similar economic environment over a similar term on the transition date.

The components of lease expense for the three months ended March 31, 2019 and 2018 were as follows:

	Three Months Ended March 31,	
	2019	2018
Operating lease cost*	\$ 54,606	\$ 47,559

*Includes short-term leases, which are immaterial.

Because the corporate headquarter lease provides for a 12-month lease abatement, the cash paid for amounts included in the measurement of lease liabilities is \$0 for the three months ended March 31, 2019.

The following table shows a maturity analysis of the operating lease liability as of March 31, 2019:

	Undiscounted Cash Flows	
April 1, 2019 through December 31, 2019	\$	—
2020		155,815
2021		169,510
2022		173,748
2023		178,092
Thereafter		1,183,290
Total lease payments	\$	1,860,455
Less implied interest	\$	(671,178)
Total	\$	1,189,277

13. Commitments and Contingencies

Litigation

The Company is party in various contractual disputes, litigation, and potential claims arising in the ordinary course of business. The Company does not believe that the resolution of these matters will have a material adverse effect on our financial position or results of operations except as otherwise disclosed in this document. See below for further discussion of the Lachlan legal arbitration.

Purchase obligations

The Company has unconditional purchase obligations as a result of recent acquisitions that include agreements to purchase goods that are enforceable and legally binding and that specify all significant terms including: fixed or minimum quantities to be purchased; fixed, minimum or variable price provisions; and the approximate timing of the transaction. Purchase obligations exclude agreements that are cancelable at any time without penalty. The unconditional purchase obligations outstanding as of March 31, 2019 include the following:

Lachlan Pharmaceuticals Minimum Obligations and Indemnity Receivable

As discussed in Note 5, in November 2017, the Company acquired TRx and its wholly-owned subsidiaries, including Zylera. The previous owners of TRx beneficially own more than 10% of our outstanding common stock. Zylera, which is now our wholly owned subsidiary, entered into an agreement with Lachlan Pharmaceuticals, an Irish company controlled by the previous owners of TRx ("Lachlan"), effective December 18, 2015 (the "Lachlan Agreement"). Pursuant to the Lachlan Agreement, Lachlan named Zylera as its exclusive distributor of Ulesfia in the United States and agreed to supply Ulesfia to Zylera exclusively for marketing and sale in the United States.

The Lachlan Agreement requires Zylera to purchase a minimum of 20,000 units per year, or approximately \$1.2 million worth of product, from Lachlan, unless and until there has been a "Market Change" involving a new successful competitive product. Zylera must pay Lachlan \$58.84 per unit and handling fees that are equal to \$4.03 per unit of fully packaged Ulesfia in 2019 and escalate at a rate of 10% annually. The Lachlan Agreement also requires that Zylera make certain cumulative net sales milestone payments and royalty payments to Lachlan with a \$3.0 million annual minimum payment unless and until there has been a "Market Change" involving a new successful competitive product. Lachlan is obligated to pay identical amounts to an unrelated third party from which it obtained rights to Ulesfia, with the payments ultimately flowing to Summers Laboratories, Inc. ("Summers Labs"). Because of the dispute described below, the Company has not made any payments to Lachlan under the Lachlan Agreement subsequent to the acquisition date.

On December 10, 2016, Zylera informed Lachlan that a Market Change had occurred due to the introduction of Arbor Pharmaceuticals' lice product, Sklice®. On June 5, 2017, Lachlan and Zylera entered into joint legal representation along with other unrelated third parties in negotiation and arbitration of a dispute with Summers Labs regarding the existence of a Market Change and the concomitant obligations of the parties. The arbitration panel issued an interim ruling on October 23, 2018 that no Market Change had occurred up to and including the date of the hearing. The arbitration panel issued a second interim ruling on December 26, 2018. The second interim award rejected Summers Labs' request to accelerate future minimum royalties, however, it ruled in favor of Summers Labs that it is owed reimbursement for all reasonable costs and expenses, including legal fees, by Shionogi, as well as

interest, as stipulated in the contract. The arbitration panel issued a final award on March 1, 2019 that dictated the final amount of reimbursable costs and interest as contemplated in the second interim ruling. The final award has no direct bearing on the Company as the Company was not a named defendant to the original claim by Summers Labs and a federal court denied Zylera's ability to be a counterclaimant in the matter. Furthermore, the Company is not subject to the guarantee or interest provisions identified in the second ruling as these elements of the contractual relationship were not passed down to the Company's agreement with Lachlan. However, the Company has interpreted this ruling's impact on the Lachlan Agreement to mean that the minimum purchase obligation and minimum royalty provisions of the contract are active and due for any prior periods as well as going forward for any future periods.

The Company has recognized an \$8.7 million liability for these minimum obligations in accrued liabilities as of March 31, 2019. Under the terms of the TRx Purchase Agreement, the former TRx owners are required to indemnify the Company for 100% of all pre-acquisition losses related this arbitration, including legal costs, and possible minimum payments in excess of \$1 million. Furthermore, the former TRx owners are required to indemnify the Company for 50% of post-acquisition Ulesfia losses, which would include losses resulting from having to fund these minimum obligations. The Company has recorded an indemnity receivable of \$5.2 million in other receivables as of March 31, 2019, which the Company believes is fully collectible. For the three months ended March 31, 2019, minimum obligations net of amounts recorded within the indemnity receivable of \$0.6 million has been recorded in cost of product sales. If the Company fails to make these minimum obligations timely then the Lachlan Agreement may be terminated by Lachlan, in which case the Company would no longer be able to sell the Ulesfia product, but it would also not be subject to future minimum obligations. Lachlan has not requested payment for the minimum obligations.

The Company expects a successful competitive product will enter the market in early 2021 and therefore the future minimum purchase obligations and royalty payments are expected only through 2020. As of March 31, 2019, future minimum purchase obligations and future minimum royalty payments to Lachlan are as follows:

	Q2 2019 - Q4 2019*	2020*	2021	2022	Total*
Minimum Purchase Obligations	\$ 942,994	1,265,378	—	—	\$ 2,208,372
Minimum Royalties	2,250,000	3,000,000	—	—	5,250,000
Total	\$ 3,192,994	4,265,378	—	—	\$ 7,458,372

*Per the TRx Purchase Agreement, the previous owners of TRx are required to indemnify the Company for 50% of post-acquisition Ulesfia losses, which include the future minimum purchase obligations and future minimum royalties disclosed above. Thus, the Company's future net payouts related to the Ulesfia product should be significantly reduced as a result of the indemnification.

Karbinal Royalty Make-Whole Provision

As discussed in Note 5, on February 16, 2018, in connection with the acquisition of Avadel's pediatric products, the Company entered into a supply and distribution agreement with TRIS Pharma (the "Karbinal Agreement"). As part of this agreement, the Company has an annual minimum sales commitment, which is based on a commercial year that spans from August 1 through July 31, of 70,000 units through 2033. The Company is required to pay TRIS a royalty make-whole payment of \$30 for each unit under the 70,000 units annual minimum sales commitment through 2033. The annual payment is due in August of each year.

The Company paid \$0.9 million to TRIS in August 2018 related to the make-whole payment for the commercial year ended July 31, 2018. As of March 31, 2019, the Company has accrued \$1.1 million in accrued expenses and other current liabilities related to the Karbinal royalty make whole for the commercial year ending July 31, 2019. For the three months ended March 31, 2019, the make-whole provision of \$0.4 million has been recorded in cost of product sales. The future royalty make-whole payments are unknown as the amount owed to TRIS is dependent on the number of units sold.

Possible future milestone proceeds for out-licensed compound

In August 2017, the Company sold its worldwide rights to CERC-501 to Janssen Pharmaceuticals, Inc. ("Janssen") in exchange for initial gross proceeds of \$25 million. There is a potential future \$20 million regulatory milestone payment to the

Company. The terms of the agreement provide that Janssen will assume ongoing clinical trials and be responsible for any new development and commercialization of CERC-501.

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

This Quarterly Report on Form 10-Q and the information incorporated herein by reference contain forward-looking statements that involve a number of risks and uncertainties, as well as assumptions that, if they never materialize or prove incorrect, could cause our results to differ materially from those expressed or implied by such forward-looking statements. Forward-looking statements can be identified by the use of forward-looking words such as "believes," "expects," "may," "will," "plans," "intends," "estimates," "could," "should," "would," "continue," "seeks," "aims," "projects," "predicts," "pro forma," "anticipates," "potential" or other similar words (including their use in the negative), or by discussions of future matters such as the development of product candidates or products, technology enhancements, possible changes in legislation, and other statements that are not historical. Although our forward-looking statements reflect the good faith judgment of our management, these statements can only be based on facts and factors currently known by us. Consequently, forward-looking statements are inherently subject to risks and uncertainties, and actual results and outcomes may differ materially from results and outcomes discussed in the forward-looking statements. Factors that could cause or contribute to these differences include those below and elsewhere in this Quarterly Report on Form 10-Q, particularly in Part II – Item 1A, "Risk Factors," as well as in our Annual Report on Form 10-K filed with the Securities and Exchange Commission, or SEC, on March 18, 2019, as amended on April 23, 2019 and in our other filings with the SEC. Statements made herein are as of the date of the filing of this Quarterly Report on Form 10-Q with the SEC and should not be relied upon as of any subsequent date. Unless otherwise required by applicable law, we do not undertake, and we specifically disclaim any obligation to update any forward-looking statements to reflect occurrences, developments, unanticipated events or circumstances after the date of such statement.

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our unaudited financial statements and related notes that appear in Item 1 of this Quarterly Report on Form 10-Q and with our audited financial statements and related notes for the year ended December 31, 2018 appearing in our Annual Report on Form 10-K filed with the SEC on March 18, 2019, as amended on April 23, 2019.

Overview

Cerecor Inc. (the "Company" or "Cerecor") is a fully integrated biopharmaceutical company with commercial operations and research and development capabilities. The Company is building a pipeline of innovative therapies in neurology, pediatric healthcare, and orphan rare diseases. The Company's neurology pipeline is led by CERC-301, which recently received positive interim results from the Phase I safety study of Neurogenic Orthostatic Hypotension ("nOH"). The Company is also developing 2 other neurological compounds, one of which is in preclinical testing and the other is in clinical ready stage. The Company's pediatric orphan rare disease pipeline is led by CERC-801, CERC-802, and CERC-803. All 3 of these compounds are therapies for inherited metabolic disorders known as Congenital Disorders of Glycosylation ("CDGs") by means of substrate replacement therapy. The U.S. Food and Drug Administration ("FDA") has granted Rare Pediatric Disease designation ("RPDD") and Orphan Drug Designation ("ODD") to all 3 compounds. Under the FDA's Rare Pediatric Disease Priority Review Voucher ("PRV") program, upon the approval of a new drug application ("NDA") for the treatment of a rare pediatric disease, the sponsor of such application would be eligible for a PRV that can be used to obtain priority review for a subsequent new drug application or biologics license application. The PRV may be sold or transferred an unlimited number of times. The Company plans to leverage the 505(b)(2) NDA pathway for all 3 compounds to accelerate development and approval. The Company is also in the process of developing 1 other preclinical pediatric orphan rare disease compound.

The Company also has a diverse portfolio of marketed products. Our marketed products are led by our prescribed dietary supplements and prescribed drugs. Our prescribed dietary supplements include Poly-Vi-Flor and Tri-Vi-Flor, which are prescription vitamin and fluoride supplements used in infants and children to treat or prevent deficiency of essential vitamins and fluoride. The Company also markets a number of prescription drugs that treat a range of pediatric diseases, disorders and conditions. Cerecor's prescription drugs include Millipred®, Ulesfia®, Karbinal™ ER, AcipHex® Sprinkle™, and Cefaclor for Oral Suspension. Finally, the Company has 1 marketed medical device, Flexichamber™.

Recent Developments

Executive Leadership Changes

In April 2019, the Company announced changes to its executive leadership team. Effective April 15, 2019, Dr. Simon Pedder, Ph.D., was appointed Executive Chairman of the Board. Additionally, Patrick Crutcher was promoted to Chief Strategy Officer. Peter Greenleaf resigned from his position as Chief Executive Officer role and remains on the Board of Directors.

Research and Development Updates

In April 2019, the Company received positive interim results from the Phase 1 study of CERC-301 for the treatment of Neurogenic Orthostatic Hypotension in Parkinson’s disease patients. All doses showed clinically meaningful increases in blood pressure over placebo, within the six-hour post-dose timepoints. The purpose of the Phase 1 study is to evaluate the single-dose safety, tolerability and pharmacokinetics of CERC-301 in the relevant patient population, as well as explore the effects on blood pressure in nOH patients during an orthostatic challenge at escalating dose levels. The interim results demonstrate a rapid, robust increase in systolic blood pressure (SBP) from baseline to six hours. This early and sustained effect could differentiate CERC-301 from existing nOH treatments. Additionally, all doses tested were safe and well tolerated with no serious adverse events reported. Additionally, in early 2019, a patent was issued for CERC-301, which provides Cerecor with intellectual property rights to CERC-301 until 2035

The FDA granted ODD to CERC-801, CERC-802, and CERC-803 in early 2019. There are numerous benefits associated with receipt of ODD, which include 7-year marketing exclusivity (upon approval) in the United States, tax credits (up to 25% of clinical development costs) and waiver of Prescription Drug User Fee Act application fees (filing fees). Additionally, CERC-801, CERC-802, and CERC-803 were granted RPDD in 2018. RPDD provides eligibility for receipt of a PRV upon approval of an NDA.

In early 2019, the Company received a may proceed letter related to an Investigational New Drug ("IND") application previously submitted to the FDA for CERC-801. Additionally, the FDA designated Fast Track Designation for CERC-801. Fast Track Designation is granted to drugs being developed for the treatment of serious or life-threatening diseases or conditions where there is an unmet medical need. The purpose of the Fast Track Designation provision is to help facilitate development and expedite the review of drugs to treat serious and life-threatening conditions so that an approved product can reach the market expeditiously.

Furthermore, in April 2019, the Company announced positive Phase 1 safety data for CERC-801 in healthy volunteers. The single-center, US-based safety, tolerability and pharmacokinetic study was an open-label, randomized, single-dose, four-way crossover study in 16 healthy adult volunteers. CERC-801 was shown to be safe and well-tolerated at the studied doses, with no serious adverse events. CERC-801 related adverse events were mild and transient. Cerecor seeks to leverage existing clinical and nonclinical data in conjunction with sponsor-initiated studies, such as this Phase 1 study, to accelerate development and approval of CERC-801 via the 505(b)(2) pathway.

	Program	Target Indication	Upcoming Milestone
Metabolic Disorders	CERC-801*	PGM1 Deficiency	FDA Discussion - 2H19
	CERC-802*	MPI Deficiency	IND Filing - June 2019
	CERC-803*	SLC35C1-CDG (CDG-IIc)	IND Filing - 2020
Neurology Disorders	CERC-301	Neurogenic Orthostatic Hypotension	Complete Phase 1 - June 2019
	CERC-406	Parkinson’s Disease	IND Filing - 1H20
	CERC-611	Partial Onset Seizures	Under Strategic Review

*505(b)(2) Pathway

Recent Financing

During the first quarter of 2019, the Company closed on an underwritten public offering of common stock for 1,818,182 shares of common stock of the Company, at a price to the public of \$5.50 per share ("public price"). Armistice Capital Master Fund Ltd. ("Armistice"), our largest stockholder, participated in the offering by purchasing 363,637 shares of common stock of the Company from the underwriter at the public price. Cerecor director Steven J. Boyd is Armistice’s Chief Investment Officer. The gross proceeds to the Company, before deducting underwriting discounts and commissions and offering expenses, were approximately \$10.0 million. The net proceeds were approximately \$9.0 million.

Our Strategy

Our strategy for increasing shareholder value includes:

- Advancing our pipeline of compounds through development and to regulatory approval;
- Pursuing targeted, differentiated preclinical and clinical stage product candidates;
- Acquiring or licensing rights to clinically meaningful and differentiated products that are already on the market for pediatric use or in late-stage development for pediatric indications; and
- Growing sales of the existing commercial products in our portfolio, including by identifying and investing in growth opportunities such as new indications and new geographic markets.

Product Pipeline Assets

The following table summarizes key information about our product candidates and further detail regarding each product candidate follows:

	Program	Mechanism of Action	Target Indication	Development Stage
Metabolic Disorders	CERC-801	D-Galactose replacement	PGM1 Deficiency	Phase 1 → 505(b)(2)
	CERC-802	D-Mannose replacement	MPI Deficiency	IND-Enabling → 505(b)(2)
	CERC-803	L-Fucose replacement	SLC35C1-CDG (CDG-IIc)	IND-Enabling → 505(b)(2)
	CERC-913	Nucleoside replacement	DGUOK Deficiency	Preclinical POC
Neurology Disorders	CERC-301	GluN2B selective, NMDA Receptor antagonist	Neurogenic Orthostatic Hypotension	Phase 1 →
	CERC-406	CNS-targeted, COMT inhibitor (2 nd Gen)	Parkinson's Disease	IND-Enabling →
	CERC-611	TARP-γ8 dependent AMPA Receptor antagonist	Partial Onset Seizures	Phase 1 Ready →

Results of Operations

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

The following table summarizes our revenue for the three months ended March 31, 2019 and 2018

	Three Months Ended March 31,	
	2019	2018
	(in thousands)	
Product revenue, net	\$ 5,411	\$ 4,260
Sales force revenue	\$ —	\$ 223

Product revenue, net

Net product revenue increased \$1.2 million for the three months ended March 31, 2019 as compared to the same period in 2018. The increase was due to favorable product mix and unit growth driven by the sales force expansion as well as due to a full quarter of sales of products that were acquired during the prior year quarter.

Sales force revenue

As part of the acquisition of TRx in November 2017, the Company acquired a sales and marketing agreement with Pharmaceutical Associates, Inc. ("PAI") under which the Company received a monthly marketing fee to promote, market and sell certain products on behalf of PAI. The Company was also entitled to a share of PAI's profits. For the three months ended March 31, 2018, sales force revenue was \$0.2 million. The PAI contract was canceled during the second quarter of 2018 and therefore there is no sales force revenue for the three months ended March 31, 2019.

Cost of product sales

Cost of product sales was \$1.9 million for the three months ended March 31, 2019, compared to \$0.9 million for the three months ended March 31, 2018. The increase of \$1.0 million for the three months ended March 31, 2019 compared to the same period in 2018 is driven by the increase in net product revenue as well as Lachlan Pharmaceuticals' minimum purchase and royalty obligations that arose during the third quarter of 2018 as further discussed in Note 13 to the accompanying unaudited financial statements appearing above.

Research and Development Expenses

The following table summarizes our research and development expenses for the three months ended March 31, 2019 and 2018:

	Three Months Ended March 31,	
	2019	2018
	(in thousands)	
Preclinical expenses	\$ 879	\$ 887
Clinical expenses	1,590	341
CMC expenses	435	107
Internal expenses not allocated to programs:		
Salaries, benefits and related costs	435	240
Stock-based compensation expense	57	11
Other	5	64
	\$ 3,401	\$ 1,650

Research and development expenses increased \$1.8 million for the three months ended March 31, 2019 compared to the same period in 2018. The overall increase is driven by an increase in research and development activities during the current year as the Company continues to develop its pipeline of assets. Clinical expenses increased \$1.2 million primarily due to increased activities related to the CERC-301 clinical study in nOH during the first quarter of 2019 and activities related to CERC-801, CERC-802, and CERC-803, which were acquired as part of the Ichorion Acquisition in September 2018. Chemistry, Manufacturing, and Controls ("CMC") expenses increased \$0.3 million for the three months ended March 31, 2019 compared to the same period in 2018 due to additional spending on manufacturing to support clinical development. Salaries, benefits, and related costs increased by \$0.2 million compared to the same period in 2018 due to an increase in headcount and salary-related costs.

General and Administrative Expenses

The following table summarizes our general and administrative expenses for the three months ended March 31, 2019 and 2018:

	Three Months Ended March 31,	
	2019	2018
	(in thousands)	
Salaries, benefits, and related costs	\$ 1,230	\$ 617
Legal, consulting, and other professional expenses	887	1,986
Stock-based compensation expense	469	207
Other	131	109
	<u>\$ 2,717</u>	<u>\$ 2,919</u>

General and administrative expenses decreased \$0.2 million for the three months ended March 31, 2019 as compared to the three months ended March 31, 2018. The overall decrease was driven by a \$1.1 million decrease in legal, consulting, and other professional expenses, partially offset by a \$0.6 million increase in salaries, benefits, and related costs and a \$0.3 million increase in stock-based compensation expense.

Legal, consulting, and other professional expenses decreased \$1.1 million as compared to the same period in 2018 mainly due to a substantial decrease in consulting fees. The consulting costs incurred in the prior year were related to the integration of the acquisitions of TRx and Avadel's pediatric products. The Company has since increased corporate headcount and therefore utilizes less consulting services to meet accounting and reporting requirements. Additionally, \$0.4 million of litigation fees incurred in the three months ended March 31, 2018 relate to arbitration and legal costs related to Lachlan Pharmaceuticals (explained further in Note 13 to the accompanying unaudited financial statements appearing above). Under the terms of the TRx Purchase Agreement, the former TRx owners are required to indemnify the Company for 100% of all pre-acquisition losses related this arbitration, including legal costs, and possible minimum payments in excess of \$1.0 million. The \$1.0 million threshold was met in the third quarter of 2018 and therefore the minimal legal costs related to Lachlan Pharmaceuticals incurred in the three months ended March 31, 2019 were offset by a corresponding receivable instead of general and administrative expenses. Salaries, benefits, and related costs increased by \$0.6 million due to an increase in headcount and salary-related costs. Stock-based compensation expense increased for the three months ended March 31, 2019 as compared to the same period in 2018 due to equity awards granted to a senior executive who joined the Company in late March 2018. Due to the timing of the grant, minimal expense was recognized for the three months ended March 31, 2018, however a full quarter of expense was recognized for the three months ended March 31, 2019.

Sales and Marketing Expenses

The following table summarizes our sales and marketing expenses for the three months ended March 31, 2019 and 2018:

	Three Months Ended March 31,	
	2019	2018
	(in thousands)	
Salaries, benefits, and related costs	\$ 1,838	\$ 952
Logistics, insurance, and other commercial operations expenses	339	91
Stock-based compensation expense	70	24
Advertising and marketing expense	815	177
Other	47	280
	<u>\$ 3,109</u>	<u>\$ 1,524</u>

Sales and marketing expenses increased \$1.6 million for the three months ended March 31, 2019 as compared to the same period in 2018. Salaries, benefits and related costs increased \$0.9 million as a result of increasing sales and sales support personnel needed to maintain and grow our commercial sales activities in connection with the acquisition of TRx and Avadel's pediatric products. Logistics, insurance, and other commercial operations expenses increased largely due to an increase of FDA fees incurred for the three months ended March 31, 2019. Advertising and marketing expenses increased \$0.6 million due to an increased focus on advertising and marketing initiatives during the current quarter to support the portfolio of pediatric drugs.

Amortization Expense

The following table summarizes our amortization expense for the three months ended March 31, 2019 and 2018:

	Three Months Ended March 31,	
	2019	2018
	(in thousands)	
Amortization of intangible assets	\$ 1,079	\$ 1,017

Amortization expense relates to the acquisition of intangible assets as part of the acquisition of TRx in November 2017 and Avadel's pediatric products in February 2018.

Change in fair value of contingent consideration

The Company recognized a loss on the change in fair value of contingent consideration of \$0.2 million for the three months ended March 31, 2019 as compared to a loss of \$0.3 million for the same period in 2018. The contingent consideration is related to the potential for future payment of consideration that is contingent upon the achievement of operation and commercial milestones and royalty payments on future product sales as part of the Company's acquisitions of Avadel's pediatric products and TRx. The fair value of contingent consideration was determined at the acquisition date. Subsequent to the acquisition date, at each reporting period, the contingent consideration liability is remeasured at the current fair value with changes recorded in operating expenses in the condensed consolidated statement of operations.

Other expense, net

The following table summarizes our other expense, net for the three months ended March 31, 2019 and 2018:

	Three Months Ended March 31,	
	December 31,	
	2019	2018
	(in thousands)	
Change in fair value of warrant liability and unit purchase option liability	\$ (48)	\$ (23)
Other (expense) income, net	(9)	19
Interest expense, net	(208)	(100)
	<u>\$ (265)</u>	<u>\$ (104)</u>

Other expense, net increased \$0.2 million for the three months ended March 31, 2019 as compared to the same period in 2018, which was primarily driven by a \$0.1 million increase in interest expense. The interest expense recognized relates to interest for the Deerfield Obligation, as defined below, assumed as part of the acquisition of Avadel's pediatric products, which took place on February 16, 2018. Due to the timing of the acquisition, approximately 1.5 months of interest was incurred for the three months ended March 31, 2018 as compared to a full quarter in the current year.

Income tax expense

The provision for income taxes was \$0.2 million for the three months ended March 31, 2019 and includes estimated cash taxes and additionally, discrete to the quarter, interest and penalties on the outstanding taxes payable to the IRS and various state authorities.

Liquidity, Capital Resources and Expenditure Requirements

In order to meet its cash flow needs, the Company applies a disciplined decision-making methodology as it evaluates the optimal allocation of the Company's resources between investing in the Company's current commercial product line, the Company's development portfolio and acquisitions, or in-licensing of new assets. For the three months ended March 31, 2019, Cerecor generated a net loss of \$7.5 million and negative cash flow from operations of \$3.1 million. As of March 31, 2019, Cerecor had an accumulated deficit of \$105.7 million and a balance of \$16.1 million in cash and cash equivalents. During the first quarter of 2019, the Company closed an underwritten public offering of common stock for 1,818,182 shares of common stock of the Company, at a price to the public of \$5.50 per share ("public price"). Armistice, our largest stockholder, participated in the offering by purchasing 363,637 shares of common stock of the Company from the underwriter at the public price. Cerecor director Steven J. Boyd is Armistice's Chief Investment Officer. The net proceeds of the offering were approximately \$9.0 million (see "Common Stock Offering" in Note 9 below for description of the transaction).

The Company plans to use cash and the anticipated cash flows from the Company's existing product sales to offset costs related to its neurology programs, pediatric rare disease programs, business development, costs associated with its organizational infrastructure, and debt principal and interest payments. Cerecor expects to continue to incur significant expenses and operating losses for the immediate future as it continues to invest in the Company's pipeline assets. Our ability to achieve and maintain profitability in the future is dependent on, among other things, the development, regulatory approval, and commercialization of our new product candidates and achieving a level of revenues from our existing product sales adequate to support our cost structure, which includes significant investment in our pipeline assets.

The Company believes it will require additional financing to continue to execute its clinical development strategy and fund future operations. The Company plans to meet its capital requirements through operating cash flows from product sales and some combination of equity or debt financings, collaborations, out-licensing arrangements, strategic alliances, federal and private grants, marketing, distribution, or licensing arrangements or the sale of current or future assets. If the Company is not able to secure adequate additional funding, the Company may be forced to make reductions in spending, extend payment terms with suppliers, liquidate assets where possible, or suspend or curtail planned programs. If the Company raises additional funds through collaborations, strategic alliances, or licensing arrangements with third parties, the Company may have to relinquish valuable rights to our technologies, future revenue streams, research programs, or product candidates.

Our plan to aggressively develop our pipeline will require substantial cash inflows in excess of what the Company expects our current commercial operations to generate. However, the Company expects that our existing cash and cash equivalents, together with anticipated revenue, will enable us to fund our operating expenses, capital expenditure requirements, and other non-operating cash payments, such as fixed quarterly payments on our outstanding debt balances, through at least May 2020.

Uses of Liquidity

The Company uses cash and the anticipated positive net cash flows from the Company's existing product sales to fund research and development expenses related to its neurology and pediatric rare disease pipelines, business development, costs associated with its organizational infrastructure, and debt principal and interest payments.

Ichorion Asset Acquisition

On September 24, 2018, the Company entered into a merger agreement in which we acquired Ichorion Therapeutics, Inc. The consideration for the Ichorion acquisition at closing consisted of 5.8 million shares of the Company's Common Stock, par value \$0.001 per share, as adjusted for estimated working capital. The shares are subject to a lockup through December 31, 2019. Consideration for the Merger included certain development milestones worth up to an additional \$15 million, payable either in shares of Company common stock or in cash, at the election of the Company. There will be future cash outflow for research and development costs associated with the development of the assets acquired as part of the Ichorion acquisition (CERC-801, CERC-802, CERC-803 and CERC-913).

Deerfield Debt Obligation

In relation to the Company's acquisition of Avadel's pediatric products on February 16, 2018, the Company assumed an obligation that Avadel had to Deerfield (the "Deerfield Obligation"). Beginning in July 2018 through October 2020, the Company will pay a quarterly payment of \$262,500 to Deerfield. In January 2021, a balloon payment of \$15,250,000 is due. The Deerfield Obligation was \$15.4 million as of March 31, 2019, of which \$1.1 million is recorded as a current liability.

Cash Flows

The following table summarizes our cash flows for the three months ended March 31, 2019 and 2018:

	Three Months Ended March 31,	
	2019	2018
	(in thousands)	
Net cash provided by (used in):		
Operating activities	\$ (3,122)	\$ (280)
Investing activities	(166)	(19)
Financing activities	8,817	363
Net increase (decrease) in cash and cash equivalents	<u>\$ 5,530</u>	<u>\$ 64</u>

Net cash used in operating activities

Net cash used in operating activities was \$3.1 million for the three months ended March 31, 2019 and consisted primarily of a net loss of \$7.5 million, offset by depreciation and amortization of \$1.1 million, non-cash stock-based compensation expense of \$0.6 million, and changes in working capital, primarily, an increase in accrued expenses of \$2.0 million, largely related to the Lachlan minimum obligations as discussed in Note 13 to the accompanying unaudited financial statements appearing above. The net loss for the three months ended March 31, 2019 was driven by increased research and development activities incurred as the Company continues to fund its pipeline of development assets and also by increased sales and marketing expenses incurred to support commercial sales activities.

Net cash used in operating activities was \$0.3 million for the three months ended March 31, 2018 and consisted primarily of a net loss of \$3.9 million, adjusted for non-cash stock-based compensation expense of \$0.2 million, depreciation and amortization of \$1.0 million, and changes in working capital, primarily driven by a change in accounts payable of \$1.9 million and other receivables of \$0.4 million, offset by a change in inventory of \$0.6 million.

Net cash used in investing activities

Net cash used in investing activities was \$0.2 million for the three months ended March 31, 2019, an increase of approximately \$0.2 million over the three months ended March 31, 2018. The increase was primarily driven by the purchase of property and equipment in connection with the Company occupying its new corporate headquarters during the first quarter of 2019.

Net cash used in investing activities was \$19,225 for the three months ended March 31, 2018 and primarily consisted of purchases of property and equipment.

Net cash provided by financing activities

Net cash provided by financing activities was \$8.8 million for the three months ended March 31, 2019 and consisted primarily of net proceeds of approximately \$9.0 million from the underwritten public offering of common stock for 1,818,182 shares of common stock of the Company, at a price to the public of \$5.50 per share. The increase was partially offset by \$0.2 million payment of contingent consideration related to the Avadel acquisition.

Net cash provided by financing activities was \$0.4 million for the three months ended March 31, 2018 and consisted of proceeds from option and warrant exercises.

Critical Accounting Policies, Estimates, and Assumptions

This Management's Discussion and Analysis of Financial Condition and Results of Operations is based on our unaudited condensed consolidated financial statements, which have been prepared in accordance with GAAP. In preparing the financial statements in conformity with GAAP, the Company makes estimates and assumptions that have an impact on assets, liabilities, revenue and expenses reported. These estimates can also affect supplemental information disclosed by us, including information about contingencies, risk, and financial condition. In our unaudited condensed consolidated financial statements, estimates are used for, but not limited to, revenue recognition, cost of product sales, stock-based compensation, fair value measurements (including those relating to contingent consideration), cash flows used in management's going concern assessment, income taxes, goodwill, and other intangible assets, and clinical trial accruals. The Company believes, given current facts and circumstances, our estimates and assumptions are reasonable, adhere to GAAP and are consistently applied. Inherent in the nature of an estimate or assumption is the fact that actual results may differ from estimates, and estimates may vary as new facts and circumstances arise. Our most critical accounting estimates and assumptions are included in our Annual Report on Form 10-K for the year ended December 31, 2018 filed with the SEC on March 18, 2019 and amended on April 23, 2019.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements, as defined by applicable SEC rules and regulations.

Recently Adopted Accounting Pronouncements

See Item 1 of Part I, “Notes to Unaudited Financial Statements,” Note 2, of this Quarterly Report on Form 10-Q.

JOBS Act

The JOBS Act contains provisions that, among other things, reduce reporting requirements for an “emerging growth company.” As an emerging growth company, we have elected to not take advantage of the extended transition period afforded by the JOBS Act for the implementation of new or revised accounting standards and, as a result, will comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for non-emerging growth companies.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

As a smaller reporting company, we are not required to provide the information required by this Item.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

As required by Rule 13a-15(b) and Rule 15d-15(b) of the Exchange Act, our management, including our principal executive officer and our principal financial officer, conducted an evaluation as of the end of the period covered by this Quarterly Report on Form 10-Q of the effectiveness of the design and operation of our disclosure controls and procedures. In designing and evaluating our disclosure controls and procedures, our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. Based on that evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of the end of the period covered by this Quarterly Report on Form 10-Q.

Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting identified in management's evaluation pursuant to Rules 13a-15(d) or 15d-15(d) of the Exchange Act during the period covered by this Quarterly Report on Form 10-Q that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Attestation Report of Registered Public Accounting Firm

The Quarterly Report on Form 10-Q does not include an attestation report of our independent registered public accounting firm due to an exemption established by the JOBS Act for emerging growth companies.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings.

Lachlan Pharmaceuticals

In November 2017, the Company acquired TRx and its wholly-owned subsidiaries, including Zylera. The previous owners of TRx beneficially own more than 10% of our outstanding common stock. Zylera, which is our wholly owned subsidiary, entered into the First Amended and Restated Distribution Agreement with Lachlan, effective December 18, 2015. Pursuant to the Lachlan Agreement, Lachlan named Zylera as its exclusive distributor of Ulesfia in the United States and agreed to supply Ulesfia to Zylera exclusively for marketing and sale in the United States.

Zylera is obligated to purchase a minimum of 20,000 units per year, or approximately \$1.2 million worth of product, from Lachlan, subject to certain termination rights. Zylera must pay Lachlan \$58.84 per unit and handling fees that are equal to \$3.66 per unit of fully packaged Ulesfia in 2018, and escalate at a rate of 10% annually, as well as reimburse Lachlan for all product liability insurance fees incurred by Lachlan. The Lachlan Agreement also requires that Zylera make certain cumulative net sales milestone payments and royalty payments to Lachlan with a \$3 million annual minimum payment unless and until there has been a “Market Change” involving a new successful competitive product. Lachlan is obligated to pay identical amounts to an unrelated third party from which it obtained rights to Ulesfia, with the payments ultimately flowing to Summers Laboratories, Inc. (“Summers Labs”). Because of the dispute described below, the Company has not made any payments to Lachlan under the Lachlan Agreement subsequent to the acquisition date.

On December 10, 2016, Zylera informed Lachlan that a Market Change had occurred due to the introduction of Arbor Pharmaceuticals' lice product, Sklice®. On June 5, 2017, Lachlan and Zylera entered into joint legal representation along with other unrelated third parties in negotiation and arbitration of a dispute with Summers Labs regarding the existence of a Market Change and the concomitant obligations of the parties. The arbitration panel issued an interim ruling on October 23, 2018 that no Market Change had occurred up to and including the date of the hearing. The arbitration panel issued a second interim ruling on December 26, 2018. The second interim award rejected Summers Labs' request to accelerate future minimum royalties, however, it ruled in favor of Summers Labs that it is owed reimbursement for all reasonable costs and expenses, including legal fees, by Shionogi, as well as interest, as stipulated in the contract. The arbitration panel issued a final award on March 1, 2019 that dictated the final amount of reimbursable costs and interest as contemplated in the second interim ruling. The final award has no direct bearing on the Company as the Company was not a named defendant to the original claim by Summers Labs and a federal court denied Zylera's ability to be a counterclaimant in the matter. Furthermore, the Company is not subject to the guarantee or interest provisions identified in the second ruling as these elements of the contractual relationship were not passed down to the Company's agreement with Lachlan. However, the Company has interpreted this ruling's impact on the Lachlan Agreement to mean the minimum purchase obligation and minimum royalty provisions of the contract are active and due for any prior periods as well as going forward for any future periods.

The Company has recognized an \$8.7 million liability for these minimum obligations in accrued liabilities as of March 31, 2019. Under the terms of the TRx Purchase Agreement, the former TRx owners are required to indemnify the Company for 100% of all pre-acquisition losses related this arbitration, including legal costs, and possible minimum payments in excess of \$1 million. Furthermore, the former TRx owners are required to indemnify the Company for 50% of post-acquisition Ulesfia losses, which would include losses resulting from having to fund these minimum obligations. The Company has recorded an indemnity receivable of \$5.2 million in other receivables as of March 31, 2019, which the Company believes is fully collectible. For the three months ended March 31, 2019, minimum obligations net of amounts recorded within the indemnity receivable of \$0.6 million has been recorded in cost of product sales. If the Company fails to make these minimum obligations timely then the Lachlan Agreement may be terminated by Lachlan, in which case the Company would no longer be able to sell the Ulesfia product, but it would also not be subject to future minimum obligations. Lachlan has not requested payment for the minimum obligations.

Item 1A. Risk Factors.

In addition to the other information set forth in this Quarterly Report on Form 10-Q, you should carefully consider the factors discussed in Part I, “Item 1A. Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2018, filed with the SEC on March 18, 2019 and amended on April 23, 2019, which could materially affect our business, financial condition, or future results. Our risk factors as of the date of this Quarterly Report on Form 10-Q have not changed materially from those described in our Annual Report on Form 10-K, as amended. However, the risks described in our Annual Report on Form 10-K are not the only risks facing our company. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition, or future results of operations and the trading price of our common stock.

Item 6. Exhibits.

Exhibit Number	Description of Exhibit
31.1	Certification of Principal Executive Officer and Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1*	Certification of Principal Executive Officer and Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document.
101.SCH	XBRL Taxonomy Extension Schema Document.
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.

* This certification is being furnished solely to accompany this Quarterly Report pursuant to 18 U.S.C. Section 1350, and is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and is not to be incorporated by reference into any filing of the registrant, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

SIGNATURES

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

Cerecor Inc.

Date: May 9, 2019

/s/ Joseph M. Miller

Joseph M. Miller

Chief Financial Officer

(on behalf of the registrant and as the registrant's principal executive officer, principal financial officer and principal accounting officer)

**CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER AND PRINCIPAL FINANCIAL OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Joseph M. Miller, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Cerecor 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 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 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.

Date: May 9, 2019

/s/ Joseph M. Miller

Joseph M. Miller

Chief Financial Officer

(Registrant's principal executive officer, principal financial officer
and principal accounting officer)

**CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
AND PRINCIPAL FINANCIAL OFFICER
PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of Cerecor Inc. (the "Registrant") on Form 10-Q for the period ended March 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Joseph M. Miller, Chief Financial Officer of the Registrant, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

1. 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 Registrant.

Date: May 9, 2019

/s/ Joseph M. Miller

Joseph M. Miller

Chief Financial Officer

(Registrant's principal executive officer, principal financial officer
and principal accounting officer)

The foregoing certifications are not deemed filed with the Securities and Exchange Commission for purposes of section 18 of the Securities Exchange Act of 1934, as amended (Exchange Act), and are not to be incorporated by reference into any filing of Cerecor Inc. under the Securities Act of 1933, as amended, or the Exchange Act, whether made before or after the date hereof, regardless of any general incorporation language in such filing.
