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Filed Pursuant to Rule 424(b)(5)
Registration No. 333-233978

Prospectus Supplement
(To prospectus dated October 24, 2019)

1,306,282 Shares of Common Stock

We are offering 1,306,282 shares of our common stock at a purchase price of $3.98 per share pursuant to this prospectus supplement and the accompanying prospectus. Our common stock is listed on The Nasdaq Capital Market, or Nasdaq, under the symbol "CERC." The last reported sale price of our common stock on Nasdaq on February 3, 2020 was $3.98 per share.

Investing in our common stock involves a high degree of risk. Before making any investment decision, you should carefully review and consider all the information in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein, including the risks and uncertainties described under "Risk Factors" beginning on page S-8 of this prospectus supplement and the risk factors incorporated by reference into this prospectus supplement and the accompanying prospectus.

We have retained Wedbush Securities Inc., or Wedbush PacGrow, to act as our exclusive placement agent for this offering. The placement agent has agreed to use its "reasonable best efforts" to arrange for the sale of our common stock offered by this prospectus supplement and the accompanying prospectus, but the placement agent has no obligation to purchase or sell any of such shares or to arrange for the purchase or sale of any specific number or dollar amount of such shares. There is no required minimum number of shares of our common stock that must be sold as a condition to completion of this offering. Because there is no minimum offering amount required as a condition to closing this offering, the actual offering amount, placement agent fees, and proceeds to us, if any, are not presently determinable and may be substantially less than the total maximum offering amounts set forth below. We have not arranged to place the funds from investors in an escrow, trust or similar account. We have agreed to pay the placement agent the fees set forth in the table below in connection with this offering, which assumes that we sell all of the shares of common stock we are offering hereby.

	Per Share	Total
Public offering price	$3.9800	$5,199,002.36
Placement agent's fees(1)	$0.0842	$109,950.05
Proceeds, before expenses, to us	$3.8958	$5,089,052.31

(1) We have agreed to reimburse the placement agent for certain of its expenses as described under the "Plan of Distribution" on page S-63 of this prospectus supplement for additional information.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

We anticipate delivery of the shares will take place on or about February 5, 2020 through the facilities of the Depository Trust Company.

Wedbush PacGrow

The date of this prospectus supplement is February 3, 2020.

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Prospectus Supplement

Prospectus

You should rely only on the information incorporated by reference or provided in this prospectus supplement and the accompanying prospectus. Neither we nor the placement agent have authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus supplement and the accompanying prospectus do not constitute an offer to sell, or a solicitation of an offer to purchase, the securities offered by this prospectus supplement and the accompanying prospectus in any jurisdiction where it is unlawful to make such offer or solicitation. You should assume that the information contained in this prospectus supplement or the accompanying prospectus, or any document incorporated by reference in this prospectus supplement or the accompanying prospectus, is accurate only as of the date of those respective documents. Neither the delivery of this prospectus supplement nor any distribution of securities pursuant to this prospectus supplement shall, under any circumstances, create any implication that there has been no change in the information set forth or incorporated by reference into this prospectus supplement or in our affairs since the date of this prospectus supplement. Our business, financial condition, results of operations and prospects may have changed since that date.

ABOUT THIS PROSPECTUS SUPPLEMENT

On September 27, 2019, we filed with the Securities and Exchange Commission, or the SEC, a registration statement on Form S-3 (File No. 333-233978) utilizing a shelf registration process relating to the securities described in this prospectus supplement, which registration statement became effective on October 24, 2019. Under this shelf registration, we may, from time to time, sell common stock and other securities, including in this offering.

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of this offering of common stock and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into the prospectus and this prospectus supplement. The second part is the accompanying prospectus dated October 24, 2019, which provides more general information, some of which does not apply to this offering. Generally, when we refer to this prospectus, we are referring to both parts of this document combined.

If the description of the offering varies between this prospectus supplement and the accompanying prospectus, you should rely on the information contained in this prospectus supplement. To the extent there is any other conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying prospectus or in any document incorporated by reference that was filed with the SEC before the date of this prospectus supplement, on the other hand, you should rely on the information in this prospectus supplement. If any statement in one of these documents is inconsistent with a statement in another document having a later date—for example, a document incorporated by reference in the accompanying prospectus—the statement in the document having the later date modifies or supersedes the earlier statement. It is important for you to read and consider all information contained in this prospectus supplement and the accompanying prospectus, including the documents we have referred you to in the section entitled "Where You Can Find More Information" below in this prospectus supplement.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in this prospectus supplement or the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

Unless the context otherwise requires, "Cerecor," "the Company," "we," "us," "our" and similar terms refer to Cerecor Inc.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement and the accompanying prospectus, the information incorporated by reference herein and therein and any free writing prospectus that we have authorized for use in connection with this offering contain or may include "forward-looking statements" within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and Section 27A of the Securities Act of 1933, as amended, or the Securities Act. For these purposes, any statements contained or incorporated by reference herein regarding our strategy, future operations, financial position, future revenues, projected costs, prospects, plans and objectives of management, other than statements of historical facts, are forward-looking statements. In some cases, 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 integration of the companies and their personnel; the development of product candidates or products; timing and success of trial results and regulatory review; potential attributes and benefits of product candidates; the expansion of Cerecor's drug portfolio; strategic alternatives for the neurological assets and Millipred; and other statements that are not historical.

These statements are based upon the current beliefs and expectations of Cerecor's management but are subject to significant risks and uncertainties, including:

- risks related to integration of the combined company;
- drug development costs, timing and other risks, including reliance on investigators and enrollment of patients in clinical trials;
- regulatory risks;
- reliance on and the need to attract, integrate and retain key personnel, including Mr. Cola and Dr. Neil;
- Cerecor's cash position and the need for it to raise additional capital;
- risks related to potential strategic alternatives for the Company's neurology assets and Millipred; and
- those other risks detailed in Cerecor's filings with the SEC.

We cannot guarantee that we actually will achieve the plans, intentions or expectations expressed or implied in our forward-looking statements. There are a number of important factors that could cause actual results to differ materially from those expressed or implied in the forward-looking statements we make. These important factors include our "critical accounting estimates" described in Part II, Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations—Application of Critical Accounting Estimates" of our most recent annual report filed on Form 10-K, and the factors set forth under and incorporated by reference in the caption "Risk Factors" in this prospectus supplement.

Given these risks, uncertainties and other factors, many of which are beyond our control, we cannot assure you that the forward-looking statements in this prospectus supplement will prove to be accurate, and you should not place undue reliance on these forward-looking statements. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified timeframe, or at all.

Any forward-looking statement speaks only as of the date on which it is made. Although we may elect to update forward-looking statements in the future, we specifically disclaim any obligation to do so, except as may be required by law, even if our estimates change, and readers should not rely on our forward-looking statements as representing our views as of any date subsequent to the date the statements were made.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights information contained in other parts of this prospectus supplement, the accompanying prospectus or information incorporated by reference herein or therein from our filings with the SEC, listed in the section of the prospectus entitled "Incorporation of Certain Information by Reference." Because it is only a summary, it does not contain all of the information that you should consider before purchasing our securities in this offering and it is qualified in its entirety by, and should be read in conjunction with, the more detailed information appearing elsewhere or incorporated by reference into this prospectus supplement and the accompanying prospectus. You should read the entire prospectus, the registration statement of which this prospectus supplement and the accompanying prospectus are a part, and the information incorporated by reference herein in their entirety, including the "Risk Factors" and our financial statements and the related notes incorporated by reference into this prospectus supplement and the accompanying prospectus, before purchasing our securities in this offering.

Company Overview

Cerecor Inc. (the "Company" or "Cerecor") is a biopharmaceutical company focused on becoming a leader in development and commercialization of treatments for rare pediatric and orphan diseases. The Company is advancing an emerging clinical-stage pipeline of innovative therapies.

The Company's pediatric rare disease pipeline is led by CERC-801, CERC-802 and CERC-803 ("CERC-800 programs"), which are therapies for inborn errors of metabolism, specifically disorders known as Congenital Disorders of Glycosylation (CDGs). The FDA granted Rare Pediatric Disease Designation and Orphan Drug Designation ("ODD") to all three CERC-800 compounds, thus qualifying the Company to receive a Priority Review Voucher ("PRV") upon approval of a new drug application ("NDA"). The Company plans to leverage the 505(b)(2) NDA pathway for all three compounds to accelerate development and approval. The Company is also developing CERC-002, CERC-006 and CERC-007, compounds previously developed by Aevi Genomics prior to our acquisition of Aevi on February 3, 2020. CERC-007 is an anti-IL-18 monoclonal antibody being developed for autoimmune inflammatory diseases such as Adult Onset Stills Disease (AOSD) and Multiple Myeloma, with initial proof-of-concept in patients expected in 2021. CERC-006 is an mTORC1/2 inhibitor targeted towards Complex Lymphatic Malformations, also with initial proof-of-concept in patients expected in 2021. CERC-002 is an anti-LIGHT monoclonal antibody currently in a Phase 1 clinical trial; initial proof-of-concept data is expected in the first half of 2020 in Adult Crohn's Disease, an FDA requirement before proceeding into Pediatric Crohn's. The Company is also developing one other preclinical pediatric orphan rare disease compound, CERC-913, for the treatment of mitochondrial DNA Depletion Syndrome.

Our portfolio of product candidates is summarized below:

- CERC-002 (formerly AEVI-002) is an anti-LIGHT (Lymphotoxin-like, exhibits Inducible expression, and competes with HSV Glycoprotein D for HVEM, a receptor expressed by T lymphocytes (part of the Tumor Necrosis Super Family 14)), fully human, monoclonal antibody being developed as a treatment for Pediatric Crohn's Disease. CERC-002 is currently in a Phase I trial in adult Crohn's patients and has recently dosed the first patient, we anticipate initial data in the first half of 2020.

- CERC-006 (formerly AEVI-006) is an mTORC1/2 inhibitor (a class of drugs that inhibit the mammalian target of rapamycin) being developed as a treatment for complex Lymphatic Malformations (LM). LM patients often have activating mutations along the PI3K/AKT/mTOR pathway; sirolimus, an mTORC1 inhibitor, has demonstrated clinical utility in LM. CERC-006 has the potential to improve upon both the safety and efficacy of mTOR inhibition in LM. Cerecor seeks to initiate a Phase 1b/2a proof-of-concept study of CERC-006 in LM patients by the end of 2020.

- CERC-007 (formerly AEVI-007) is a fully human, anti-IL-18 monoclonal antibody with the potential to address multiple auto-inflammatory diseases, including Adult Onset Stills Disease (AOSD) and Multiple Myeloma (MM). IL-18 is a pro-inflammatory cytokine that stimulates the production of interferon gamma; patients with ASOD and MM show elevated serum levels of IL-18. Cerecor seeks to initiate two separate Phase 1b/2a proof-of-concept studies in ASOD and MM patients in the second half of 2020.

- CERC-801, CERC-802 and CERC-803 are monosaccharide substrate replacement therapies with known therapeutic utility for the treatment of Congenital Disorders of Glycosylation. Oral administration of these substrates replenishes critical metabolic intermediates that are reduced or absent due to genetic mutation, overcoming single enzyme defects to support glycoprotein synthesis, maintenance and function. The FDA has granted RPDD and Orphan Drug Designation (ODD) to all three CERC-800 programs. CERC-801 and CERC-802 have completed phase 1 studies and the IND filing for CERC-803 is anticipated in the first half of 2020. The Company has an ongoing retrospective study, CDG FIRST, which seeks to collect natural history and treatment-related data for patients diagnosed with PGM1-CDG, MPI-CDG or SLC35C1-CDG who are either treated with or without D-galactose, D-mannose and L-fucose, respectively, as well as patients with other CDGs who are treated with one of the three monosaccharides. Cerecor seeks to initiate a pivotal study for one or more CERC-800 program(s) in 2020, with the first anticipated NDA filing in 2021.

Cerecor's also has a neurology pipeline, led by CERC-301, a Glutamate NR2B selective, NMDA Receptor antagonist, which Cerecor is currently developing as a novel treatment for orthostatic hypotension. Cerecor is also developing CERC-406, a CNS-targeted COMT inhibitor for Parkinson's Disease

Cerecor also currently has one marketed product, Millipred®, an oral prednisolone indicated across a wide variety of inflammatory conditions and indications.

Cerecor is currently exploring strategic alternatives for its neurological assets, as well as its one commercialized product Millipred®.

Recent Developments

On February 3, 2020, Cerecor consummated its previously announced two-step merger (the "Merger") with Aevi Genomic Medicine, Inc. ("Aevi"), in accordance with the terms of a previously disclosed Agreement and Plan of Merger and Reorganization, dated as of December 5, 2019.

Corporate Information

Our principal executive offices are located at 540 Gaither Road, Suite 400, Rockville, Maryland 20850 and our telephone number is (410) 522-8707. Our website address is *www.cerecor.com*. The information contained on, or that can be accessed through, our website is not a part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

The trademarks, trade names and service marks appearing in this prospectus are the property of their respective owners. We do not intend our use or display of other companies' trademarks, trade names or service marks to imply a relationship with, or endorsement or sponsorship of us by, any other companies or products.

Implications of Being an Emerging Growth Company

As a company with less than $1.07 billion in revenue during our last fiscal year, we qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, or the

JOBS Act. For so long as we remain an emerging growth company, we are permitted and intend to rely on exemptions from specified disclosure requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include:

- being permitted to provide only two years of audited financial statements, in addition to any required unaudited interim financial statements, with correspondingly reduced "Management's Discussion and Analysis of Financial Condition and Results of Operations" disclosure;
- not being required to comply with the auditor attestation requirements in the assessment of our internal control over financial reporting;
- not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements;
- reduced disclosure obligations regarding executive compensation; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved.

We may take advantage of these provisions through 2020 or such earlier time that we are no longer an emerging growth company. We would cease to be an emerging growth company if we have more than $1.07 billion in annual revenue, have more than $700 million in market value of our capital stock held by non-affiliates or issue more than $1.0 billion of non-convertible debt over a three-year period. We may choose to take advantage of some, but not all, of the available exemptions. We have taken advantage of some reduced reporting burdens in this prospectus and the documents incorporated by reference into this prospectus. Accordingly, the information contained herein may be different than the information you receive from other public companies in which you hold stock.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This provision allows an emerging growth company to delay the adoption of some accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards and, therefore, we will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

THE OFFERING

Common stock offered by us	1,306,282 shares
Common stock to be outstanding after this offering	53,715,672 shares(1)
Use of proceeds	We intend to use the net proceeds for general corporate purposes and working capital, primarily to support the ongoing clinical development of key assets within our pipeline and to pay for recent transaction costs associated with our Merger with Aevi Genomic Medicine. See "Use of Proceeds" on page S-60 of this prospectus supplement.
Risk factors	Investing in our common stock involves a high degree of risk. Before making any investment decision, you should carefully review and consider all the information in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein, including the risks and uncertainties described under "Risk Factors" beginning on page S-8 of this prospectus supplement and the risk factors incorporated by reference into this prospectus supplement and the accompanying prospectus.
NASDAQ symbol	"CERC"

(1) The number of shares of common stock to be outstanding after this offering is based on an aggregate of 52,409,390 shares outstanding as of January 30, 2020, and excludes, as of that date, the following:

- 4,455,438 shares of common stock issuable upon the exercise of outstanding options having a weighted average exercise price of $4.83 per share;
- 4,024,708 shares of common stock issuable upon the exercise of outstanding warrants having a weighted average exercise price of $12.47 per share;
- 6,285,715 shares of common stock issuable upon the conversion of Series B Non-Voting Convertible Preferred Stock;
- 4,307,530 shares of common stock reserved for future issuance under the Amended and Restated 2016 Equity Incentive Plan;
- 267,500 shares of nonvested restricted stock units outstanding;
- 1,562,724 shares of common stock reserved for future issuance under the Employee Stock Purchase Plan; and
- 40,000 shares of common stock issuable upon the exercise of an outstanding unit purchase warrant at a price of $7.48 per share.

As described above, we closed our Merger with Aevi on February 3, 2020. Therefore, the number of shares of common stock to be outstanding after this offering excludes the following issuances associated with the closing of the Merger:

- 3,889,801 shares of common stock issuable to the former stockholders of Aevi;

- 2,375,000 shares of common stock issuable upon the exercise of outstanding inducement options granted to new Cerecor employees upon closing of the Merger having a weighted average exercise price of $3.98 per share; and
- 1,014,000 shares of common stock issuable upon the exercise of outstanding options granted to new Cerecor employees and a new member of our board of directors under the Amended and Restated 2016 Equity Incentive Plan upon closing of the Merger having a weighted average exercise price of $3.98 per share.

RISK FACTORS

Investing in our securities involves a high degree of risk. You should consider carefully the risks and uncertainties described below together with the other information included in this prospectus, and other information included in our securities filings, including our Annual Reports on Form 10-K, our Quarterly Reports on Form 10-Q and other information in our consolidated financial statements incorporated by reference herein, before deciding to purchase our common stock. These risks and uncertainties are not the only risks and uncertainties we face. Additional risks and uncertainties not currently known to us, or that we currently view as immaterial, may also impair our business. If any of the risks or uncertainties described in our SEC filings or any additional risks and uncertainties actually occur, our business, financial condition, results of operations and cash flow could be materially and adversely affected. In that case, the trading price of our common stock could decline and you might lose all or part of your investment.

Risks Related to Our Business and Industry

Cerecor will need substantial additional capital for the continued development of its product candidates and for its long-term operations.

Cerecor will need to raise capital to continue product development. Cerecor's capital requirements depend on many factors, including:

- the rate and level of patient recruitment into clinical trials, particularly those in Phase 2 and Phase 3 stages of development;
- the level of research and development investment required to develop product candidates;
- changes in product development plans needed to address any difficulties that may arise in manufacturing, pre-clinical activities, clinical trials or commercialization;
- revenue from sales of Millipred;
- the ability and willingness to enter into new agreements with strategic partners, and the terms of these agreements;
- the success rate in pre-clinical and clinical efforts;
- the costs of future commercialization activities, including product sales, marketing, manufacturing and distribution;
- proceeds, if any, from sales of any priority review vouchers received;
- revenue, if any, received from commercial sales of product candidates, should any of Cerecor's product candidates receive marketing approval;
- the effect of competing product and market developments;
- the timing and amount of milestone payments Cerecor is required to make under license agreements acquired through the closing of the merger with Aevi;
- in-licensing and/or acquisition or other transaction costs (if any) for potential product development candidates;
- time and costs involved in obtaining regulatory approvals; and
- costs of filing, prosecuting, defending, and enforcing patent claims and other intellectual property rights.

Cerecor will likely require significant amounts of additional capital in the future, and such capital might not be available on favorable terms when needed, if at all. Cerecor might never progress to the point where it has commercially successful product sales or other revenue sufficient to sustain operations.

Accordingly, Cerecor may seek to raise these funds through public or private equity offerings, debt financings, credit facilities, partnering or other corporate collaborations and licensing arrangements. If adequate funds are not available or are not available on acceptable terms, the combined company's ability to fund its operations, take advantage of opportunities, develop products and technologies, and otherwise respond to competitive pressures could be significantly delayed or limited, and it might need to downsize or halt its operations.

The success of the recently closed Merger with Aevi will depend, in large part, on the ability of the Company to realize the anticipated benefits from combining the legacy businesses of Aevi and Cerecor.

The recently closed merger with Aevi involves the integration of two companies that previously have operated independently with principal offices in two distinct locations. Significant management attention and resources will be required to integrate the two companies. The failure to integrate successfully and to manage successfully the challenges presented by the integration process may result in the combined company's failure to achieve some or all of the anticipated benefits of the merger.

Potential difficulties that may be encountered in the integration process include the following:

- using Cerecor's limited cash and other assets efficiently to develop the business of the newly combined companies;
- appropriately managing the liabilities of the newly combined companies;
- potential unknown or currently unquantifiable liabilities associated with the merger and the operations of the newly combined companies;
- potential unknown and unforeseen expenses, delays or regulatory conditions associated with the merger; and
- performance shortfalls as a result of the diversion of management's attention caused by completing the merger and integrating the newly combined companies' operations.

Delays in the integration processes could adversely affect the Cerecor's business, financial results, financial condition and stock price following the merger. Even if Cerecor were able to integrate the business operations successfully, there can be no assurance that this integration will result in the realization of the full benefits of synergies, innovation and operational efficiencies that may be possible from this integration or that these potential benefits will be achieved within a reasonable period of time.

Cerecor's product candidates that it intends to commercialize are in early stages of development. If Cerecor does not successfully complete preclinical testing and clinical development of its product candidates or experiences significant delays in doing so, Cerecor's business may be materially harmed.

Cerecor has invested a significant portion of its efforts and financial resources in the identification and preclinical and clinical development of product candidates. Cerecor's ability to increase product revenues will depend on Cerecor's ability to advance Cerecor's one clinical product candidate and its preclinical product candidates into clinical development and successfully complete preclinical testing of its clinical stage product candidates. The outcome of preclinical studies and Phase 1 clinical trials might not predict the success of future clinical trials. Preclinical data are often susceptible to varying interpretations and analyses, and many companies that believed their product candidates performed satisfactorily in preclinical studies have nonetheless failed in clinical development. Cerecor's inability to successfully complete development of its product candidates could result in additional costs to Cerecor relating to product development and obtaining marketing approval and impair Cerecor's ability to generate product revenues and commercialization and sales milestone payments and royalties on product sales.

If clinical trials of Cerecor's product candidates fail to demonstrate safety and efficacy to the satisfaction of regulatory authorities or do not otherwise produce positive results, Cerecor may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of Cerecor's product candidates.

Before obtaining required approvals from regulatory authorities for the sale of future product candidates, Cerecor alone, or with a partner, must conduct extensive clinical trials to demonstrate the safety and efficacy of the product candidates in humans. Clinical testing is expensive and difficult to design and implement, can take many years to complete and is uncertain as to outcome. A failure of one or more clinical trials can occur at any stage of testing. The outcome of preclinical studies and early clinical trials might not predict the success of later clinical trials, and interim results of a clinical trial do not necessarily predict final results. A number of companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in advanced clinical trials due to lack of efficacy or unacceptable safety profiles, notwithstanding promising results in earlier trials. Cerecor's product candidates will require additional clinical and preclinical development, management of clinical, preclinical and manufacturing activities, regulatory approval in multiple jurisdictions, obtaining manufacturing supply on Cerecor's own or from a third party, expansion of Cerecor's commercial organization, and substantial investment and significant marketing efforts before Cerecor generates any revenues from sales of any of those product candidates approved for marketing. Cerecor does not know whether the clinical trials Cerecor or Cerecor's partners may conduct will demonstrate adequate efficacy and safety to result in regulatory approval to market any of Cerecor's product candidates in any particular jurisdiction or jurisdictions. If later stage clinical trials do not produce favorable results, Cerecor's ability to achieve regulatory approval for any of its product candidates would be adversely impacted.

If Cerecor experiences delays in clinical testing, it will be delayed in obtaining regulatory approvals and commercializing its product candidates, Cerecor's costs may increase and its business may be harmed.

Cerecor does not know whether any clinical trials will begin as planned, whether the design will be revised prior to or during conduct of the study, completed on schedule or conducted at all. Cerecor product development costs will increase if Cerecor experiences delays in clinical testing. Significant clinical trial delays also could shorten any periods during which Cerecor may have the exclusive right to commercialize its product candidates or allow its competitors to bring products to market before Cerecor does, which would impair Cerecor's ability to successfully commercialize its product candidates and may harm Cerecor's business, results of operations and prospects.

Events which may result in a delay or unsuccessful completion of clinical development include:

- delays in reaching an agreement with or failure in obtaining authorization from the FDA, other regulatory authorities or institutional review boards, or IRBs, to commence or amend a clinical trial;
- imposition of a clinical hold ("Clinical Hold") or trial termination following an inspection of Cerecor's clinical trial operations or trial sites by the FDA or other regulatory authorities, or due to concerns about trial design, or a decision by the FDA, other regulatory authorities, IRBs or the company, or recommendation by a data safety monitoring board, to place the trial on hold or otherwise suspend or terminate clinical trials at any time for safety issues or for any other reason;
- delays in reaching agreement on acceptable terms with prospective CROs and clinical trial sites;
- deviations from the trial protocol by clinical trial sites and investigators, or failing to conduct the trial in accordance with regulatory requirements;

- failure of Cerecor's third parties, such as CROs, to satisfy their contractual duties or meet expected deadlines;
- failure to enter into agreements with third parties to obtain the results of clinical trials;
- delays in the importation and manufacture of clinical supply;
- delays in the testing, validation and delivery of the clinical supply of the product candidates to the clinical sites;
- for clinical trials in selected subject populations, delays in identification and auditing of central or other laboratories and the transfer and validation of assays or tests to be used to identify selected subjects;
- delays in recruiting suitable subjects to participate in a trial;
- delays in having subjects complete participation in a trial or return for post-treatment follow-up;
- delays caused by subjects dropping out of a trial due to side effects or disease progression;
- delays in adding new investigators and clinical trial sites;
- withdrawal of clinical trial sites from Cerecor's clinical trials as a result of changing standards of care or the ineligibility of a site to participate in Cerecor's clinical trials; or
- changes in government regulations or administrative actions or lack of adequate funding to continue the clinical trials.

Any inability by Cerecor or its partners to timely complete clinical development could result in additional costs to Cerecor relating to product development and obtaining marketing approval and impair Cerecor's ability to generate product revenues and commercialization and sales milestone payments and royalties on product sales.

If Cerecor is unable to enroll appropriate subjects in clinical trials, Cerecor will be unable to complete these trials on a timely basis or at all.

Identifying and qualifying subjects to participate in clinical trials of Cerecor's product candidates is critical to Cerecor's success. The timing of Cerecor's clinical trials depends on the speed at which Cerecor can recruit appropriate subjects to participate in testing Cerecor's product candidates as well as completion of required follow-up periods. If subjects are unwilling to participate in Cerecor's trials, the timeline for recruiting subjects, conducting trials and obtaining marketing approval of potential products may be delayed.

Difficulty or delays in patient recruitment into Cerecor's trials could result in increased costs, delays in advancing Cerecor's product development, delays in testing the effectiveness of Cerecor's technology or termination of the clinical trials altogether. Many factors affect subject enrollment, including:

- the size and nature of the subject population;
- the number and location of clinical sites Cerecor enrolls;
- the proximity of subjects to clinical sites;
- perceived risks and benefits of the product candidate under trial;
- competition with other companies for clinical sites or subjects;
- competing clinical trials;
- the eligibility and exclusion criteria for the trial;

- the design of the clinical trial;
- effectiveness of publicity for the clinical trials;
- inability to obtain and maintain subject consents;
- ability to monitor subjects adequately during and after the administration of the product candidate and the ability of subjects to comply with the clinical trial requirements;
- risk that enrolled subjects will drop out or be withdrawn before completion; and
- clinicians' and subjects' perceptions as to the potential advantages of the drug being studied in relation to other available therapies, including any new drugs that may be approved for the indications Cerecor is investigating.

There is significant competition for recruiting subjects in clinical trials for product candidates for the treatment of neurological disorders and Cerecor or its partners may be unable to enroll the subjects it needs to complete clinical trials on a timely basis or at all. Furthermore, Cerecor relies on CROs and clinical trial sites to ensure the proper and timely conduct of Cerecor's clinical trials, and while Cerecor has agreements governing their committed activities, it has limited influence over their actual performance. If Cerecor is unable to enroll sufficient subjects in its clinical trials, if enrollment is slower than Cerecor anticipates, or if Cerecor's clinical trials require more subjects than Cerecor anticipates, Cerecor's clinical trials may be delayed or might not be completed. If Cerecor experiences delays in its clinical trials, the commercial prospects of its product candidates will be harmed. In addition, any delays in completing Cerecor's clinical trials will increase its costs, slow down Cerecor's product candidate development and approval process and jeopardize Cerecor's ability to commence product sales and generate revenues. In addition, many of the factors that could cause a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of Cerecor's lead product candidates or Cerecor's other product candidates.

Cerecor may face significant delays in its clinical studies and trials due to an inability to recruit patients for its clinical studies and trials or to retain patients in the clinical studies and trials it may perform.

Cerecor may not be able to locate and enroll enough eligible patients to participate in these trials as required by the FDA, the European Medicines Agency ("EMA") or similar regulatory authorities outside the United States and the European Union. This may result in Cerecor's failure to initiate or continue clinical trials for its product candidates or may cause Cerecor to abandon one or more clinical trials altogether. In particular, because several of Cerecor's programs are focused on the treatment of patients with rare, orphan or ultra-orphan diseases, Cerecor's ability to enroll eligible patients in these trials may be limited or slower than it anticipates in light of the small patient populations involved and the specific age range required for treatment eligibility in some indications. In addition, Cerecor's potential competitors, including major pharmaceutical, specialty pharmaceutical and biotechnology companies, academic institutions and governmental agencies and public and private research institutions, may seek to develop competing therapies, which would further limit the small patient pool available for Cerecor's studies.

Completion of orphan clinical trials may take considerably more time than other trials, sometimes years, depending on factors such as type, complexity, novelty and intended use of a product candidate. As a result of the uncertainties described above, there can be no assurance that Cerecor will meet timelines that it establishes for any of its clinical trials.

Cerecor may in the future conduct clinical trials for certain of its product candidates at sites outside the United States, and the FDA might not accept data from trials conducted in such locations.

Cerecor may in the future choose to conduct one or more of Cerecor's clinical trials outside the United States. Although the FDA may accept data from clinical trials conducted outside the United States, acceptance of this data is subject to certain conditions imposed by the FDA. The trial population must also adequately represent the U.S. population, and the data must be applicable to the U.S. population and medical practice in ways that the FDA deems clinically meaningful. Generally, the patient population for any clinical trials conducted outside of the United States must be representative of the population for whom Cerecor intends to seek approval in the United States. In addition, while these clinical trials are subject to the applicable local laws, FDA acceptance of the data will be dependent upon its determination that the trials also complied with all applicable U.S. laws and regulations. There can be no assurance that the FDA will accept data from trials conducted outside of the United States. If the FDA does not accept the data from any of Cerecor's clinical trials that it determines to conduct outside the United States, it would likely result in the need for additional trials, which would be costly and time-consuming and delay or permanently halt Cerecor's development of the product candidate.

Cerecor may fail to successfully identify, in-license, acquire, develop or commercialize potential product candidates.

The success of Cerecor's business depends in part upon its ability to identify and validate new therapeutic targets and identify, develop and commercialize therapeutics, which it may develop itself, in-license or acquire from others. Research programs designed to identify product candidates require substantial technical, financial and human resources, whether or not any product candidates are ultimately identified. Cerecor's research efforts may initially show promise in identifying potential therapeutic targets or candidates, yet fail to yield product candidates for clinical development for a number of reasons, including:

- Cerecor's methodology, including its screening technology, might not successfully identify medically relevant potential product candidates;
- Cerecor's competitors may develop alternatives that render Cerecor's product candidates obsolete;
- Cerecor may encounter product manufacturing difficulties that limit yield or produce undesirable characteristics that increase the cost of goods, cause delays or make the product candidates unmarketable;
- Cerecor's product candidates may cause adverse effects in subjects, even after successful initial toxicology studies, which may make the product candidates unmarketable;
- Cerecor's product candidates might not be capable of being produced in commercial quantities at an acceptable cost, or at all;
- Cerecor's product candidates might not demonstrate a meaningful benefit to subjects;
- Cerecor's potential collaboration partners may change their development profiles or plans for potential product candidates or abandon a therapeutic area or the development of a partnered product; and
- Cerecor's reliance on third party clinical trials may cause it to be denied access to clinical results that may be significant to further clinical development.

Additionally, Cerecor may focus its efforts and resources on potential programs or product candidates that ultimately prove to be unsuccessful. If any of these events occur, Cerecor may be forced

to abandon its development efforts for a program or programs, which would have a material adverse effect on its business, operating results and prospects and could potentially cause Cerecor to cease operations.

Cerecor might not be successful in its efforts to develop and commercialize its preclinical product candidates.

Cerecor's continued development of its preclinical product candidates will be dependent on receiving positive preclinical and clinical data that, in Cerecor's judgment, merits advancing such programs. Even if Cerecor is successful in continuing to build and expand its pipeline, the potential product candidates that Cerecor identifies might not be suitable for clinical development, including as a result of being shown to have harmful side effects or other characteristics that indicate that they are unlikely to be products that will receive marketing approval and achieve market acceptance. Similarly, even if the FDA approves Cerecor's Investigational New Drug Applications ("INDs"), there is no guarantee that Cerecor will be successful in its efforts to advance Cerecor's preclinical product candidates into clinical trials. If Cerecor does not successfully develop and commercialize product candidates based upon Cerecor's technological approach, Cerecor will not be able to obtain product revenues in future periods, which likely would result in significant harm to Cerecor's financial position and adversely affect Cerecor's stock price.

The marketing approval processes of the FDA and comparable foreign regulatory authorities are lengthy, time-consuming, costly and inherently unpredictable. Cerecor's inability to obtain regulatory approval for its product candidates would substantially harm its business.

The time required to obtain approval to market new drugs by the FDA and comparable foreign regulatory authorities is unpredictable but typically takes many years following the commencement of preclinical studies and clinical trials and depends upon numerous factors, including the discretion of the regulatory authorities. In addition, approval policies, regulations or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions. Cerecor has not obtained regulatory approval for any product candidate and it is possible that none of its existing product candidates or any future product candidates will ever obtain regulatory approval. Moreover, the filing of an NDA for products that have not been granted Orphan Drug Designation requires a payment of a significant NDA application fee under the Prescription Drug User Fee Act ("PDUFA") upon submission. Any subsequent clinical data submissions to the NDA (i.e. for new indications) are also assessed an NDA application fee. The filing of an NDA for Cerecor's product candidates may be delayed due to Cerecor's lack of financial resources to pay such user fee.

Cerecor's product candidates could fail to receive regulatory approval from the FDA or a comparable foreign regulatory authority for many reasons, including:

- the FDA or comparable foreign regulatory authorities may disagree on the design or implementation of Cerecor's clinical trials, including the methodology used in Cerecor's trial, its chosen endpoints, its statistical analysis, or its proposed product indication. For instance, the FDA may find that the designs that Cerecor is utilizing in its planned clinical trial does not support an adequate and well-controlled study. The FDA also might not agree with the various disease scales and evaluation tools that Cerecor may use in its clinical trials to assess the efficacy of its product candidates. Further, the FDA might not agree with Cerecor's endpoints and/or indications selected for its development programs;
- the FDA or comparable foreign regulatory authorities may disagree with Cerecor's development plans for its product candidates;
- Cerecor's failure to demonstrate to the satisfaction of the FDA or comparable regulatory authorities that a product candidate is safe and effective for its proposed indication;

- Cerecor's clinical trials may fail to meet the level of statistical significance required for approval;
- Cerecor may fail to demonstrate that a product candidate's clinical and other benefits outweigh its safety risks;
- the FDA or comparable foreign regulatory authorities may disagree with Cerecor's interpretation of data from preclinical studies or clinical trials;
- data collected from clinical trials of Cerecor's product candidates may be insufficient to support the submission and filing of an NDA, other submission or to obtain marketing approval, and FDA may require additional studies to show that Cerecor's product candidates are safe or effective;
- Cerecor may fail to obtain approval of the manufacturing processes or facilities of third-party manufacturers with whom it contracts for clinical and commercial supplies; or
- there may be changes in the approval policies or regulations that render Cerecor's preclinical and clinical data insufficient for approval.

The FDA or comparable foreign regulatory authority may require more information, including additional preclinical or clinical studies to support approval, which may delay or prevent approval and Cerecor's commercialization plans, or Cerecor may decide to abandon the development program. This lengthy approval process, as well as the unpredictability of future clinical trial results, may result in Cerecor failing to obtain approval to market its product candidates, which would significantly harm its business, results of operations and prospects. In addition, even if Cerecor were to obtain approval, regulatory authorities may approve any or all of its product candidates for fewer or more limited indications than Cerecor request, may require that contraindications, warnings or precautions be included in the product labeling, including a black-box warning, may grant approval with a requirement of costly post-marketing clinical trials or other post-market requirements, or may approve a product candidate with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that product candidate. Any of the foregoing scenarios could materially harm the commercial prospects for Cerecor's product candidates.

As appropriate, Cerecor intends to seek all available periods of regulatory exclusivity for its product candidates. However, there is no guarantee that Cerecor will be granted these periods of regulatory exclusivity or that it will be able to maintain these periods of exclusivity.

The FDA grants product sponsors certain periods of regulatory exclusivity, during which the agency might not approve, and in certain instances, might not accept, certain marketing applications for competing drugs. For example, product sponsors may be eligible for five years of exclusivity from the date of approval of a new chemical entity, seven years of exclusivity for drugs that are designated to be orphan drugs, and/or a six-month period of exclusivity added to any existing exclusivity period or patent life for the submission of FDA requested pediatric data. While Cerecor intends to apply for all periods of market exclusivity that it may be eligible for, there is no guarantee that Cerecor will receive all such periods of market exclusivity. Additionally, under certain circumstances, the FDA may revoke the period of market exclusivity. Thus, there is no guarantee that Cerecor will be able to maintain a period of market exclusivity, even if granted. Moreover, Cerecor has not sought to obtain orphan drug designation for any of its product candidates, which the FDA must first grant to be eligible for orphan drug exclusivity, but may if Cerecor determines that it may be eligible. In the case of orphan designation, other benefits, such as tax credits and exemption from user fees may be available. If Cerecor is not able to obtain or maintain orphan drug designation or any period of market exclusivity to which it may be entitled, Cerecor will be materially harmed, as it will potentially be subject to greater market competition and may lose the benefits associated with programs.

Cerecor's product candidates may cause undesirable side effects or have other properties that could delay or prevent their marketing approval, limit the commercial profile of an approved label, or result in significant negative consequences following any marketing approval.

Undesirable side effects caused by Cerecor's product candidates could cause Cerecor or regulatory authorities to issue a Clinical Hold and could result in a more restrictive label or the delay or denial of marketing approval by the FDA or other comparable foreign regulatory authority. Results of Cerecor's trials could reveal a high and unacceptable severity and prevalence of side effects or unexpected characteristics.

Should Cerecor's clinical studies of its product candidates reveal undesirable side effects, Cerecor could suspend or terminate its trials or the FDA or comparable foreign regulatory authorities as well as IRBs could order Cerecor to suspend or cease clinical trials. The FDA or comparable regulatory authorities could also deny approval of Cerecor's product candidates for any or all targeted indications or only for a limited indication or patient population or could require label warnings, contraindications or precautions, including black box warnings, post-market studies, testing and surveillance programs or other conditions including distribution restrictions or other risk management mechanisms under a costly risk evaluation and mitigation strategy ("REMS"). Drug-related side effects could affect subject recruitment or the ability of enrolled subjects to complete the trial or result in potential product liability claims. Any of these occurrences may harm Cerecor's business, financial condition and prospects significantly.

Additionally, if one or more of Cerecor's product candidates receives marketing approval, and Cerecor or others (regulatory agencies, consumers, etc.) later identify undesirable side effects caused by such products, a number of potentially significant negative consequences could result, including:

- Cerecor may suspend marketing of, or withdraw or recall, such product;
- regulatory authorities may withdraw approvals of such product;
- regulatory authorities may require additional warnings on the label or other label modifications;
- the FDA or other regulatory bodies may issue safety alerts, Dear Healthcare Provider letters, press releases or other communications containing warnings about such product;
- the FDA may require the establishment or modification of a REMS or other restrictions on marketing and distribution, or a comparable foreign regulatory authority may require the establishment or modification of a similar strategy that may, for instance, require Cerecor's to issue a medication guide outlining the risks of such side effects for distribution to patients or restrict distribution of Cerecor's products and impose burdensome implementation requirements on Cerecor;
- regulatory authorities may require that Cerecor conduct post-marketing studies; and
- Cerecor could be sued and held liable for harm caused to subjects or patients.

Any of these events could prevent Cerecor from achieving or maintaining market acceptance of the particular product candidate or otherwise materially harm the commercial prospects for the product candidate, if approved, and could significantly harm Cerecor's business, financial condition, results of operations and prospects.

Changes in product candidate manufacturing or formulation may result in additional costs or delay.

As product candidates are developed through preclinical studies to late-stage clinical trials towards regulatory approval and commercialization, it is common that various aspects of the development program, such as manufacturing methods and formulation, are altered in an effort to optimize processes and results. Such changes carry the risk that they will not achieve these intended objectives.

Any of these changes could cause Cerecor's product candidates to perform differently and affect the results of planned clinical trials or other future clinical trials conducted with the altered materials. Such changes may also require additional testing, FDA notification or FDA approval.

Similarly, changes in the location of manufacturing or addition of manufacturing facilities may increase Cerecor's costs and require additional studies and FDA approval. This may require Cerecor to ensure that the new facility meets all applicable regulatory requirements, is adequately validated and qualified, and to conduct additional studies of product candidates manufactured at the new location. Any of the above could delay completion of clinical trials, require the conduct of bridging clinical trials or the repetition of one or more clinical trials, increase clinical trial costs, delay regulatory approval of Cerecor's product candidates and jeopardize its ability to commence product sales and generate revenue.

Even if Cerecor completes the necessary clinical trials, Cerecor cannot predict when or if it will obtain marketing approval to commercialize a product candidate or the approval may be for a narrower indication than Cerecor expects.

Cerecor cannot commercialize a product candidate until the appropriate regulatory authorities have reviewed and approved the product candidate. Even if Cerecor's product candidates demonstrate safety and efficacy in clinical trials, the regulatory agencies might not complete their review processes in a timely manner, or Cerecor might not be able to obtain marketing approval from the relevant regulatory agencies. Additional delays may result if the FDA, an FDA Advisory Committee or other regulatory authority recommends non-approval or restrictions on approval. In addition, Cerecor may experience delays or rejections based upon additional government regulation from future legislation or administrative action, or changes in regulatory agency policy during the period of product development, clinical trials and the review process. Regulatory authorities also may approve a product candidate for fewer or more limited indications than requested, may impose significant limitations in the form of narrow indications, warnings, including black-box warnings, precautions or contra-indications with respect to conditions of use or may grant approval subject to the performance of costly post-marketing clinical trials or other post-marketing requirements, including a REMS. In addition, regulatory agencies might not approve the labeling claims that are necessary or desirable for the successful commercialization of Cerecor's product candidates. Cerecor's drugs, if approved, may be required to carry warnings comparable to this and other class-wide warnings. Any of the foregoing scenarios could materially harm the commercial prospects for Cerecor's product candidates.

Even if Cerecor were to obtain approval for its product candidates with the Rare Pediatric Disease Designation, the Rare Pediatric Disease Priority Review Voucher Program may no longer be in effect at the time of such approval or Cerecor might not be able to capture the value of the Rare Pediatric Disease Priority Review Voucher Program.

Rare pediatric disease designation by the FDA is granted in the case of serious or life-threatening diseases affecting fewer than 200,000 people in the United States in which the serious or life-threatening manifestations are primarily in individuals 18 years of age and younger. The designation provides regulatory incentives for companies to develop and market therapies that treat these conditions. The sponsor of a drug for a rare pediatric disease may be eligible for a priority review voucher upon approval of the drug that can be used to obtain a priority review of a subsequent marketing application. The priority review voucher may be sold or transferred an unlimited number of times. Congress has extended the priority review voucher program until September 30, 2020 with new drug approvals that meet the voucher criteria grandfathered through 2022. This program has been subject to criticism, including by the FDA, and it is possible that even if Cerecor obtains approval for some of its product candidates and qualifies for such a priority review voucher, the program may no longer be in effect at the time of approval. Also, although priority review vouchers may be sold or

transferred to third parties, there is no guaranty that Cerecor will be able to realize any value if it were to sell a priority review voucher.

Even if Cerecor were able to commercialize its products focused on rare orphan diseases, product sales of these products might not justify the cost of development.

Because of the small patient population for a rare orphan disease, if pricing is not approved or accepted in the market at an appropriate level for an approved therapeutic product with orphan drug designation, such drug may not generate enough revenue to offset costs of development, manufacturing, marketing, and commercialization despite any benefits received from the rare orphan drug designation, such as market exclusivity, assistance in clinical trial design, or a reduction in user fees or tax credits related to development expense. Furthermore, Cerecor's estimates regarding potential market size for any rare indication may be materially different from what Cerecor discovers to exist at the time it commences commercialization, if any, for a therapeutic product, which could result in significant changes in its business plan and have a material adverse effect on its business, financial condition, results of operations, and prospects.

Once commercialized, some of Cerecor's products may face significant competition from non-prescription competition and consumer substitution, and Cerecor's operating results will suffer if it fails to compete effectively.

Cerecor may be subject to non-prescription competition and consumer substitution for certain of its pipeline assets. For example, the three preclinical therapies in its pediatric orphan rare disease pipeline, CERC-801, CERC-802 and CERC-803, are ultra-pure formulations of D-galactose, D-mannose and L-fucose, respectively. These formulations are naturally occurring substances contained in various foods, including dairy products and fruit. Additionally, these formulations, particularly D-mannose, are also marketed by others as non-prescription dietary supplements. Once approved by the FDA and commercially available, Cerecor cannot be sure physicians will view the pharmaceutical grade purity and tested safety of CERC-801, CERC-802 or CERC-803 as having a superior therapeutic profile to the naturally occurring formulations and dietary supplements. In addition, to the extent the net price of CERC-801, CERC-802 or CERC-803, after insurance and offered discounts, is significantly higher than the prices of commercially available formulations marketed by other companies as dietary supplements (through that lack of coverage by insurers or otherwise), physicians and pharmacists may recommend these commercial alternatives instead of writing or filling prescriptions for CERC-801, CERC-802 or CERC-803, or patients may elect on their own to take commercially available supplements. Either of these outcomes may adversely impact Cerecor's results of operations by limiting how it prices its product and limiting the revenue it receives from the sale of CERC-801, CERC-802 and CERC-803 due to reduced market acceptance.

Even if Cerecor's product candidates receive marketing approval, Cerecor will still be subject to ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense. Additionally, Cerecor's product candidates, if approved, could be subject to labeling and other restrictions and market withdrawal and Cerecor may be subject to administrative sanctions or penalties if it fails to comply with regulatory requirements or experiences unanticipated problems with its products.

Even if Cerecor obtains marketing approval for a product candidate, Cerecor would be subject to ongoing requirements by the FDA and comparable foreign regulatory authorities governing the manufacture, quality control, further development, labeling, packaging, storage, distribution, safety surveillance, import, export, advertising, promotion, recordkeeping and annual reporting of safety and other post-market information. The FDA and comparable foreign regulatory authorities will continue to closely monitor the safety profile of any product even after approval. If the FDA or comparable foreign regulatory authorities become aware of new safety information after approval of any of Cerecor's

product candidates, they may withdraw approval, require labeling changes or establishment of a REMS or similar strategy, impose significant restrictions on a product's indicated uses or marketing, or impose ongoing requirements for potentially costly post-approval studies or post-market surveillance. In addition, any marketing approvals that Cerecor obtains for its product candidates may be subject to limitations on the approved indicated uses for which the product may be marketed or to the conditions of approval or contain requirements for potentially costly post-marketing testing and other requirements, including Phase 4 clinical trials, imposition of a REMS and surveillance to monitor the safety and efficacy of the product candidate.

In addition, manufacturers of drug products and their facilities, including contracted facilities, are subject to periodic inspections by the FDA and other regulatory authorities for compliance with cGMP regulations and standards. If Cerecor or a regulatory agency discover previously unknown problems with the facility where the product is manufactured, Cerecor may be subject to reporting obligations and a regulatory agency may impose restrictions on that product, the manufacturing facility, Cerecor, or Cerecor's suppliers, including requesting recalls or withdrawal of the product from the market or suspension of manufacturing. If Cerecor, its product candidates, its contractors, the manufacturing facilities for its product candidates or others working on Cerecor's behalf fails to comply with applicable regulatory requirements, either before or after marketing approval, a regulatory agency may:

- issue Warning Letters or Untitled Letters;
- mandate modifications to promotional materials or labeling, or require Cerecor to provide corrective information to healthcare practitioners;
- require Cerecor to enter into a consent decree, which can include imposition of various fines, reimbursements for inspection costs, required due dates for specific actions and penalties for noncompliance;
- seek an injunction or impose civil or criminal penalties or monetary fines, restitution or disgorgement, as well as imprisonment;
- suspend or withdraw marketing approval;
- suspend or terminate any ongoing clinical studies;
- refuse to approve pending applications or supplements to applications filed by Cerecor;
- debar Cerecor from submitting marketing applications, exclude Cerecor from participation in federal healthcare programs, require a corporate integrity agreement or deferred prosecution agreements, debar Cerecor from government contracts and refuse future orders under existing contracts;
- suspend or impose restrictions on operations, including restrictions on marketing, distribution or manufacturing of the product, or the imposition of costly new manufacturing requirements or use of alternative suppliers; or
- seize or detain products, refuse to permit the import or export of products, or request that Cerecor initiate a product recall.

The occurrence of any event or penalty described above may inhibit Cerecor's ability to continue its development programs, commercialize its products and generate revenue.

Advertising and promotion of any product candidate that obtains approval in the United States will be heavily scrutinized by the FDA, the Department of Justice, the Department of Health and Human Services' Office of Inspector General, state attorneys general, members of Congress and the public. While the FDA does not restrict physicians from prescribing approved drugs for uses outside of the drugs' approved labeling, known as off-label use, pharmaceutical manufacturers are strictly prohibited

from promoting and marketing their products for such uses. Violations, including promotion of Cerecor's products for off-label uses, are subject to enforcement letters, inquiries, investigations, civil and criminal sanctions by the government, corporate integrity agreements, deferred prosecution agreements, debarment from government contracts and refusal of future orders under existing contracts, and exclusion from participation in federal healthcare programs. Additionally, comparable foreign regulatory authorities will heavily scrutinize advertising and promotion of any product candidate that obtains approval outside of the United States.

In the United States, engaging in the impermissible promotion of Cerecor's products for off-label uses can also subject Cerecor to false claims litigation under federal and state statutes, which can lead to civil and criminal penalties and fines, debarment from government contracts and refusal of future orders under existing contracts, deferred prosecution agreements, and corporate integrity agreements with governmental authorities that materially restrict the manner in which a company promotes or distributes drug products. These false claims statutes include the federal civil False Claims Act, which allows any individual to bring a lawsuit against a pharmaceutical company on behalf of the federal government alleging submission of false or fraudulent claims, or causing to present such false or fraudulent claims, for payment by a federal program such as Medicare or Medicaid. If the government decides to intervene and prevails in the lawsuit, the individual will share in any fines or settlement funds. If the government does not intervene, the individual may proceed on his or her own. Since 2004, these False Claims Act lawsuits against pharmaceutical companies have increased significantly in volume and breadth, leading to several substantial civil and criminal settlements, such as settlements regarding certain sales practices promoting off-label drug uses involving fines that are as much as $3.0 billion. This growth in litigation has increased the risk that a pharmaceutical company will have to defend a false claim action, pay settlement fines or restitution, agree to comply with burdensome reporting and compliance obligations, and be excluded from Medicare, Medicaid and other federal and state healthcare programs. If Cerecor does not lawfully promote its approved products, Cerecor may become subject to such litigation and, if it does not successfully defend against such actions, those actions may have a material adverse effect on Cerecor's business, financial condition, results of operations and prospects.

The FDA's policies may change, and additional government regulations may be enacted that could prevent, limit or delay marketing approval, and the sale and promotion of Cerecor's product candidates. If Cerecor is slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if it is not able to maintain regulatory compliance, Cerecor may lose any marketing approval that it may have obtained, which would adversely affect Cerecor's business, prospects and ability to achieve or sustain profitability.

If Cerecor is unable to, or is delayed in obtaining, state regulatory licenses for the distribution of its products, Cerecor would not be able to sell its product candidates in such states.

The majority of states require manufacturer and/or wholesaler licenses for the sale and distribution of drugs into that state. The application process is complicated, time consuming, costly and requires dedicated personnel or a third party to oversee and manage. If Cerecor is delayed in obtaining these state licenses, or denied the licenses, even with FDA approval, Cerecor would not be able to sell or ship product into that state which would adversely affect its sales and revenues.

If any of Cerecor's product candidates are ultimately regulated as controlled substances, Cerecor, its contract manufacturers, as well as distributors, prescribers, and dispensers will be required to comply with additional regulatory requirements which could delay the marketing of Cerecor's product candidates, and increase the cost and burden of manufacturing, distributing, dispensing, and prescribing its product candidates.

Before Cerecor can commercialize its product candidates, the United States Drug Enforcement Administration, or DEA, may need to determine the controlled substance Schedule, taking into account

the recommendation of the FDA. This may be a lengthy process that could delay Cerecor's marketing of a product candidate and could potentially diminish any regulatory exclusivity periods for which Cerecor may be eligible. While Cerecor currently does not know whether any of its product candidates will be considered to be controlled substances, certain of Cerecor's product candidates may be regulated as controlled substances.

If any of Cerecor's product candidates are regulated as controlled substances, depending on the controlled substance schedule in which the product candidates are placed, Cerecor, Cerecor's contract manufacturers, and any distributers, prescribers, and dispensers of the scheduled product candidates may be subject to significant regulatory requirements, such as registration, security, recordkeeping, reporting, storage, distribution, importation, exportation, inventory, quota and other requirements administered by the DEA. Moreover, if any of Cerecor's product candidates are regulated as controlled substances, Cerecor and its contract manufacturers would be subject to initial and periodic DEA inspection. If Cerecor or its contract manufacturers are not able to obtain or maintain any necessary DEA registrations, Cerecor might not be able to commercialize any product candidates that are deemed to be controlled substances or Cerecor may need to find alternative contract manufacturers, which would take time and cause Cerecor to incur additional costs, delaying or limit Cerecor's commercialization efforts.

Because of their restrictive nature, these laws and regulations could limit commercialization of Cerecor's product candidates, should they be deemed to contain controlled substances. Failure to comply with the applicable controlled substance laws and regulations can also result in administrative, civil or criminal enforcement. The DEA may seek civil penalties, refuse to renew necessary registrations, or initiate administrative proceedings to revoke those registrations. In some circumstances, violations could result in criminal proceedings or consent decrees. Individual states also independently regulate controlled substances.

Cerecor's failure to obtain regulatory approval in international jurisdictions would prevent Cerecor from marketing its product candidates outside the United States, which would limit Cerecor's market opportunities and adversely affect its business.

In order to market and sell Cerecor's products in other jurisdictions, Cerecor must obtain separate marketing approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and can involve additional testing. The time required to obtain approval may differ substantially from that required to obtain FDA approval. The regulatory approval process outside the United States generally includes all of the risks associated with obtaining FDA approval. In addition, in many countries outside the United States, Cerecor must secure product reimbursement approvals before regulatory authorities will approve the product for sale in that country. Obtaining foreign regulatory approvals and compliance with foreign regulatory requirements could result in significant delays, difficulties and costs for Cerecor and could delay or prevent the introduction of Cerecor's products in certain countries. Further, clinical trials conducted in one country might not be accepted by regulatory authorities in other countries. If Cerecor fails to comply with the regulatory requirements in international markets and receive applicable marketing approvals, Cerecor's target market will be reduced and Cerecor's ability to realize the full market potential of its product candidates will be harmed and Cerecor's business will be adversely affected. Cerecor might not obtain foreign regulatory approvals on a timely basis, if at all. Approval by the FDA does not ensure approval by regulatory authorities in other countries or jurisdictions. Approval by one regulatory authority outside the United States does not ensure approval by regulatory authorities in other countries or jurisdictions or by the FDA. Also, regulatory approval for any of Cerecor's product candidates may be withdrawn. However, the failure to obtain approval in one jurisdiction may negatively impact Cerecor's ability to obtain approval in another jurisdiction. Cerecor's failure to obtain approval of any of its

product candidates by regulatory authorities in another country may significantly diminish the commercial prospects of that product candidate and Cerecor's business prospects could decline.

If Cerecor obtains approval to commercialize its product candidates outside of the United States, a variety of risks associated with international operations could materially adversely affect Cerecor's business.

If any of Cerecor's product candidates are approved for commercialization, Cerecor may enter into agreements with third parties to market them on a worldwide basis or in more limited geographical regions. Cerecor expects that it will be subject to additional risks related to entering into international business relationships, including:

- different regulatory requirements for approval of drugs in foreign countries;
- challenges enforcing Cerecor's contractual and intellectual property rights, especially in those foreign countries that do not respect and protect intellectual property rights to the same extent as the United States;
- foreign reimbursement, pricing and insurance regimes;
- unexpected changes in tariffs, trade barriers and regulatory requirements;
- economic weakness, including inflation, or political instability in particular foreign economies and markets;
- compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;
- foreign currency fluctuations, which could result in increased operating expenses and reduced revenues, and other obligations incident to doing business in another country;
- foreign taxes;
- difficulties staffing and managing foreign operations;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- potential liability under the FCPA or comparable foreign regulations;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad; and
- business interruptions resulting from geopolitical actions, including war and terrorism, or natural disasters including earthquakes, typhoons, floods and fires.

These and other risks associated with Cerecor's international operations may materially adversely affect Cerecor's ability to attain or maintain profitable operations.

Cerecor faces substantial competition and rapid technological change and the possibility that others may discover, develop or commercialize products before or more successfully than Cerecor.

The biotechnology and pharmaceutical industries are intensely competitive and subject to rapid and significant technological change. Cerecor faces competition with respect to its current product candidates and will face competition with respect to any future product candidates from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide. Many of Cerecor's competitors have significantly greater financial, technical and human resources. Smaller and early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies.

Cerecor's competitors may obtain marketing approval of their products more rapidly than Cerecor may or may obtain patent protection or other intellectual property rights that limit Cerecor's ability to develop or commercialize its product candidates. Cerecor's competitors may also develop drugs that are more effective, more convenient, more widely used and less costly or have a better safety profile than Cerecor's products and these competitors may also be more successful than Cerecor in manufacturing and marketing their products.

Cerecor's competitors will also compete with Cerecor in recruiting and retaining qualified scientific, management and commercial personnel, establishing clinical trial sites and subject registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, its programs.

There are numerous currently approved therapies for treating the pediatric conditions Cerecor's products address and, consequently, competition in these markets is intense. Many of these approved drugs are well established therapies or products and are widely accepted by physicians, patients and third-party payors. Some of these drugs are branded and subject to patent protection and non-patent regulatory exclusivity, and others are available on a generic basis.

Insurers and other third-party payors may also encourage the use of generic products or specific branded products. Cerecor expects that any or Cerecor's product candidates, if approved, would be priced at a significant premium over competitive generic, including branded generic, products, but, any new product that competes with an approved product must demonstrate compelling advantages in efficacy, convenience, tolerability and safety in order to overcome price competition and to be commercially successful. This may make it difficult for Cerecor to differentiate its product from currently approved therapies, which may adversely impact Cerecor's business strategy. If Cerecor is not able to compete effectively against its current and future competitors, Cerecor's business will not grow, and its financial condition and operations will suffer.

Cerecor's products might not achieve adequate market acceptance among physicians, patients, third -party payors and others in the medical community necessary for commercial success.

Even if Cerecor's product candidates have or receive marketing approval, they might not gain adequate market acceptance among physicians, patients and others in the medical community. Cerecor's commercial success also depends on coverage and adequate reimbursement of its product candidates by third-party payors, including government payors, generally, which may be difficult or time-consuming to obtain, may be limited in scope or might not be obtained in all jurisdictions in which Cerecor may seek to market its products. The degree of market acceptance of any of Cerecor's approved product candidates will depend on a number of factors, including:

- the efficacy and safety profile of Cerecor's product candidates, including relative to marketed products and product candidates in development by third parties;
- prevalence and severity of any side effects of Cerecor's product candidates;
- relative convenience and ease of administration of Cerecor's product candidates;
- cost effectiveness of Cerecor's product candidates;
- the claims Cerecor may make for its product candidates based on the approved label or any restrictions placed upon Cerecor's marketing and distribution of its product candidates;
- the time it takes for Cerecor's product candidates to complete clinical development and receive marketing approval;
- how quickly and effectively Cerecor alone, or with a partner, can market, launch, and distribute any of its product candidates that receive marketing approval;

- the ability to commercialize any of Cerecor's product candidates that receive marketing approval;
- the price of Cerecor's products, including in comparison to branded or generic competitors and relative to alternative treatments;
- potential or perceived advantages of disadvantages over alternative treatments;
- the ability to collaborate with others in the development and commercialization of new products;
- whether coverage and adequate levels of reimbursement are available under private and governmental health insurance plans, including Medicare;
- the ability to establish, maintain and protect intellectual property rights related to Cerecor's product candidates;
- the entry of generic versions of Cerecor's products onto the market;
- the number of products in the same therapeutic class as Cerecor's product candidates;
- the effect of current and future healthcare laws on Cerecor's drug candidates;
- the ability to secure favorable managed care formulary positions, including federal healthcare program formularies;
- the ability to manufacture commercial quantities of any of Cerecor's product candidates that receive marketing approval;
- acceptance of any of Cerecor's product candidates that receive marketing approval by physicians and other healthcare providers; and
- potential post-marketing commitments imposed on regulatory authorities, such as patient registries.

If any product candidate is approved but does not achieve an adequate level of acceptance by physicians, hospitals, third-party payors and patients, Cerecor might not generate or derive sufficient revenue from that product candidate and might not become or remain profitable.

Even if Cerecor commercializes any of its product candidates, these products may become subject to unfavorable third-party coverage and reimbursement policies, healthcare reform initiatives, or pricing regulations, any of which could negatively impact Cerecor's business.

Cerecor's ability to commercialize any products successfully will depend in part on the extent to which coverage and adequate reimbursement for these products will be available from government authorities, private health insurers, health maintenance organizations and other entities. These third-party payors determine which medications they will cover and establish reimbursement levels, and increasingly attempt to control costs by limiting coverage and the amount of reimbursement for particular medications. Several third-party payors are requiring that drug companies provide them with predetermined discounts from list prices, are using preferred drug lists to leverage greater discounts in competitive classes and are challenging the prices charged for drugs. In addition, federal programs impose penalties on drug manufacturers in the form of mandatory additional rebates and/or discounts if commercial prices increase at a rate greater than the Consumer Price Index-Urban, and these rebates and/or discounts, which can be substantial, may impact Cerecor's ability to raise commercial prices. Cerecor cannot be sure that coverage and reimbursement will be available for any product that it commercializes and, if coverage is available, what the level of reimbursement will be. Coverage and reimbursement may impact the demand for, or the price of, any product candidate for which Cerecor obtains marketing approval. If coverage and reimbursement are not available or available only to

limited levels, Cerecor might not successfully commercialize any product candidate for which it obtains marketing approval.

There may be significant delays in obtaining coverage and reimbursement for newly approved drugs, and coverage may be more limited than the purposes for which the drug is approved by the FDA or comparable foreign regulatory authorities. Moreover, eligibility for coverage and reimbursement does not imply that a drug will be paid for in all cases or at a rate that covers Cerecor's costs, including research, development, manufacture, sale and distribution. Interim reimbursement levels for new drugs, if applicable, may also not be sufficient to cover Cerecor's costs and may only be temporary. Reimbursement rates for a drug may vary according to the clinical setting in which it is used and may be based on reimbursement levels already set for lower cost drugs and may be incorporated into existing payments for other services. Prices paid for a drug also vary depending on the class of trade. Prices charged to government customers are subject to price controls and private institutions obtain discounts through group purchasing organizations. Net prices for drugs may be further reduced by mandatory discounts or rebates required by government healthcare programs and demanded by private payors, and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. Cerecor's inability to promptly obtain coverage and profitable reimbursement rates from both government-funded and private payors for any approved products that it develops could have a material adverse effect on Cerecor's operating results, its ability to raise capital needed to commercialize products and its overall financial condition.

Moreover, the regulations that govern marketing approvals, pricing, coverage and reimbursement for new drug products vary widely from country to country. Current and future legislation may significantly change the approval requirements in ways that could involve additional costs and cause delays in obtaining approvals. Adverse pricing limitations may hinder Cerecor's ability to recoup its investment in one or more product candidates even if Cerecor's product candidates obtain marketing approval.

Cerecor may expend its limited resources to pursue a particular product candidate or indication and fail to capitalize on product candidates or indications that may be more profitable or for which there is a greater likelihood of success.

Because Cerecor has limited financial and managerial resources, it may forego or delay pursuit of opportunities with other product candidates or for other indications that later prove to have greater commercial potential. Cerecor's resource allocation decisions may cause it to fail to capitalize on viable commercial products or profitable market opportunities. Cerecor's spending on current and future research and development programs and product candidates for specific indications might not yield any commercially viable products. If Cerecor does not accurately evaluate the commercial potential or target market for a particular product candidate, Cerecor may relinquish valuable rights to that product candidate through collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous to retain sole development and commercialization rights to such product candidate.

Cerecor's current revenue depends on one product; so if it does not grow sales of that product, its revenue might not grow, which could affect its stock price.

Following the sale of Cerecor's Pediatric Portfolio, it currently has rights to only one commercial pharmaceutical product, Millipred. Cerecor does not expect Millipred to generate significant revenue and profits, but it currently relies on it for all its commercial revenue. Cerecor's ability to increase revenue in the future will depend on commercializing it successfully, as well as developing and commercializing its current pipeline of product candidates. Any failure to do so could require Cerecor to raise additional financing, and could negatively impact Cerecor's stock price.

Recently enacted and future legislation may increase the difficulty and cost for Cerecor to obtain marketing approval of and commercialize its product candidates and affect the prices it may obtain.

In the United States and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could, among other things, prevent or delay marketing approval of Cerecor's product candidates, restrict or regulate post-approval activities and affect Cerecor's ability to profitably sell any product candidates for which it obtains marketing approval.

For example, in March 2010, the ACA was enacted. The law has continued the downward pressure on pharmaceutical pricing, especially under the Medicare program, and increased the industry's regulatory burdens and operating costs. Among the provisions of the ACA of importance to Cerecor's potential drug candidates are the following:

- an annual, nondeductible fee payable by any entity that manufactures or imports specified branded prescription drugs and biologic agents;
- revised the definition of "average manufacturer price," or AMP, for reporting purposes, which can increase the amount of Medicaid drug rebates manufacturers are required to pay to states, and created a separate AMP for certain categories of drugs provided in non-retail outpatient settings;
- an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program;
- a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected;
- a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer (70%) point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries under their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D;
- extension of manufacturers' Medicaid rebate liability to individuals enrolled in Medicaid managed care organizations;
- expansion of eligibility criteria for Medicaid programs in certain states;
- expansion of the entities eligible for discounts under the Public Health Service pharmaceutical pricing program;
- a new requirement to annually report drug samples that manufacturers and distributors provide to physicians;
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research; and
- enacted substantial new provisions affecting compliance which may affect Cerecor's business practices with healthcare practitioners.

Cerecor cannot predict the full impact of the ACA on pharmaceutical companies, as many of the reforms require the promulgation of detailed regulations implementing the statutory provisions, some of which has not yet fully occurred. Since January 2017, the President of the United States has signed two Executive Orders and other directives designed to delay the implementation of any certain provisions of the ACA or otherwise circumvent some of the requirements for health insurance mandated by the ACA. The Tax Cuts and Jobs Act ("TCJA") included a provision repealing, effective January 1, 2019, the tax-based shared responsibility payment imposed by the ACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly

referred to as the "individual mandate." Congress will likely consider other legislation to replace elements of the ACA. The ACA is likely to continue the downward pressure on pharmaceutical pricing and may also increase Cerecor's regulatory burdens and operating costs. Cerecor continues to evaluate the effect that the ACA and its possible repeal and replacement has on Cerecor's business.

Other legislative changes have been proposed and adopted since the ACA was enacted. For example, in August 2011 President Obama signed into law the Budget Control Act of 2011, which, among other things, created the Joint Select Committee on Deficit Reduction to recommend to Congress proposals in spending reductions. The Joint Select Committee did not achieve a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, triggering the legislation's automatic reduction to several government programs. This included further reductions to Medicare payments to providers of 2% per fiscal year, which went into effect in April 2013 and, due to subsequent legislative amendments to the statute, will stay in effect through 2025 unless additional Congressional action is taken. Additionally, in January 2013 the American Taxpayer Relief Act of 2012 was signed into law, which, among other things, reduced Medicare payments to several providers and increased the statute of limitations period in which the government may recover overpayments to providers from three to five years.

Further, there have been several recent U.S. Congressional inquiries and proposed federal and state legislation designed to, among other things, bring more transparency to drug pricing, review the relationship between pricing and manufacturer patient programs, reduce the out-of-pocket cost of prescription drugs and reform government program reimbursement methodologies for drugs. Such scrutiny has resulted in several recent Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to pharmaceutical product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for products. At the federal level, the current administration's budget proposal for fiscal year 2019 contains further drug price control measures that could be enacted during the 2019 budget process or in other future legislation, including, for example, measures to permit Medicare Part D plans to negotiate the price of certain drugs under Medicare Part B, to allow some states to negotiate drug prices under Medicaid, and to eliminate cost sharing for generic drugs for low-income patients. Additionally, on May 11, 2018, the President of the United States laid out his administration's "Blueprint to Lower Drug Prices and Reduce Out-of-Pocket Costs" to reduce the cost of prescription drugs while preserving innovation and cures. The U.S. Department of Health and Human Services ("HHS") has already started the process of soliciting feedback on some of these measures and, at the same time, is immediately implementing others under its existing authority. Although some of these and other proposals will require authorization through additional legislation to become effective, Congress and the U.S. presidential administration have each indicated that they will continue to seek new legislative and/or administrative measures to control drug costs. At the state level, legislatures have become increasingly aggressive in passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing.

Moreover, the Drug Supply Chain Security Act, which was enacted in 2012 as part of the Food and Drug Administration Safety and Innovation Act, imposes new obligations on manufacturers of pharmaceutical products related to product tracking and tracing.

Legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for pharmaceutical products. Cerecor is not sure whether additional legislative changes will be enacted, whether the current regulations, guidance or interpretations will be changed, or what the impact of such changes on Cerecor's business, if any, may be. In addition, increased scrutiny by the U.S. Congress of the FDA's approval process may significantly

delay or prevent marketing approval, as well as subject Cerecor to more stringent product labeling and post-marketing testing and other requirements.

Cerecor expects that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for Cerecor's product candidates or additional pricing pressures.

Product liability lawsuits against Cerecor could cause Cerecor to incur substantial liabilities and to limit commercialization of any products that it may develop.

Cerecor faces an inherent risk of product liability exposure related to the testing of Cerecor's product candidates in human clinical trials and related to the commercial sale of Cerecor's products. Product liability claims may be brought against Cerecor by subjects enrolled in Cerecor's clinical trials, patients, healthcare providers or others using, administering or selling Cerecor's products. For example, Cerecor may be sued if any product it sells allegedly causes injury or is found to be otherwise unsuitable during product testing, manufacturing, marketing or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product, negligence, strict liability and a breach of warranties. Claims could also be asserted under state consumer protection acts. If Cerecor cannot successfully defend itself against claims that its product candidates or products that it may develop caused injuries, Cerecor could incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product candidates or products that Cerecor may develop;
- termination of clinical trial sites or entire trial programs;
- injury to Cerecor's reputation and significant negative media attention;
- withdrawal of clinical trial participants;
- significant costs to defend the related litigation;
- substantial monetary awards to trial subjects or patients;
- loss of revenue;
- product recalls, withdrawals or labeling, marketing or promotional restrictions;
- diversion of management and scientific resources from Cerecor's business operations;
- the inability to commercialize any products that Cerecor may develop; and
- a decline in Cerecor's stock price.

Cerecor currently holds product and clinical trial liability insurance coverage, but it might not adequately cover all liabilities that Cerecor incurs. Cerecor might not be able to maintain clinical trial insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise. Cerecor also maintains insurance coverage for its commercially available products, which might not adequately cover all liabilities that Cerecor may incur. Cerecor might not be able to maintain insurance coverage for its approved products at a reasonable cost or in an amount adequate to satisfy any liability that may arise. Large judgments have been awarded in class action lawsuits based on drugs that had unanticipated side effects. A product liability claim or series of claims brought against Cerecor, whether or not successful, but particularly if judgments exceed Cerecor's insurance coverage, could decrease Cerecor's cash and adversely affect its reputation and business.

Cerecor's relationships with commercial and government customers, healthcare providers, and third -party payors and others are subject to applicable anti-kickback, fraud and abuse, transparency and other healthcare related laws, regulations and requirements, which could expose Cerecor to criminal sanctions, civil penalties, exclusion from participation in federal healthcare programs, contractual damages and consequences, reputational harm, administrative burdens and diminished profits and future earnings.

Pharmaceutical companies participating in federal and/or state healthcare programs such as Medicare and Medicaid are subject to a multitude of federal and state laws and regulations which are intended to address and prevent "fraud and abuse". These laws also apply to the physicians and third-party payors who play a primary role in the recommendation and prescription of Cerecor's commercially-available products. Cerecor's arrangements with providers, payors, and patients may expose Cerecor to broadly-applicable fraud and abuse laws. These laws may constrain the business or financial arrangements and relationships through which Cerecor markets, sells, and distributes its products. There are also laws, regulations, and requirements applicable to the award and performance of federal grants and contracts.

Actions resulting in violations of these laws regulations, and requirements may result in civil and criminal liability, damages and restitution, as well as exclusion from participation in federal healthcare programs, corporate integrity agreements, deferred prosecution agreements, debarment from government contracts and grants and refusal of future orders under existing contracts or contractual damages, and other consequences. Restrictions under applicable federal and state healthcare related laws and regulations, include the following:

- the federal Anti-Kickback Statute prohibits persons from, among other things, knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, overtly or covertly, in cash or in kind, to induce or reward, or in return for, the referral of an individual for the furnishing or arranging for the furnishing, or the purchase, lease or order, or arranging for or recommending purchase, lease or order, of any good or service for which payment may be made under a federal healthcare program;

- the civil federal False Claims Act imposes civil penalties, including through civil whistleblower or qui tam actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent; knowingly making, using or causing to be made or used, a false record or statement to get a false or fraudulent claim paid or approved by the government; conspiring to defraud the government by getting a false or fraudulent claim paid or approved by the government; or knowingly making, using or causing to be made or used a false record or statement to avoid, decrease or conceal an obligation to pay money to the federal government;

- the criminal federal False Claims Act imposes criminal fines or imprisonment against individuals or entities who willfully make or present a claim to the government knowing such claim to be false, fictitious or fraudulent;

- the Veterans Health Care Act ("VHCA") requires manufacturers of covered drugs to offer them for sale on the Federal Supply Schedule, which requires compliance with applicable federal procurement laws and regulations and subjects Cerecor to contractual remedies as well as administrative, civil and criminal sanctions;

- HIPAA and its related regulations impose criminal liability for, among other actions, knowingly and willfully executing a scheme to defraud any healthcare benefit program, knowingly and willfully embezzling or stealing from a health care benefit program, willfully obstructing a criminal investigation of a health care offense, or knowingly and willfully making false statements relating to healthcare matters;

- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 ("HITECH") and its implementing regulations, also imposes obligations on certain covered entity health care providers, health plans, and health care clearinghouses as well as their business associates that perform certain services involving individually identifiable health information, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information, as well as directly applicable privacy and security standards and requirements

- the civil monetary penalties statute imposes penalties against any person or entity who, among other things, is determined to have presented or caused to be presented a claim to a federal health program that the person knows or should know is for an item or service that was not provided as claimed or is false or fraudulent;

- the federal Physician Sunshine Act, created under Section 6002 of the ACA and its implementing regulations, requires manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) to report annually to the Centers for Medicare and Medicaid Services, or CMS, information related to payments or other "transfers of value" made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, and requires applicable manufacturers and applicable group purchasing organizations to report annually to CMS ownership and investment interests held by physicians (as defined above) and their immediate family members;

- the FCPA prohibits any U.S. individual or business from paying, offering, or authorizing payment or offering of anything of value, directly or indirectly, to any foreign official, political party or candidate for the purpose of influencing any act or decision of the foreign entity in order to assist the individual or business in obtaining or retaining business. The FCPA also obligates companies whose securities are listed in the United States to comply with accounting provisions requiring the company to maintain books and records that accurately and fairly reflect all transactions of the corporation, including international subsidiaries, and to devise and maintain an adequate system of internal accounting controls for international operations; and

- analogous or similar state, federal, and foreign laws, regulations, and requirements such as state anti-kickback and false claims laws, which may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers; state and foreign laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the applicable compliance guidance promulgated by the federal government or otherwise restrict payments that may be made to healthcare providers; state and foreign laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures; laws, regulations, and requirements applicable to the award and performance of federal contracts and grants and state, federal and foreign laws that govern the privacy and security of health and other information in certain circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Efforts to ensure that Cerecor's business arrangements with third parties will comply with applicable healthcare laws and regulations involve substantial costs. Because of the breadth of these laws and the narrowness of the statutory exceptions and safe harbors available, it is possible that governmental authorities will conclude that Cerecor's business practices do not comply with current or future statutes, regulations, or case law interpreting applicable fraud and abuse or other healthcare laws and regulations. In addition, recent health care reform legislation has strengthened these laws. For example, recent case law from the U.S. Supreme Court interpreted the federal False Claims Act to

include liability for implied false certifications, in certain instances. If Cerecor's operations are found to be in violation of any of these laws or any other governmental regulations or requirements that may apply to it, Cerecor may be subject to significant civil, criminal and administrative penalties, damages, fines, imprisonment, restitution exclusion from government funded healthcare programs, such as Medicare and Medicaid, corporate integrity agreements, deferred prosecution agreements, debarment from government contracts and grants and refusal of future orders under existing contracts, contractual damages, the curtailment or restructuring of Cerecor's operations and other consequences. If any of the physicians or other healthcare providers or entities with whom Cerecor expects to do business are found not to be in compliance with applicable laws, that person or entity may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs. Moreover, availability of any federal grant funds which Cerecor may receive or for which it may apply is subject to federal appropriations law. Grant funding may also be withdrawn or denied for other reasons.

Cerecor may be subject to numerous and varying privacy and security laws, and its failure to comply could result in penalties and reputational damage.

Cerecor maintains a large quantity of sensitive information, including confidential business information and information associated with clinical trials. If Cerecor's security measures are breached or fail and/or are bypassed because of third-party action, inadvertent disclosures through technological or human error (including employee error), malfeasance, hacking, ransomware, social engineering (including phishing schemes), computer viruses, malware, or otherwise, unauthorized acquisition of or access to sensitive information may occur. As a result, Cerecor's reputation could be damaged, its business might suffer, information might be lost, and Cerecor could face damages for breach of contract, penalties for violation of applicable laws or regulations, costly litigation or government investigations, and significant costs for remediation and remediation efforts to prevent future occurrences. The harm associated with these negative results is likely to be exacerbated if the affected information is personally identifiable.

Cerecor may be subject to laws and regulations governing the privacy and security of personal information, including regulations pertaining to health information. The legislative and regulatory landscape for privacy and data security continues to evolve, and there has been an increasing focus on privacy and data security issues that may affect Cerecor's business. In the U.S., there are numerous federal and state privacy and data security laws and regulations that govern the collection, use, disclosure, and protection of personal information, including federal and state health information privacy laws, federal and state security breach notification laws, and federal and state consumer protection laws. Each of these laws is subject to varying interpretations by courts and government agencies, creating complex compliance issues for Cerecor. If Cerecor fails to comply with applicable laws and regulations, Cerecor could be subject to penalties or sanctions. Recently, the HHS Office for Civil Rights, which enforces HIPAA, appears to have increased its enforcement activities. Additionally, state attorneys general may bring civil actions seeking either injunctions or damages in response to violations of HIPAA that threaten the privacy of state residents. Privacy and data security has become an area of emphasis for some state legislatures. In addition to the risk associated with enforcement, compliance with these evolving laws, rules, and regulations regarding the privacy, security and protection of personal information could result in higher compliance and technology costs for Cerecor and present challenges for its business model.

There are numerous federal and state laws that generally require notice to affected individuals, regulators, and sometimes the media or credit reporting agencies in the event of a data breach impacting personal information. For example, at the federal level, HIPAA Breach Notification Rule mandates notification of breaches affecting protected health information to affected individuals and regulators under conditions set forth in the Rule. Covered Entities must report breaches of unsecured

protected health information to affected individuals without unreasonable delay, but not to exceed 60 days of discovery of the breach by a Covered Entity or its agents. Notification must also be made to HHS and, in certain circumstances involving large breaches, to the media. Business Associates must report breaches of unsecured protected health information to Covered Entities within 60 days of discovery of the breach by the Business Associate or its agents. All states, the District of Columbia, Guam, Puerto Rico, and the Virgin Islands have enacted data breach notification laws. These laws may impose notification obligations in addition to, or inconsistent with, the HIPAA Breach Notification Rule when a data breach implicates protected health information. In that event that Cerecor fails to detect or timely report a data breach it may be subject to significant penalties under federal and state law. In the event that Cerecor reports a data breach as required by federal or state law, federal or state regulators may initiate an investigation into, and/or litigation related to, Cerecor's privacy or data security practices. Private plaintiffs may also initiate costly class-action litigation following a data breach.

Numerous other countries have, or are developing, laws governing the collection, use, and transmission of personal information. These laws often impose significant compliance obligations. For example, since May 25, 2018, the General Data Protection Regulation ("GDPR"), has imposed more stringent obligations and restrictions on the ability to collect, analyze, and transfer personal information, including health data from clinical trials and substantial fines for breaches of the data protection rules in the European Economic Area. To the extent that Cerecor's activities are or become subject to the GDPR, Cerecor may need to devote significant effort and resources to complying with those legal regimes. Any failure to comply with the rules arising from the GDPR could lead to government enforcement actions and significant penalties against Cerecor and adversely impact its operating results.

If Cerecor fails to attract and keep management and other key personnel, as well as our board members, we may be unable to develop our product candidates or otherwise implement our business plan.

The Cerecor's success will depend on the retention of its directors and members of its management and technical team, including Michael F. Cola, Chief Executive Officer, Dr. Perricles Calias, Chief Scientific Officer, James A. Harrell, Jr., Chief Commercial Officer, Joe Miller, Chief Financial Officer, and Garry A. Neil, Chief Medical Officer, and on Cerecor's ability to continue to attract and retain highly skilled and qualified personnel. Cerecor might not be able to attract or retain qualified management and other key personnel in the future due to the intense competition for qualified personnel among biotechnology, pharmaceutical and other businesses. Key employees may depart because of issues relating to the uncertainty and difficulty of integration of the merger with Aevi or a desire not to remain following the merger. Cerecor's industry has experienced a high rate of turnover of management personnel in recent years. As such, Cerecor could have difficulty attracting experienced personnel to the Company and may be required to expend significant financial resources in its employee recruitment and retention efforts. Many of the other biotechnology and pharmaceutical companies with whom Cerecor competes for qualified personnel have greater financial and other resources, different risk profiles and longer histories in the industry than Cerecor will have. They also may provide more diverse opportunities and better chances for career advancement. Some of these characteristics may be more appealing to high quality candidates than that which Cerecor has to offer. If Cerecir is not able to attract and retain the necessary personnel to accomplish its business objectives, Cerecor may experience constraints that will impede significantly its ability to implement its business strategy and achieve its business objectives. There can be no assurance that Cerecir will retain the services of any of its directors, officers or employees, or attract or retain additional senior managers or skilled employees. Furthermore, the combined company does not intend to carry key man insurance with respect to any of such individuals.

If Cerecor's employees, independent contractors, principal investigators, CROs, manufacturers, consultants or vendors commit fraud or other misconduct, including noncompliance with regulatory standards and requirements and insider trading, Cerecor's business may experience serious adverse consequences.

Cerecor is exposed to the risk that its employees, independent contractors, principal investigators, CROs, manufacturers, consultants and vendors may engage in fraudulent or other illegal activity. Misconduct by these parties could include intentional, reckless and/or negligent conduct or disclosure of unauthorized activities to Cerecor that violates: (1) FDA regulations, including those laws requiring the reporting of true, complete and accurate information to the FDA, (2) manufacturing standards, (3) federal and state healthcare fraud and abuse laws and regulations or (4) laws that require the true, complete and accurate reporting of financial information or data. Specifically, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. The improper use of information obtained in the course of clinical trials could also result in significant legal sanctions and serious harm to Cerecor's reputation. In addition, federal procurement laws and regulations impose substantial penalties for misconduct in connection with government contracts and require contractors to maintain a code of business conduct and ethics. Cerecor has adopted a Code of Business Conduct and Ethics, but it is not always possible to identify and deter misconduct by Cerecor's employees and other third parties, and the precautions Cerecor takes to detect and prevent this activity might not be effective in controlling unknown or unmanaged risks or losses or in protecting Cerecor from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. If any such actions are instituted against Cerecor, and Cerecor is not successful in defending itself or asserting its rights, those actions could have a significant impact on Cerecor's business, including regulatory enforcement action, the imposition of significant criminal and civil fines, penalties, or other sanctions, including imprisonment, exclusion from participation in federal healthcare programs, and deferred prosecution and corporate integrity agreements.

In addition, during the course of Cerecor's operations, Cerecor's directors, executives and employees may have access to material, nonpublic information regarding Cerecor's business, its results of operations or potential transactions Cerecor is considering. Cerecor has adopted an Insider Trading and Window Period Policy, but despite the adoption of such policy, Cerecor might not be able to prevent a director, an executive or an employee from trading in Cerecor's common stock on the basis of, or while having access to, material, nonpublic information. If a director, executive or employee was to be investigated, or an action was to be brought against a director, executive or employee for insider trading, it could have a negative impact on Cerecor's reputation and its stock price. Such a claim, with or without merit, could also result in substantial expenditures of time and money, and divert attention of Cerecor's management team from other tasks important to the success of Cerecor's business.

Cerecor may encounter difficulties in managing its growth and expanding its operations successfully.

As Cerecor seeks to advance its product candidates through clinical trials, Cerecor will need to expand its development, regulatory, manufacturing, administrative, marketing and sales capabilities or contract with third parties to provide these capabilities for it. As Cerecor's operations expand, Cerecor expects that it will need to manage additional relationships with various strategic partners, suppliers and other third parties. Future growth will impose significant added responsibilities on members of management. Cerecor's future financial performance and its ability to commercialize its product candidates and to compete effectively will depend, in part, on Cerecor's ability to manage any future growth effectively. To that end, Cerecor must be able to manage its development efforts and clinical trials effectively and hire, train and integrate additional management, administrative and sales and marketing personnel. The hiring, training and integration of new employees may be more difficult,

costly and/or time-consuming for Cerecor because it has fewer resources than a larger organization. Cerecor might not be able to accomplish these tasks, and its failure to accomplish any of them could prevent Cerecor from successfully growing its company.

If, in the future, Cerecor is unable to grow its own sales, or establish marketing and distribution capabilities or enter into licensing or collaboration agreements for these purposes, Cerecor might not be successful in commercializing its product candidates.

Cerecor does not currently have a robust sales or marketing infrastructure. To develop its internal sales, distribution and marketing capabilities for new product candidates, Cerecor will have to invest significant amounts of financial and management resources, some of which will be committed prior to any confirmation that any new product candidates will be approved. For product candidates for which Cerecor decides to perform sales, marketing and distribution functions itself, it could face a number of additional risks, including:

- Cerecor's inability to recruit and retain adequate numbers of effective sales and marketing personnel;
- inability of marketing personnel to develop effective marketing materials;
- the inability of sales personnel to obtain access to physicians or educate adequate numbers of physicians on the clinical benefits of Cerecor's products to achieve market acceptance;
- the lack of complementary products to be offered by sales personnel, which may put Cerecor at a competitive disadvantage relative to companies with more extensive product lines;
- the costs associated with training sales personnel on legal compliance matters and monitoring their actions;
- liability for sales personnel failing to comply with the applicable legal requirements; and
- unforeseen costs and expenses associated with creating an independent sales and marketing organization.

Where and when appropriate, Cerecor may elect to utilize contract sales forces or strategic partners to assist in the commercialization of Cerecor's product candidates. If Cerecor enters into arrangements with third parties to perform sales, marketing and distribution services for its products, the resulting revenues or the profitability from these revenues to Cerecor is likely to be lower than if it had sold, marketed and distributed its products itself. In addition, Cerecor might not be successful in entering into arrangements with third parties to sell, market and distribute its product candidates or may be unable to do so on terms that are favorable to Cerecor. Cerecor likely will have little control over such third parties, and any of these third parties may fail to devote the necessary resources and attention to sell, market and distribute its products effectively. Such third parties may also not comply with the applicable regulatory requirements, which could potentially expose Cerecor to regulatory and legal enforcement actions.

Following the closing of the Merger, Cerecor assumed the liabilities of the royalty agreement with certain related parties on terms that could raise conflicts of interest and that some stockholders may consider not to be in their best interests.

In July 2019, Aevi entered into a royalty agreement with Michael F. Cola, our Chief Executive Officer, Joseph J. Grano, Jr., Kathleen Jane Grano, Joseph C. Grano, The Grano Children's Trust, Joseph C. Grano, trustee and LeoGroup Private Investment Access, LLC on behalf of Garry A. Neil, our Chief Medical Officer, in exchange for a one-time aggregate payment of $2 million (the "Royalty Agreement"). Collectively, the investors will be entitled to an aggregate amount equal to a low-single digit percentage of the aggregate net sales of Astellas' second generation mTORC1/2 inhibitor,

CERC-006 (the "OSI Products"). At any time beginning three years after the date of the first public launch of an OSI Product, we may exercise, at our sole discretion, a buyout option that terminates any further obligations under the Royalty Agreement in exchange for a payment to Investors of an aggregate of 75% of the net present value of the royalty payments. A majority of the independent members of the board of directors or the audit committee of Aevi approved the Royalty Agreement, which liability was assumed by Cerecor upon closing of our Merger with Aevi, but these arrangements could present Mr. Cola and Dr. Neil, officers of Cerecor, might have a conflict of interest when making decisions on the priority of the development of our pipeline products. In addition, some stockholders might not consider the terms of the Royalty Agreement to be in their best interests.

Risks Related to Our Dependence on Third Parties

Cerecor might not succeed in establishing and maintaining development collaborations, which could adversely affect Cerecor's ability to develop and commercialize product candidates.

A part of Cerecor's strategy is to enter into product development collaborations in the future, including collaborations with major biotechnology or pharmaceutical companies for the development or commercialization of its current and future product candidates. Cerecor also faces significant competition in seeking appropriate development partners and the negotiation process is time-consuming and complex. Cerecor might not succeed in its efforts to establish development collaborations or other alternative arrangements for any of its existing or future product candidates and programs because its research and development pipeline may be insufficient, its product candidates and programs may be deemed to be at too early a stage of development for collaborative effort and/or third parties might not view its product candidates and programs as having the requisite potential to demonstrate safety and efficacy.

Furthermore, any collaborations that Cerecor enters into might not be successful. The success of Cerecor's development collaborations will depend heavily on the efforts and activities of its collaborators. Furthermore, any collaborations that Cerecor enters into might not be successful. The success of Cerecor's development collaborations will depend heavily on the efforts and activities of its collaborators. Cerecor's relationship with any future collaborations may pose several risks, including the following:

- collaborators have significant discretion in determining the amount and timing of the efforts and resources that they will apply to these collaborations;
- collaborators might not perform their obligations as expected;
- the nonclinical studies and clinical trials conducted as part of these collaborations might not be successful;
- collaborators might not pursue development and commercialization of any product candidates that achieve regulatory approval or may elect not to continue or renew development or commercialization programs based on nonclinical study or clinical trial results, changes in the collaborators' strategic focus or available funding or external factors, such as an acquisition, that divert resources or create competing priorities;
- collaborators may delay nonclinical studies and clinical trials, provide insufficient funding for nonclinical studies and clinical trials, stop a nonclinical study or clinical trial or abandon a product candidate, repeat or conduct new nonclinical studies or clinical trials or require a new formulation of a product candidate for nonclinical studies or clinical trials;
- Cerecor might not have access to, or may be restricted from disclosing, certain information regarding product candidates being developed or commercialized under a collaboration and,

consequently, may have limited ability to inform its stockholders about the status of such product candidates;

- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with Cerecor's product candidates if the collaborators believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than Cerecor's;
- product candidates developed in collaboration with Cerecor may be viewed by its collaborators as competitive with their own product candidates or products, which may cause collaborators to cease to devote resources to the commercialization of Cerecor's product candidates;
- a collaborator with marketing and distribution rights to one or more of Cerecor's product candidates that achieve regulatory approval might not commit sufficient resources to the marketing and distribution of any such product candidate;
- disagreements with collaborators, including disagreements over proprietary rights, contract interpretation or the preferred course of development of any product candidates, may cause delays or termination of the research, development or commercialization of such product candidates, may lead to additional responsibilities for Cerecor with respect to such product candidates or may result in litigation or arbitration, any of which would be time consuming and expensive;
- collaborators might not properly maintain or defend Cerecor's intellectual property rights or may use Cerecor's proprietary information in such a way as to invite litigation that could jeopardize or invalidate Cerecor's intellectual property or proprietary information or expose Cerecor to potential litigation;
- disputes may arise with respect to the ownership or inventorship of intellectual property developed pursuant to Cerecor's collaborations;
- collaborators may infringe the intellectual property rights of third parties, which may expose Cerecor to litigation and potential liability;
- the terms of Cerecor's collaboration agreement may restrict Cerecor from entering into certain relationships with other third parties, thereby limiting Cerecor's options; and
- collaborations may be terminated for the convenience of the collaborator and, if terminated, Cerecor could be required to raise additional capital to pursue further development or commercialization of the applicable product candidates.

Even if Cerecor is successful in its efforts to establish development collaborations, the terms that Cerecor agrees upon might not be favorable to it and it might not be able to maintain such development collaborations if, for example, development or approval of a product candidate is delayed or sales of an approved product candidate are disappointing. Any delay in entering into development collaboration agreements related to Cerecor's product candidates could delay the development and commercialization of its product candidates and reduce their competitiveness if they reach the market. Additionally, collaborations with pharmaceutical or biotechnology companies and other third parties often are terminated or allowed to expire by the other party. Any such termination or expiration would adversely affect Cerecor financially and could harm its business reputation.

If Cerecor fails to establish and maintain additional development collaborations related to its product candidates:

- the development of certain of Cerecor's current or future product candidates may be terminated or delayed;
- Cerecor's cash expenditures related to development of certain of its current or future product candidates would increase significantly and Cerecor may need to seek additional financing, which might not be available on favorable terms, or at all;
- Cerecor may be required to hire additional employees or otherwise develop expertise, such as sales and marketing expertise, for which Cerecor has not budgeted;
- Cerecor will bear all of the risk related to the development of any such product candidates;
- Cerecor may have to expend unexpected efforts and funds if it is unable to obtain the results of third-party clinical trials; and
- the competitiveness of any product candidate that is commercialized could be reduced.

Cerecor relies on third parties to conduct, supervise and monitor its clinical trials. The failure of these third parties to successfully carry out their contractual duties or meet expected deadlines could substantially harm Cerecor's business because Cerecor might not obtain marketing approval for or commercialize its product candidates in a timely manner or at all.

Cerecor relies upon third-party CROs to monitor and manage data for its clinical programs. Cerecor relies on these parties for execution of its clinical trials and, while Cerecor has agreements governing their activities, Cerecor has limited influence over their actual performance and control only certain aspects of their activities. Nevertheless, Cerecor is responsible for ensuring that each of its studies is conducted in accordance with the applicable protocol, legal, regulatory and scientific standards, and Cerecor's reliance on the CROs does not relieve it of its regulatory responsibilities. Cerecor, its clinical trial sites, and its CROs are required to comply with GCP requirements, which are regulations and guidelines enforced by the FDA, the Competent Authorities of the Member States of the European Economic Area and comparable foreign regulatory authorities for all of Cerecor's products in clinical development. Regulatory authorities enforce these GCP requirements through periodic inspections of trial sponsors, principal investigators and trial sites. If Cerecor, any of its CROs or clinical trial sites fails to comply with applicable GCP requirements, the clinical data generated in Cerecor's clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require Cerecor to perform additional clinical trials before approving its marketing applications, if at all. In addition, Cerecor is required to report certain financial interests of its third-party investigators if these relationships exceed certain financial thresholds or meet other criteria. The FDA or comparable foreign regulatory authorities may question the integrity of the data from those clinical trials conducted by principal investigators who previously served or currently serve as scientific advisors or consultants to Cerecor from time to time and receive cash compensation in connection with such services or otherwise receive compensation from Cerecor that could be deemed to impact study outcome, proprietary interests in a product candidate, certain company equity interests, or significant payments of other sorts. Cerecor cannot assure you that upon inspection by a given regulatory authority, such regulatory authority will determine that any of its clinical trials complies with GCP requirements. In addition, Cerecor must conduct its clinical trials with product produced under applicable cGMP requirements. Failure to comply with these regulations may require Cerecor to repeat preclinical and clinical trials, which would delay the marketing approval process.

Cerecor's CROs and clinical trial sites are not its employees, and, except for remedies available to Cerecor under its agreements with such CROs and clinical trial sites, Cerecor cannot control whether or not they devote sufficient time and resources to Cerecor's ongoing clinical, nonclinical and

preclinical programs. These CROs and clinical trial sites may also have relationships with other commercial entities, including Cerecor's competitors, for whom they may also be conducting clinical trials or other drug development activities that could harm Cerecor's competitive position. If CROs or clinical trial sites do not successfully carry out their contractual duties or obligations or meet expected deadlines, or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to Cerecor's clinical protocols, regulatory requirements or for other reasons, Cerecor's clinical trials may be extended, delayed or terminated and Cerecor might not be able to obtain marketing approval for or successfully commercialize its product candidates or it may be subject to regulatory enforcement actions. As a result, Cerecor's results of operations and the commercial prospects for its product candidates would be harmed, its costs could increase and its ability to generate revenues could be delayed. To the extent Cerecor is unable to successfully identify and manage the performance of third-party service providers in the future, Cerecor's business may be adversely affected.

Switching or adding CROs involves substantial cost and requires extensive management time and focus. In addition, there is a natural transition period when a new CRO commences work. As a result, delays occur, which can materially impact Cerecor's ability to meet its desired clinical development timelines. Though Cerecor carefully manages its relationships with its CROs, there can be no assurance that Cerecor will not encounter similar challenges or delays in the future or that these delays or challenges will not have a material adverse impact on Cerecor's business, prospects, financial condition and results of operations.

Cerecor uses third parties to manufacture all of its product candidates. This may increase the risk that Cerecor will not have sufficient quantities of its product candidates to conduct its clinical trials or such quantities at an acceptable cost, which could result in the delay, prevention, or impairment of clinical development and commercialization of Cerecor's product candidates.

Cerecor's does not own or operate, and has no plans to establish, any manufacturing facilities for its product candidates. Cerecor has limited personnel with experience in drug manufacturing and Cerecor lacks the resources and the capabilities to manufacture any of its product candidates on a clinical or commercial scale.

Cerecor currently outsources all manufacturing of its product candidates to third parties typically without any guarantee that there will be sufficient supplies to fulfill Cerecor's requirements or that Cerecor may obtain such supplies on acceptable terms. Any delays in obtaining adequate supplies with respect to Cerecor's product candidates may delay the development or commercialization of its other product candidates.

In addition, Cerecor does not currently have any agreements with third-party manufacturers for the long-term commercial supply of its product candidates. Cerecor may be unable to enter agreements for commercial supply with third-party manufacturers, or may be unable to do so on acceptable terms. Even if Cerecor enters into these agreements, the various manufacturers of each product candidate will likely be single source suppliers to Cerecor for a significant period of time.

The facilities used by Cerecor's contract manufacturers to manufacture Cerecor's product candidates must be approved by the FDA pursuant to inspections that will be conducted after Cerecor submits its NDA to the FDA. While Cerecor is ultimately responsible for the manufacture of its product candidates, other than through its contractual arrangements, Cerecor does not control the manufacturing process of, and is completely dependent on, its contract manufacturing partners for compliance with cGMP requirements for manufacture of both active drug substances and finished drug products for clinical supply and eventually for commercial supply, if Cerecor receives regulatory approval. If Cerecor's contract manufacturers cannot successfully manufacture material that conforms to Cerecor's specifications and the strict regulatory requirements of the FDA or other regulatory

authorities, Cerecor's will not be able to secure and/or maintain regulatory approval for their manufacturing facilities. Failure of Cerecor's contract manufacturers to comply with the applicable regulatory requirements may also subject Cerecor to regulatory enforcement actions. In addition, other than through Cerecor's contractual agreements, Cerecor has no control over the ability of Cerecor's contract manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA or a comparable foreign regulatory authority does not approve these facilities for the manufacture of Cerecor's product candidates or if it withdraws any such approval in the future, Cerecor may need to find alternative manufacturing facilities, which would significantly impact its ability to develop, obtain marketing approval for or market its product candidates, if approved.

Reliance on third-party manufacturers subjects Cerecor to risks that would not affect it if Cerecor manufactured the product candidates itself, including:

- reliance on the third parties for regulatory compliance and quality assurance;
- the possible breach of the manufacturing agreements by the third parties because of factors beyond Cerecor's control;
- the possible misappropriation of Cerecor's proprietary information, including trade secrets and know-how;
- the possibility of termination or nonrenewal of the agreements by the third parties because of Cerecor's breach of the manufacturing agreement or based on their own business priorities;
- the disruption and costs associated with changing suppliers, including additional regulatory filings.
- failure to satisfy their contractual duties or obligations;
- inability to meet Cerecor's product specifications and quality requirements consistently;
- delay or inability to procure or expand sufficient manufacturing capacity;
- manufacturing and/or product quality issues related to manufacturing development and scale-up;
- costs and validation of new equipment and facilities required for scale-up;
- failure to comply with applicable laws, regulations, and standards, including cGMP and similar foreign standards;
- deficient or improper record-keeping;
- contractual restrictions on Cerecor's ability to engage additional or alternative manufacturers;
- inability to negotiate manufacturing agreements with third parties under commercially reasonable terms;
- termination or nonrenewal of manufacturing agreements with third parties in a manner or at a time that is costly or damaging to Cerecor;
- reliance on a limited number of sources, and in some cases, single sources for product components, such that if Cerecor is unable to secure a sufficient supply of these product components, Cerecor will be unable to manufacture and sell its product candidates or any future product candidate in a timely fashion, in sufficient quantities or under acceptable terms;
- lack of qualified backup suppliers for those components that are currently purchased from a sole or single source supplier;
- lack of access or licenses to proprietary manufacturing methods used by third-party manufacturers to make Cerecor's product candidates;

- operations of Cerecor's third-party manufacturers or suppliers could be disrupted by conditions unrelated to Cerecor's business or operations, including the bankruptcy of the manufacturer or supplier or regulatory sanctions related to the manufacture of Cerecor or other company's products;
- carrier disruptions or increased costs that are beyond Cerecor's control; and
- failure to deliver Cerecor's products under specified storage conditions and in a timely manner.

Cerecor's product candidates may compete with other products and product candidates for access to manufacturing facilities. There are a limited number of manufacturers that operate under cGMP regulations and that are both capable of manufacturing for Cerecor and willing to do so. If Cerecor's existing third-party manufacturers, or the third parties that it engages in the future to manufacture a product for commercial sale or for Cerecor's clinical trials, should cease to continue to do so for any reason, Cerecor likely would experience delays in obtaining sufficient quantities of its product candidates for Cerecor to meet commercial demand or to advance its clinical trials while it identifies and qualifies replacement suppliers. If for any reason Cerecor is unable to obtain adequate supplies of its product candidates or the drug substances used to manufacture them, it will be more difficult for Cerecor to develop its product candidates and compete effectively.

Cerecor's suppliers are subject to regulatory requirements, covering manufacturing, testing, quality control, manufacturing, and record keeping relating to its product candidates, and subject to ongoing inspections by the regulatory agencies. Failure by any of Cerecor's suppliers to comply with applicable regulations may result in long delays and interruptions to Cerecor's manufacturing capacity while Cerecor seeks to secure another supplier that meets all regulatory requirements, as well as market disruption related to any necessary recalls or other corrective actions.

Cerecor will continue to depend on Aytu to provide it with certain services to manage the operations of Millipred.

In connection with the sale of Cerecor's Pediatric Portfolio to Aytu, Cerecor retained the rights to Millipred and entered into a Transition Services Agreement with Aytu. Pursuant to the Transition Services Agreement, Aytu is responsible for managing the commercial operations of Millipred, including providing accounting reporting services and managing the third-party logistics provider. Cerecor exercises no control over the activities of Aytu, other than the contractual rights it has pursuant to its Transition Services Agreement. If Aytu were to fail to fulfill all of its obligations under the Transition Service Agreement, Cerecor could suffer operational difficulties or significant losses. If Aytu ceases to provide services pursuant to the Transition Services Agreement, Cerecor might not be able to reestablish its commercial infrastructure to replace these services in a timely manner, if at all, which would materially adversely affect its financial position.

The revenue generated by sales of Millipred will be received by Aytu and subsequently transferred to Cerecor, and any delay or default in payment by Aytu to Cerecor of these revenues could adversely affect Cerecor's cash flows, financial condition, and results of operations. Pursuant to the Transition Services Agreement, Aytu is responsible for managing the commercial operations of Millipred and is obligated to transfer the revenue generated by sales of Millipred to Cerecor on a timely basis. Adverse economic conditions or financial difficulties of Aytu could impair its ability to remit such payment or could cause Aytu to delay such payments. Furthermore, if Aytu were unable to meet its obligations, it could consider restructuring under the bankruptcy laws, which might make it difficult for Cerecor to collect all or a significant portion of the revenues generated by Millipred. Cerecor's inability to collect its revenues generated by Millipred from Aytu could adversely affect its cash flows, financial condition, and results of operations.

Risks Related to Intellectual Property

If Cerecor is unable to obtain or maintain intellectual property rights, or if the scope of patent protection is not sufficiently broad, competitors could develop and commercialize products similar or identical to Cerecor's, and Cerecor might not be able to compete effectively in its market.

Cerecor's success depends in significant part on Cerecor's and its licensors', licensees' or collaborators' ability to establish, maintain and protect patents and other intellectual property rights and operate without infringing the intellectual property rights of others. Cerecor has filed numerous patent applications both in the United States and in foreign jurisdictions to obtain patent rights to inventions it has discovered. Cerecor have also licensed from third parties' rights to patent portfolios.

The patent prosecution process is expensive and time-consuming, and Cerecor and Cerecor's current or future licensors, licensees or collaborators might not be able to prepare, file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that Cerecor or its licensors, licensees or collaborators will fail to identify patentable aspects of inventions made in the course of development and commercialization activities before it is too late to obtain patent protection on them. Moreover, in some circumstances, Cerecor might not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the patents, covering technology that it licenses from or license to third parties and are reliant on Cerecor's licensors, licensees or collaborators. Therefore, these patents and applications might not be prosecuted and enforced in a manner consistent with the best interests of Cerecor's business. If Cerecor's current or future licensors, licensees or collaborators fail to establish, maintain or protect such patents and other intellectual property rights, such rights may be reduced or eliminated. If Cerecor's licensors, licensees or collaborators are not fully cooperative or disagree with Cerecor as to the prosecution, maintenance or enforcement of any patent rights, such patent rights could be compromised.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal and factual questions and has in recent years been the subject of much litigation. As a result, the issuance, scope, validity, enforceability and commercial value of Cerecor and Cerecor's current or future licensors', licensees' or collaborators' patent rights are highly uncertain. Cerecor's and its licensors', licensees' or collaborators' pending and future patent applications might not result in patents being issued which protect Cerecor's technology or products, in whole or in part, or which effectively prevent others from commercializing competitive technologies and products. The patent examination process may require Cerecor or its licensors, licensees or collaborators to narrow the scope of the claims of Cerecor or its licensors', licensees' or collaborators' pending and future patent applications, which may limit the scope of patent protection that may be obtained. Cerecor's and its licensors', licensees' or collaborators' patent applications cannot be enforced against third parties practicing the technology claimed in such applications unless and until a patent issues from such applications, and then only to the extent the issued claims cover the technology.

Furthermore, given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, Cerecor's owned and licensed patent portfolio might not provide Cerecor with sufficient rights to exclude others from commercializing products similar or identical to Cerecor's products. Cerecor expects to seek extensions of patent terms where these are available in any countries where Cerecor is prosecuting patents. This includes in the United States under the Drug Price Competition and Patent Term Restoration Act of 1984, which permits a patent term extension of up to five years beyond the expiration of the patent. However, the applicable authorities, including the FDA in the United States, and any equivalent regulatory authority in other countries, might not agree with Cerecor's assessment of whether such extensions are available, and may refuse to grant extensions to Cerecor's patents, or may grant more limited extensions than Cerecor requests. If this occurs, Cerecor's competitors may take advantage of its investment in development and

clinical trials by referencing its clinical and preclinical data and launch their product earlier than might otherwise be the case.

If Cerecor breaches the license agreements related to its product candidates, Cerecor could lose the ability to develop and commercialize its product candidates.

Cerecor's commercial success depends upon its ability, and the ability of its licensors and collaborators, to develop, manufacture, market and sell Cerecor's product candidates and use Cerecor and its licensors' or collaborators' proprietary technologies without infringing the proprietary rights of third parties. If Cerecor fails to comply with its obligations in the agreements under which it licenses intellectual property rights from third parties or otherwise experience disruptions to Cerecor's business relationships with its licensors, Cerecor could lose the ability to continue the development and commercialization of its product candidates or face other penalties under these agreements. Cerecor has entered into exclusive license agreements with Merck & Co., Inc. and its affiliates ("Merck") pursuant to which Merck has granted Cerecor rights to the compounds used in CERC-301 and the COMTi platform, including CERC-406. If Cerecor fails to comply with the obligations under these agreements, including payment terms, Merck and Lilly may have the right to terminate any of these agreements, in which event Cerecor might not be able to develop, market or sell the relevant product candidate. Such an occurrence could materially adversely affect the value of the product candidate being developed under any such agreement. Termination of these agreements or reduction or elimination of Cerecor's rights under these agreements may result in Cerecor having to negotiate new or reinstated agreements, which might not be available to Cerecor on equally favorable terms, or at all, or cause Cerecor to lose its rights under these agreements, including its rights to intellectual property or technology important to Cerecor's development programs. Any of these occurrences may harm Cerecor's business, financial condition and prospects significantly.

Cerecor may be required to make significant payments in connection with the license and development agreements it acquired in its Merger with Aevi.

Following the Merger with Aevi, Cerecor is now party to license agreements and a research agreement with The Children's Hospital of Philadelphia ("CHOP") and the Center for Applied Genomics ("CAG"), and a Development and Option Agreement with Kyowa Hakko Kirin Co., Ltd. (the "KHK Development and Option Agreement") pursuant to which we exclusively licenses certain technology related to the development of CERC-002 and CERC-005, a license agreement with OSI Pharmaceuticals, LLC, a wholly owned subsidiary of Astellas Pharma, Inc. ("Astellas"), for CERC-006 and a license and option agreement with MedImmune Limited, a subsidiary of AstraZeneca plc ("AstraZeneca"), for CERC-007. We may be required to make significant payments in connection with the license agreements and research agreement with CHOP and have certain ongoing payment obligations with respect to the Research Agreement. If we exercise our option under the terms of KHK Development and Option Agreement, we will be obligated to cover significant development costs for CERC-002 and make significant payments in connection with certain milestones and the sale of resulting products. Pursuant to the exercise of the AZ Option, we are obligated to spend significant amounts to develop the program. If we develop CERC-006, it will have significant obligations to Astellas under the license agreement with OSI Pharmaceuticals, LLC, a wholly owned subsidiary of Astellas. If the obligations become due under the terms any of these agreements, we might not have sufficient funds available to meet its obligations and its development efforts may be negatively impacted. In addition, if we do not have sufficient funds to pay its ongoing obligations under the development agreement with CHOP, we may lose our rights under that agreement, which would negatively impact their development capabilities.

Obtaining and maintaining Cerecor's patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and Cerecor's patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance and annuity fees on any issued patent are due to be paid to the USPTO, and foreign patent agencies in several stages over the lifetime of the patent. The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If Cerecor or its licensors or collaborators fails to maintain the patents and patent applications covering its product candidates, Cerecor's competitors might be able to enter the market, which would have a material adverse effect on Cerecor's business.

Third parties may initiate legal proceedings against Cerecor alleging that it infringed their intellectual property rights, or Cerecor may initiate legal proceedings against third parties to challenge the validity or scope of intellectual property rights controlled by third parties, the outcome of which would be uncertain and could have a material adverse effect on the success of Cerecor's business.

Third parties may initiate legal proceedings against Cerecor or its licensors or collaborators alleging that Cerecor or its licensors or collaborators infringe their intellectual property rights or Cerecor or its licensors or collaborators may initiate legal proceedings against third parties to challenge the validity or scope of intellectual property rights controlled by third parties, including in oppositions, interferences, reexaminations, inter partes reviews or derivation proceedings before the United States or other jurisdictions. These proceedings can be expensive and time-consuming and many of Cerecor's or its licensors' or collaborators' adversaries in these proceedings may have the ability to dedicate substantially greater resources to prosecuting these legal actions than Cerecor or its licensors or collaborators can.

An unfavorable outcome could require Cerecor or its licensors or collaborators to cease using the related technology or developing or commercializing its product candidates, or to attempt to license rights to it from the prevailing party. Cerecor's business could be harmed if the prevailing party does not offer Cerecor or its licensors or collaborators a license on commercially reasonable terms or at all. Even if Cerecor or its licensors or collaborators obtain a license, it may be non-exclusive, thereby giving Cerecor's competitors access to the same technologies licensed to Cerecor or its licensors or collaborators. In addition, Cerecor could be found liable for monetary damages, including treble damages and attorneys' fees, if Cerecor is found to have willfully infringed a patent. A finding of infringement could prevent Cerecor from commercializing its product candidates or force Cerecor to cease some of its business operations, which could materially harm Cerecor's business.

Cerecor may become involved in lawsuits to protect or enforce its intellectual property, which could be expensive, time-consuming and unsuccessful and have a material adverse effect on the success of Cerecor's business.

Third parties may infringe on Cerecor's or its licensors' or collaborators' patents or misappropriate or otherwise violate Cerecor's or its licensors' or collaborators' intellectual property rights. In the future, Cerecor or its licensors or collaborators may initiate legal proceedings to enforce or defend Cerecor's or its licensors' or collaborators' intellectual property rights, to protect Cerecor's or its licensors' or collaborators' trade secrets or to determine the validity or scope of intellectual property

rights Cerecor owns or controls. Also, third parties may initiate legal proceedings against Cerecor or its licensors or collaborators to challenge the validity or scope of intellectual property rights Cerecor owns or controls. The proceedings can be expensive and time-consuming and many of Cerecor's or its licensors' or collaborators' adversaries in these proceedings may have the ability to dedicate substantially greater resources to prosecuting these legal actions than Cerecor or its licensors or collaborators can. Accordingly, despite Cerecor's or its licensors' or collaborators' efforts, Cerecor or its licensors or collaborators might not prevent third parties from infringing upon or misappropriating intellectual property rights Cerecor owns or controls, particularly in countries where the laws might not protect those rights as fully as in the United States. Litigation could result in substantial costs and diversion of management resources, which could harm Cerecor's business and financial results. In addition, in an infringement proceeding, a court may decide that a patent owned by or licensed to Cerecor is invalid or unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that Cerecor's or its licensors' or collaborators' patents do not cover the technology in question. An adverse result in any litigation proceeding could put one or more of Cerecor's or its licensors' or collaborators' patents at risk of being invalidated, held unenforceable or interpreted narrowly.

Third party pre-issuance submission of prior art to the USPTO, or opposition, derivation, reexamination, inter partes review or interference proceedings, or other pre-issuance or post-grant proceedings in the United States or other jurisdictions provoked by third parties or brought by Cerecor or its licensors or collaborators may be necessary to determine the priority of inventions with respect to Cerecor's or its licensors' or collaborators' patents or patent applications. An unfavorable outcome could require Cerecor or its licensors or collaborators to cease using the related technology and commercializing its product candidates, or to attempt to license rights to it from the prevailing party. Cerecor's business could be harmed if the prevailing party does not offer Cerecor or its licensors or collaborators a license on commercially reasonable terms or at all. Even if Cerecor or its licensors or collaborators obtain a license, it may be non-exclusive, thereby giving Cerecor's competitors access to the same technologies licensed to Cerecor or its licensors or collaborators. In addition, if the breadth or strength of protection provided by Cerecor's or its licensors' or collaborators' patents and patent applications is threatened, it could dissuade companies from collaborating with Cerecor to license, develop or commercialize current or future product candidates. Even if Cerecor successfully defends such litigation or proceeding, Cerecor may incur substantial costs and it may distract Cerecor's management and other employees. Cerecor could be found liable for monetary damages, including treble damages and attorneys' fees if Cerecor is found to have willfully infringed a patent.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of Cerecor's confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the price of Cerecor's warrants or shares of its common stock.

Cerecor may be subject to claims by third parties asserting that its employees or Cerecor has misappropriated their intellectual property, or claiming ownership of what Cerecor regards as its own intellectual property.

Many of Cerecor's employees, including its senior management, were previously employed at universities or at other biotechnology or pharmaceutical companies, including Cerecor's competitors or potential competitors. Some of these employees executed proprietary rights, non-disclosure and non-competition agreements in connection with such previous employment. Cerecor may be subject to claims that Cerecor or these employees have used or disclosed confidential information or intellectual property, including trade secrets or other proprietary information, of any such employee's former employer. In addition, Cerecor may be subject to claims that former employees, collaborators, or other

third parties have an ownership interest in Cerecor's patents or other intellectual property. While it is Cerecor's policy to require its employees and contractors who may be involved in the development of intellectual property to execute agreements assigning such intellectual property to Cerecor, Cerecor may be unsuccessful in executing such an agreement to each party who in fact develops intellectual property that Cerecor regards as its own. Cerecor could be subject to ownership disputes arising, for example, from conflicting obligations of consultants or others who are involved in developing Cerecor's product candidates. Litigation may be necessary to defend against these claims.

If Cerecor fails in prosecuting or defending any such claims, in addition to paying monetary damages, Cerecor may lose valuable intellectual property rights or personnel or sustain damages. Such intellectual property rights could be awarded to a third party, and Cerecor could be required to obtain a license from such third party to commercialize its technology or products. Such a license might not be available on commercially reasonable terms or at all. Even if Cerecor successfully prosecutes or defends against such claims, litigation could result in substantial costs and distract management.

Cerecor's inability to protect its confidential information and trade secrets would harm Cerecor's business and competitive position.

In addition to seeking patents for some of Cerecor's technology and products, Cerecor also relies on trade secrets, including unpatented know-how, technology and other proprietary information, to maintain Cerecor's competitive position. Though Cerecor seeks to protect these trade secrets, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to them, such as Cerecor's employees, corporate collaborators, outside scientific collaborators, contract manufacturers, consultants, advisors and other third parties, as well as by entering into confidentiality and invention or patent assignment agreements with Cerecor's employees and consultants, any of these parties may breach the agreements and disclose Cerecor's proprietary information, including Cerecor's trade secrets, and Cerecor might not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts both within and outside the United States may be less willing or unwilling to protect trade secrets. If a competitor lawfully obtained or independently developed any of Cerecor's trade secrets, Cerecor would have no right to prevent such competitor from using that technology or information to compete with Cerecor, which could harm Cerecor's competitive position.

Changes in patent law could diminish the value of patents in general, thereby impairing Cerecor's ability to protect its product candidates.

As is the case with other biotechnology and pharmaceutical companies, Cerecor's success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the biopharmaceutical industry involve technological and legal complexity, and obtaining and enforcing biopharmaceutical patents is costly, time-consuming, and inherently uncertain. The Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to Cerecor's and its licensors' or collaborators' ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by Congress, the federal courts, and the USPTO the laws and regulations governing patents could change in unpredictable ways that would weaken Cerecor's and its licensors' or collaborators' ability to obtain new patents or to enforce existing patents and patents Cerecor and its licensors or collaborators may obtain in the future. Recent patent reform legislation could increase the uncertainties and costs surrounding the prosecution of Cerecor's and its licensors' or collaborators' patent applications and the enforcement or defense of Cerecor's or its licensors' or collaborators' issued patents. On September 16, 2011, the America Invents Act was signed

into law. The America Invents Act includes a number of significant changes to United States patent law. These include provisions that affect the way patent applications are prosecuted and may also affect patent litigation. The USPTO recently developed new regulations and procedures to govern administration of the America Invents Act, and many of the substantive changes to patent law associated with the America Invents Act, and in particular, the first to file provisions, only became effective on March 16, 2013. Accordingly, it is not clear what, if any, impact the America Invents Act will have on the operation of Cerecor's business. However, the America Invents Act and its implementation could increase the uncertainties and costs surrounding the prosecution of Cerecor's or its licensors' or collaborators' patent applications and the enforcement or defense of Cerecor's or its licensors' or collaborators' issued patents, all of which could have a material adverse effect on Cerecor's business and financial condition.

Cerecor might not be able to protect its intellectual property rights throughout the world.

Filing, prosecuting, enforcing and defending patents on product candidates in all countries throughout the world would be prohibitively expensive, and Cerecor's or its licensors' or collaborators' intellectual property rights in some countries outside the United States can be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, Cerecor and its licensors or collaborators might not be able to prevent third parties from practicing Cerecor's and its licensors' or collaborators' inventions in all countries outside the United States, or from selling or importing products made using Cerecor's and its licensors' or collaborators' inventions in and into the United States or other jurisdictions. Competitors may use Cerecor's and its licensors' or collaborators' technologies in jurisdictions where Cerecor has not obtained patent protection to develop their own products and further, may export otherwise infringing products to territories where Cerecor and its licensors or collaborators have patent protection, but enforcement is not as strong as that in the United States. These products may compete with Cerecor's product candidates and Cerecor's and its licensors' or collaborators' patents or other intellectual property rights might not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biopharmaceuticals, which could make it difficult for Cerecor and its licensors or collaborators to stop the infringement of Cerecor's and its licensors' or collaborators' patents or marketing of competing products in violation of Cerecor's and its licensors' or collaborators' proprietary rights generally. Proceedings to enforce Cerecor's and its licensors' or collaborators' patent rights in foreign jurisdictions could result in substantial costs and divert Cerecor's and its licensors' or collaborators' efforts and attention from other aspects of Cerecor's business, could put Cerecor's and its licensors' or collaborators' patents at risk of being invalidated or interpreted narrowly and Cerecor's and its licensors' or collaborators' patent applications at risk of not issuing and could provoke third parties to assert claims against Cerecor or its licensors or collaborators. Cerecor or its licensors or collaborators might not prevail in any lawsuits that Cerecor or its licensors or collaborators initiate and the damages or other remedies awarded, if any, might not be commercially meaningful.

The requirements for patentability may differ in certain countries, particularly developing countries. For example, unlike other countries, China has a heightened requirement for patentability, and specifically requires a detailed description of medical uses of a claimed drug. In India, unlike the United States, there is no link between regulatory approval of a drug and its patent status. Furthermore, generic or biosimilar drug manufacturers or other competitors may challenge the scope, validity or enforceability of Cerecor's or its licensors' or collaborators' patents, requiring Cerecor or its

licensors or collaborators to engage in complex, lengthy and costly litigation or other proceedings. Generic or biosimilar drug manufacturers may develop, seek approval for, and launch biosimilar versions of Cerecor's products. In addition to India, certain countries in Europe and developing countries, including China, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In those countries, Cerecor and its licensors or collaborators may have limited remedies if patents are infringed or if Cerecor or its licensors or collaborators are compelled to grant a license to a third party, which could materially diminish the value of those patents. This could limit Cerecor's potential revenue opportunities. Accordingly, Cerecor and its licensors' or collaborators' efforts to enforce intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that Cerecor owns or licenses.

Risks Related to Our Financial Position and Capital Needs

We might require additional capital to continue to fund our operations and to finance the further advancement of our product candidates, which might not be available to us on acceptable terms, or at all. Failure to obtain any necessary capital will force us to delay, limit or terminate our product development efforts or cease our operations.

At September 30, 2019, Cerecor had $5.3 million in cash and cash equivalents and $17.3 million in current liabilities. Accordingly, Cerecor might not currently have sufficient funds to finance its continuing operations beyond the short term or to further advance any of its product candidates.

As a research and development company, Cerecor's operations have consumed substantial amounts of cash since inception. Identifying potential product candidates and conducting preclinical testing and clinical trials is a time-consuming, expensive and uncertain process that takes years to complete, and Cerecor expects its research and development expenses to increase substantially in connection with its ongoing activities, particularly as Cerecor advances its product candidates into clinical trials or obtains and advances additional product candidates. Circumstances may cause Cerecor to consume capital more rapidly than it currently anticipates. Cerecor may need to raise additional funds or otherwise obtain funding through collaborations if Cerecor chooses to initiate additional clinical trials for product candidates.

Additional fundraising efforts may divert Cerecor's management from its day-to-day activities, which may adversely affect Cerecor's ability to develop and commercialize its product candidates. In addition, Cerecor cannot guarantee that future financing will be available in sufficient amounts or on terms acceptable to Cerecor, if at all. If Cerecor does not raise additional capital when required or on acceptable terms, Cerecor may need to:

- significantly delay, scale back or discontinue the development or commercialization of one or more of Cerecor's product candidates or cease operations altogether;
- seek strategic alliances for research and development programs at an earlier stage than Cerecor would otherwise desire or on terms less favorable than might otherwise be available; or
- relinquish, or license on unfavorable terms, Cerecor's rights to technologies or any future product candidates that Cerecor otherwise would seek to develop or commercialize itself.

Cerecor's future funding requirements, both short and long term, will depend on many factors, including:

- the initiation, progress, timing, costs and results of preclinical and clinical studies for Cerecor's product candidates and future product candidates it may develop;

- the outcome, timing and cost of seeking and obtaining regulatory approvals from the FDA and comparable foreign regulatory authorities, including the potential for such authorities to require that Cerecor perform more studies than Cerecor currently expects to perform;
- the cost to establish, maintain, expand and defend the scope of Cerecor's intellectual property portfolio, including the amount and timing of any payments Cerecor may be required to make, or that Cerecor may receive, in connection with licensing, preparing, filing, prosecuting, defending and enforcing any patents or other intellectual property rights;
- the effect of competing technological and market developments;
- market acceptance of any approved product candidates;
- the costs of acquiring, licensing or investing in additional businesses, products, product candidates and technologies;
- the cost and timing of selecting, auditing and potentially validating a manufacturing site for commercial-scale manufacturing; and
- the cost of developing Cerecor's sales, marketing and distribution capabilities to accommodate any of Cerecor's product candidates for which it receives marketing approval and that Cerecor determines to commercialize itself or in collaboration with its partners.

Cerecor's role as a guarantor of Certain Obligations assigned to Aytu BioScience, Inc. ("Aytu") exposes it to risk of loss or illiquidity.

In connection with the sale of Cerecor's pediatric portfolio to Aytu, Aytu assumed Cerecor's financial obligations to Deerfield CSF, LLC ("Deerfield"), which include a $15 million loan due in January 2021 minimum monthly and royalty payments of the higher of 15% of net sales or $100,000 through the earlier of February 2026 (the "Deerfield Obligation") or reaching the maximum aggregated royalty payment of $12.5 million. The Deerfield Obligation could be accelerated upon default or a breach of covenants. Cerecor also assigned payment obligations ("TRIS Obligations") to Aytu under a supply and distribution agreement with TRIS Pharma (the "Karbinal Agreement"). As a part of these assignments, Cerecor also became a guarantor to the Deerfield Obligation and the TRIS Obligation. If Aytu defaults under the terms of the agreement with Deerfield or TRIS, Cerecor could be liable as a guarantor for unpaid amounts of the Deerfield Obligation and the TRIS Obligation. Cerecor currently does not have cash on hand to permit it to pay the entire amount that could become due under the Deerfield Obligation, and any amount Cerecor would be required to pay under the Karbinal Agreement would limit the amount of cash available for development of Cerecor's clinical pipeline. If Cerecor were to become required to pay the Deerfield Obligation, such obligation could significantly impair its ability to continue as a going concern and its ability to continue operations. Even if Cerecor were to have sufficient liquidity to pay the TRIS Obligation, or obtain funding to meet the Deerfield Obligation, Cerecor might not be able to recover the cost of such a payment and may therefore be exposed to significant losses, which would materially and adversely affect Cerecor's results of operations.

Cerecor has incurred significant net losses in most periods since its inception and Cerecor might continue to incur net losses in the future.

Investment in biopharmaceutical product development is highly speculative because it entails substantial upfront capital expenditures and significant risk that any potential product candidate will fail to demonstrate an adequate effect or acceptable safety profile, gain marketing approval and become commercially viable. Historically, Cerecor financed its operations primarily through private placements of its common and convertible preferred stock and convertible debt. Cerecor incurred net loss of $4.0 million for the three months ended September 30, 2019. As of September 30, 2019, Cerecor had

an accumulated deficit of $115.9 million. Substantially all of Cerecor's operating losses have resulted from costs incurred in connection with its research and development program and from general and administrative costs associated with its operations.

Cerecor expects to continue to incur losses in the future and it might never achieve profitability on an annual basis. Cerecor may also encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect its business. Cerecor's future profitability will depend, in part, on the rate of future growth of Cerecor's expenses and Cerecor's ability to generate revenues. Cerecor's prior losses and expected future losses have had and will continue to have an adverse effect on Cerecor's stockholders' equity and working capital.

Cerecor's ability to use its NOL carryforwards and certain other tax attributes may be limited.

Cerecor has a significant amount of gross NOLs for federal and state purposes. The NOLs accumulated through the end of 2017 will begin to expire in 2031. Unused NOLs for the current tax year and prior tax years will carry forward to offset future taxable income, if any, until such unused losses expire. Unused NOLs generated after December 31, 2017, will not expire and may be carried forward indefinitely but will be only deductible to the extent of 80% of current year taxable income in any given year. In addition, both the deductibility of current and future unused NOL carryovers may be subject to limitation under Sections 382 and 383 of the Code as described above.

In connection with the reporting of Cerecor's financial condition and results of operations, Cerecor is required to make estimates and judgments which involve uncertainties, and any significant differences between Cerecor's estimates and actual results could have an adverse impact on Cerecor's financial position, results of operations and cash flows.

Cerecor's discussion and analysis of its financial condition and results of operations are based on its financial statements, which have been prepared in accordance with generally accepted accounting principles in the United States, or GAAP. The preparation of these financial statements requires Cerecor to make estimates and judgments that affect the reported amounts of assets, liabilities, expenses and revenues and related disclosure of contingent assets and liabilities. For example, Cerecor estimates returns, wholesaler fees, prompt payment discounts, chargebacks and government rebates. Cerecor also estimates clinical trial costs incurred using subject data and information from Cerecor's CROs. If Cerecor' underestimates or overestimates these expenses, adjustments to expenses may be necessary in future periods. Any significant differences between Cerecor's actual results and Cerecor's estimates and assumptions could negatively impact Cerecor's financial position, results of operations and cash flows.

Cerecor's operating results fluctuate from quarter to quarter and year-to-year, making future operating results difficult to predict.

Cerecor's quarterly and annual operating results historically have fluctuated and are likely to continue to fluctuate depending on several factors, many of which are beyond Cerecor's control. Accordingly, Cerecor's quarterly and annual results are difficult to predict prior to the end of the quarter or year, and Cerecor may be unable to confirm or adjust expectations with respect to Cerecor's operating results for a particular period until that period has closed. Any failure to meet Cerecor's quarterly or annual revenue or earnings targets could adversely impact the market price of Cerecor's securities. Therefore, you should not rely upon the results of any quarterly or annual periods as indications of future operating performance.

Cerecor engages in in-licensing, acquisitions or other strategic transactions that could impact its liquidity, increase its expenses and divert a significant amount of Cerecor's management's time.

Since inception, Cerecor has acquired or in-licensed product candidates, most recently product candidates Cerecor acquired from its Merger with Aevi. As a part of the Aevi Merger, Cerecor issued approximately 3,889,801 shares of Cerecor's common stock at closing, and payment of contingent value rights, which represent the right to receive contingent payments upon the achievement of certain milestones of up to an additional $6,500,000, payable either in shares of Cerecor's common stock or in cash. From time to time Cerecor may consider additional in-licensing of products and other strategic transactions, such as acquisitions of companies, asset purchases and out-licensing of product candidates or technologies. Additional potential transactions that Cerecor may consider include a variety of different business arrangements, including strategic partnerships, collaborations, joint ventures, business combinations and investments. Any such transaction may require Cerecor to incur non-recurring or other charges, may increase Cerecor's near and long-term expenditures and may pose significant integration challenges or disrupt Cerecor's management or business, which could adversely affect Cerecor's operations and financial results. For example, these transactions may entail numerous operational and financial risks, including:

- exposure to unknown liabilities;
- disruption of Cerecor's business and diversion of its management's time and attention in order to develop acquired products, product candidates or technologies;
- incurrence of substantial debt or dilutive issuances of equity securities to pay for acquisitions or to fund the operations;
- higher than expected acquisition and integration costs;
- write-downs of assets or goodwill or impairment charges;
- increased amortization expenses;
- difficulty and cost in combining the operations and personnel of any acquired businesses with Cerecor's operations and personnel;
- impairment of relationships with key suppliers or other counterparties of any acquired businesses due to changes in management and ownership; and
- inability to retain key employees of any acquired businesses.

Risks Related to our Stock

If Cerecor is not able to comply with the applicable continued listing requirements or standards of The Nasdaq Stock Market, Nasdaq could delist Cerecor's common stock.

Cerecor's common stock is currently listed on The Nasdaq Stock Market. In order to maintain that listing, Cerecor must satisfy minimum financial and other continued listing requirements and standards, including those regarding director independence and independent committee requirements, minimum stockholders' equity, minimum share price, and certain corporate governance requirements. There can be no assurances that Cerecor will be able to comply with the applicable listing standards.

In the event that Cerecor's common stock is delisted from The Nasdaq Stock Market and is not eligible for quotation or listing on another market or exchange, trading of Cerecor's common stock could be conducted only in the over-the-counter market or on an electronic bulletin board established for unlisted securities such as the Pink Sheets or the OTC Bulletin Board. In such event, it could become more difficult to dispose of, or obtain accurate price quotations for, Cerecor's common stock, and there would likely also be a reduction in Cerecor's coverage by securities analysts and the news

media, which could cause the price of Cerecor's common stock to decline further. Also, it may be difficult for Cerecor to raise additional capital if it is not listed on a major exchange.

Such a de-listing would also likely have a negative effect on the price of Cerecor's common stock and would impair your ability to sell or purchase Cerecor's common stock when you wish to do so. In the event of a de-listing, Cerecor may take actions to restore its compliance with The Nasdaq Stock Market's listing requirements, but Cerecor can provide no assurance that any such action taken by Cerecor would allow its common stock to become listed again, stabilize the market price or improve the liquidity of its common stock, prevent its common stock from dropping below The Nasdaq Stock Market minimum bid price requirement or prevent future non-compliance with The Nasdaq Stock Market's listing requirements.

The market price of Cerecor's stock is volatile, and you could lose all or part of your investment.

The market price of Cerecor's shares of its common stock has been highly volatile and subject to wide fluctuations in response to various factors, some of which Cerecor cannot control. From Cerecor's initial public offering in October 2015 through January 30, 2020, the per share trading price of Cerecor's common stock has been as high as $7.65 and as low as $0.34. As a result of this volatility, you might not be able to sell your shares of Cerecor's common stock at a favorable price. In addition to the factors discussed in this "Risk Factors" section and elsewhere in this proxy statement/prospectus, these factors that could negatively affect or result in fluctuations in the market price of shares of Cerecor's common stock include:

- Cerecor's ability to generate significant product revenues, cash flows and a profit;
- the development status of Cerecor's product candidates, and when any of Cerecor's product candidates receive marketing approval;
- Cerecor's decision to initiate a clinical trial, not to initiate a clinical trial or to terminate an existing clinical trial;
- Cerecor's failure to commercialize its product candidates, if approved;
- the success of competitive products or technologies;
- regulatory actions with respect to Cerecor's products or Cerecor's competitors' products;
- actual or anticipated changes in Cerecor's growth rate relative to Cerecor's competitors;
- announcements by Cerecor or Cerecor's competitors of significant acquisitions, strategic collaborations, joint ventures, collaborations or capital commitments;
- results of preclinical studies and clinical trials of Cerecor's product candidates or those of Cerecor's competitors;
- regulatory or legal developments in the United States and other countries;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key personnel;
- the level of expenses related to any of Cerecor's product candidates or clinical development programs;
- the results of Cerecor's efforts to discover, develop, in-license or acquire additional product candidates or products;

- actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;
- the performance of third parties on whom Cerecor relies to manufacture its products and product candidates, supply API and conduct its clinical trials, including their ability to comply with regulatory requirements;
- variations in Cerecor's financial results or those of companies that are perceived to be similar to Cerecor;
- variations in the level of expenses related to Cerecor's product candidates or preclinical and clinical development programs, including relating to the timing of invoices from, and other billing practices of, Cerecor's CROs and clinical trial sites;
- fluctuations in the valuation of companies perceived by investors to be comparable to Cerecor;
- warrant or share price and volume fluctuations attributable to inconsistent trading volume levels of Cerecor's warrants or shares;
- announcement or expectation of additional financing efforts;
- sales of Cerecor's warrants or shares of Cerecor's common stock by Cerecor, its insiders or its other security holders;
- changes in the structure of healthcare payment systems;
- changes in operating performance and stock market valuations of other pharmaceutical companies;
- market conditions in the pharmaceutical and biotechnology sectors;
- Cerecor's execution of collaborative, co-promotion, licensing or other arrangements, and the timing of payments Cerecor may make or receive under these arrangements;
- additional state and federal healthcare reform measures that could put downward pricing pressure on Cerecor's products;
- the public's response to press releases or other public announcements by Cerecor or third parties, including Cerecor's filings with the SEC and announcements relating to litigation or other disputes, strategic transactions or intellectual property impacting Cerecor or Cerecor's business;
- announcement related to litigation;
- fluctuations in quarterly operating results, as well as differences between Cerecor's actual financial and operating results and those expected by investors;
- the financial projections Cerecor may provide to the public, any changes in these projections or Cerecor's failure to meet these projections;
- changes in financial estimates by any securities analysts who follow Cerecor's warrants or shares of common stock, Cerecor's failure to meet these estimates or failure of those analysts to initiate or maintain coverage of Cerecor's warrants or shares of common stock;
- ratings downgrades by any securities analysts who follow Cerecor's warrants or shares of common stock;
- the development and sustainability of an active trading market for Cerecor's shares of common stock;
- future sales of Cerecor's shares of common stock by Cerecor's officers, directors and significant stockholders;

- other events or factors, including those resulting from war, incidents of terrorism, natural disasters or responses to these events;
- changes in accounting principles; and
- general economic, industry and market conditions.

In addition, the stock market in general, and the market for biotechnology companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors may negatively affect the market price of shares of common stock, regardless of Cerecor's actual operating performance. The realization of any of the above risks or any of a broad range of other risks, including those described in this "Risk Factors" section, could have a material adverse impact on the market price of Cerecor's shares of common stock. When the market price of a stock is volatile, security holders often institute class action litigation against the company that issued the stock. If Cerecor becomes involved in this type of litigation, regardless of the outcome, Cerecor could incur substantial legal costs and Cerecor's management's attention could be diverted from the operation of Cerecor's business, which could have a material adverse effect on Cerecor's business, financial condition, results of operations and cash flows.

Future sales and issuances of shares of Cerecor's common stock or rights to purchase common stock, including pursuant to Cerecor's equity incentive plans, could result in additional dilution of the percentage ownership of Cerecor's stockholders and could cause Cerecor's stock price to fall.

Cerecor expects that additional capital may be needed in the future to continue Cerecor's planned operations, including conducting clinical trials, commercialization efforts, expanded research and development activities and costs associated with operating a public company. To raise capital, Cerecor may sell common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner Cerecor determines from time to time. If Cerecor sells common stock, convertible securities or other equity securities in more than one transaction, investors may be materially diluted by subsequent sales. Such sales may also result in material dilution to Cerecor's existing stockholders, and new investors could gain rights, preferences and privileges senior to Cerecor's existing stockholders.

Cerecor is authorized to grant equity awards, including stock grants and stock options, to Cerecor's employees, directors and consultants. As of December 31, 2019, there were 2,532,162 shares available for future issuance under the Second and Amended 2016 Equity Incentive Plan ("the 2016 Amended Plan"). 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 Cerecor on the last trading day in December of the prior calendar year. On January 1, 2020, on the terms of the 2016 Amended Plan an additional 1,775,368 shares were made available for issuance for a total of 4,307,530shares available for issuance. In addition, as of December 31, 2019, there were 1,118,882 shares available for future issuance under the 2016 Employee Stock Purchase Plan (the "ESPP"). On January 1 of each calendar year, the aggregate number of shares that may be issued under the ESPP will automatically increase by a number equal to the lesser of (i) 1% of the total number of shares of Cerecor's common stock outstanding on December 31 of the preceding calendar year, and (ii) 500,000 shares of Cerecor's common stock, or (iii) a number of shares of Cerecor's common stock as determined by Cerecor's board of directors or compensation committee. On January 1, 2020, the number of shares available for issuance under the ESPP increased by 443,842 for a total of 1,562,724 shares available for issuance. Future issuances, as well as the possibility of future issuances, under the 2016 Amended Plan or the ESPP or other equity incentive plans could cause the market price of Cerecor's common stock to decrease.

Armistice has significant influence over Cerecor, and its interests may be different from or conflict with those of Cerecor's other stockholders.

Following the closing of the Merger, as of February 3, 2020, Armistice Capital, LLC ("Armistice") beneficially own approximately 59% of Cerecor's outstanding common stock. As a consequence, Armistice continues to be able to exert a significant degree of influence over Cerecor's management, affairs, and matters requiring stockholder approval, including the election of directors, a merger, consolidation or sale of all or substantially all of Cerecor's assets, and any other significant transaction. The interests of Armistice might not always coincide with Cerecor's interests or the interests of Cerecor's other stockholders. For instance, this concentration of ownership may have the effect of delaying or preventing a change in control of Cerecor otherwise favored by Cerecor's other stockholders and could depress Cerecor's stock price.

Armistice makes investments in companies and may, from time to time, acquire and hold interests in businesses that compete directly or indirectly with Cerecor. Armistice may also pursue, for its own account, acquisition opportunities that may be complementary to Cerecor's business, and as a result, those acquisition opportunities might not be available to Cerecor. The interests of the Armistice may supersede Cerecor, causing Armistice or their affiliates to compete against Cerecor or to pursue opportunities instead of Cerecor, for which Cerecor has no recourse. Such actions on the part of Armistice and inaction on Cerecor's part could have a material adverse effect on Cerecor's business, financial condition, results of operations and cash flows.

Armistice controls a seat on Cerecor's board of directors. Since Armistice could invest in entities that directly or indirectly compete with Cerecor, when conflicts arise between the interests of Armistice and the interests of Cerecor's stockholders, this director might not be disinterested.

Sales of a significant number of shares of Cerecor's common stock in the public markets, or the perception that such sales could occur, could depress the market price of Cerecor's common stock.

Sales of a substantial number of shares of Cerecor's common stock in the public markets could depress the market price of Cerecor's common stock and impair Cerecor's ability to raise capital through the sale of additional equity securities. As additional shares of Cerecor's common stock become available for resale in the public market pursuant to this offering, and otherwise, the supply of Cerecor's common stock will increase, which could decrease its price. In addition, some or all of the shares of common stock may be offered from time to time in the open market pursuant to Rule 144, and these sales may have a depressive effect on the market for Cerecor's shares of common stock. Therefore, Cerecor cannot predict the effect that future sales of Cerecor's common stock would have on the market price of its common stock.

Cerecor has never paid cash dividends on its capital stock, and it does not anticipate paying any cash dividends in the foreseeable future.

The continued operation and expansion of Cerecor's business will require substantial funding. Cerecor currently intends to retain all of its future earnings, if any, to finance the growth and development of its business. Accordingly, Cerecor does not anticipate that it will pay any cash dividends on shares of Cerecor's common stock for the foreseeable future. Consequently, currently stockholders must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investment. Any determination to pay dividends in the future will be at the discretion of Cerecor's board of directors and will depend upon results of operations, financial condition, contractual restrictions, restrictions imposed by applicable law and other factors Cerecor's board of directors deems relevant.

Cerecor is an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012 ("JOBS Act") and will be able to avail itself of reduced disclosure requirements applicable to emerging growth companies, which could make Cerecor's securities less attractive to investors and adversely affect the market price of Cerecor's securities.

For so long as Cerecor remains an "emerging growth company" as defined in the JOBS Act, Cerecor may take advantage of certain exemptions from various requirements applicable to public companies that are not "emerging growth companies" including:

- the provisions of Section 404(b) of the Sarbanes-Oxley Act of 2002, or Sarbanes-Oxley Act, requiring that Cerecor's independent registered public accounting firm provide an attestation report on the effectiveness of Cerecor's internal control over financial reporting;
- the "say on pay" provisions (requiring a non-binding stockholder vote to approve compensation of certain executive officers) and the "say on golden parachute" provisions (requiring a non-binding stockholder vote to approve golden parachute arrangements for certain executive officers in connection with mergers and certain other business combinations) of the Dodd-Frank Act and some of the disclosure requirements of the Dodd-Frank Act relating to compensation of Cerecor's chief executive officer.
- the requirement to provide detailed compensation discussion and analysis in proxy statements and reports filed under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and instead provide a reduced level of disclosure concerning executive compensation; and
- any rules that the Public Company Accounting Oversight Board may adopt requiring mandatory audit firm rotation or a supplement to the auditor's report on the financial statements.

Cerecor may take advantage of these exemptions until it is no longer an "emerging growth company." Cerecor would cease to be an "emerging growth company" upon the earliest of: (i) the first fiscal year following the fifth anniversary of Cerecor's initial public offering; (ii) the first fiscal year after Cerecor's annual gross revenues are $1.07 billion or more; (iii) the date on which Cerecor has, during the previous three-year period, issued more than $1.07 billion in non-convertible debt securities; or (iv) as of the end of any fiscal year in which the market value of Cerecor's common stock held by non-affiliates exceeded $700 million as of the end of the second quarter of that fiscal year.

Cerecor has determined to take advantage of some, but not all, of the reduced regulatory and reporting requirements that will be available to it so long as it qualifies as an "emerging growth company." For example, Cerecor has irrevocably elected not to take advantage of the extension of time to comply with new or revised financial accounting standards available under Section 102(b) of the JOBS Act. Cerecor's independent registered public accounting firm will not be required to provide an attestation report on the effectiveness of Cerecor's internal control over financial reporting so long as Cerecor qualifies as an "emerging growth company," which may increase the risk that material weaknesses or significant deficiencies in Cerecor's internal control over financial reporting go undetected. Likewise, so long as Cerecor qualifies as an "emerging growth company," it may elect not to provide you with certain information, including certain financial information and certain information regarding compensation of Cerecor's executive officers, that it would otherwise have been required to provide in filings Cerecor makes with the SEC which may make it more difficult for investors and securities analysts to evaluate Cerecor. Even after Cerecor "no longer qualifies as an emerging growth company, Cerecor may still qualify as a "smaller reporting company," which would allow it to take advantage of many of the same exemptions from disclosure requirements, including not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act and reduced disclosure obligations regarding executive compensation in Cerecor's periodic reports and proxy statements. Cerecor cannot predict if investors will find its securities less attractive because it may rely on these exemptions. If some investors find Cerecor's securities less attractive as a result,

there may be a less active trading market for Cerecor's securities, and the securities prices may be more volatile and may decline.

Cerecor may be subject to future litigation against it, including securities litigation, which could be costly and time-consuming to defend.

The market price of Cerecor's securities may be volatile, and in the past, companies that have experienced volatility in the market price of their securities have been subject to securities class action litigation. Cerecor may be the target of this type of litigation in the future. Securities litigation against Cerecor could result in substantial costs and divert Cerecor's management's attention from other business concerns, which could seriously harm Cerecor's business. Any adverse determination in litigation could also subject Cerecor to significant liabilities.

Cerecor may also become subject, from time to time, to legal proceedings and claims that arise in the ordinary course of business such as claims brought by Cerecor's clients in connection with commercial disputes, or employment claims made by Cerecor's current or former associates. Litigation might result in substantial costs and may divert management's attention and resources, which might seriously harm Cerecor's business, overall financial condition, and operating results. Insurance might not cover such claims, might not provide sufficient payments to cover all the costs to resolve one or more such claims, and might not continue to be available on terms acceptable to Cerecor. A claim brought against Cerecor that is uninsured or underinsured could result in unanticipated costs, thereby reducing Cerecor's operating results and leading analysts or potential investors to reduce their expectations of Cerecor's performance, which could reduce the trading price of Cerecor's stock.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about Cerecor's business, Cerecor's securities prices and trading volume could decline.

The trading market for Cerecor's securities will depend in part on the research and reports that securities or industry analysts publish about Cerecor or its business. Cerecor currently has limited, and might not sustain, research coverage by securities and industry analysts. If Cerecor does not sustain coverage of Cerecor, the trading price for securities would be negatively impacted. If the securities and industry analysts are unable to predict accurately the demand and net of sales Cerecor's products, that could result in Cerecor's reported revenues and earnings being lower than the so-called "market consensus" of Cerecor's projected revenues, which could negatively affect Cerecor's stock price. Additionally, if the securities and industry analysts are unable to predict accurately the cost of advancing Cerecor's pipeline, which could result in Cerecor's reported costs being different than expectations and could negatively affect Cerecor's stock price. If Cerecor does obtain securities or industry analyst coverage and if one or more of the analysts who covers Cerecor downgrades its securities or publishes inaccurate or unfavorable research about Cerecor's business, Cerecor's securities prices would likely decline. If one or more of these analysts ceases coverage of Cerecor or fails to publish reports on Cerecor regularly, demand for Cerecor's securities could decrease, which could cause Cerecor's securities prices and trading volume to decline.

The requirements of being a public company may strain Cerecor's resources and divert management's attention, and Cerecor's minimal public company operating experience may impact Cerecor's business and stock price.

As a public company, Cerecor incurs significant legal, accounting and other expenses, and these expenses may increase even more after Cerecor is no longer an "emerging growth company." Cerecor is subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Protection Act, as well as rules adopted, and to be adopted, by the SEC, The Nasdaq Stock Market and other applicable securities rules and regulations imposed on public companies, including the establishment and maintenance of effective disclosure and financial controls

and corporate governance practices. Cerecor's management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, Cerecor expects these rules and regulations to substantially increase its legal and financial compliance costs and to make some activities more time-consuming and costly. The increased costs will increase Cerecor's net loss. For example, Cerecor expects these rules and regulations to make it more difficult and more expensive for Cerecor to obtain director and officer liability insurance and it may be required to incur substantial costs to maintain sufficient coverage. The impact of these requirements could also make it more difficult for Cerecor to attract and retain qualified persons to serve on its board of directors, its board committees or as executive officers.

Because these rules and regulations are often subject to varying interpretations, it is difficult to accurately estimate or predict the amount or timing of these additional costs. Further, the lack of specificity of many of the rules and regulations may result in an application in practice that may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices.

Cerecor's disclosure controls and procedures might not prevent or detect all errors or acts of fraud.

Cerecor is subject to the periodic reporting requirements of the Exchange Act, Sarbanes-Oxley Act and The Nasdaq Stock Market rules and regulations. The Sarbanes-Oxley Act requires, among other things, that Cerecor maintain effective disclosure controls and procedures and internal control over financial reporting. Cerecor designed its disclosure controls and procedures to reasonably assure that information Cerecor must disclose in reports it files or submit under the Exchange Act is accumulated and communicated to management, and recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC. Cerecor believes that any disclosure controls and procedures or internal controls and procedures, no matter how well-conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Cerecor cannot assure, in the future, a material weakness or significant deficiency will not exist or otherwise be discovered. If that were to happen, it could harm Cerecor's operating results and cause stockholders to lose confidence in Cerecor's reported financial information. Any such loss of confidence would have a negative effect on the trading price of Cerecor's securities.

These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in Cerecor's control system, misstatements due to error or fraud may occur and not be detected.

Cerecor's amended and restated certificate of incorporation provides that unless Cerecor consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for substantially all disputes between Cerecor and Cerecor's stockholders, which could limit Cerecor's stockholders' ability to obtain a favorable judicial forum for disputes with Cerecor or its directors, officers or employees.

Cerecor's amended and restated certificate of incorporation provides that, unless Cerecor consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the exclusive forum for any derivative action or proceeding brought on Cerecor's behalf; any action asserting a breach of fiduciary duty; any action asserting a claim against Cerecor arising pursuant to the DGCL, Cerecor's amended and restated certificate of incorporation or Cerecor's bylaws; or any action asserting a claim against Cerecor that is governed by the internal affairs doctrine. This choice of forum provision does not preclude or contract the scope of exclusive federal or concurrent jurisdiction for any actions brought under the Securities Act or the Exchange Act. Accordingly, Cerecor's exclusive forum

provision will not relieve Cerecor of its duties to comply with the federal securities laws and the rules and regulations thereunder, and Cerecor's stockholders will not be deemed to have waived Cerecor's compliance with these laws, rules and regulations.

Any person or entity purchasing or otherwise acquiring any interest in any of Cerecor's securities will be deemed to have notice of and consented to these provisions. These exclusive-forum provisions may limit a stockholder's ability to bring a claim in a judicial forum of its choosing for disputes with Cerecor or its directors, officers or other employees, which may discourage lawsuits against Cerecor and its directors, officers and other employees.

If a court were to find the choice of forum provision contained in Cerecor's amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, Cerecor may incur additional costs associated with resolving such action in other jurisdictions, which could harm Cerecor's business, results of operations, and financial condition. Even if Cerecor is successful in defending against these claims, litigation could result in substantial costs and be a distraction to management and other employees.

Some provisions of Cerecor's charter documents and Delaware law may have anti-takeover effects that could discourage an acquisition of Cerecor by others, even if an acquisition would benefit Cerecor's stockholders and may prevent attempts by Cerecor's stockholders to replace or remove its current management.

Provisions in Cerecor's amended and restated certificate of incorporation and second amended and restated bylaws, as well as provisions of Delaware law, could make it more difficult for a third party to acquire Cerecor or increase the cost of acquiring Cerecor, even if doing so would benefit Cerecor's stockholders, or remove its current management. These provisions include:

- authorizing the issuance of "blank check" preferred stock, the terms of which Cerecor may establish and shares of which Cerecor may issue without stockholder approval;
- prohibiting cumulative voting in the election of directors, which would otherwise allow for less than a majority of stockholders to elect director candidates;
- prohibiting stockholder action by written consent, thereby requiring all stockholder actions to be taken at a meeting of Cerecor's stockholders;
- eliminating the ability of stockholders to call a special meeting of stockholders; and
- establishing advance notice requirements for nominations for election to the board of directors or for proposing matters that can be acted upon at stockholder meetings.

These provisions may frustrate or prevent any attempts by Cerecor's stockholders to replace or remove Cerecor's current management by making it more difficult for stockholders to replace members of Cerecor's board of directors, who are responsible for appointing the members of Cerecor's management. Because Cerecor is incorporated in Delaware, it is governed by the provisions of Section 203 of the DGCL which may discourage, delay or prevent someone from acquiring Cerecor or merging with Cerecor whether or not it is desired by or beneficial to Cerecor's stockholders. Under the DGCL, a corporation might not, in general, engage in a business combination with any holder of 15% or more of its capital stock unless the holder has held the stock for three years or, among other things, the board of directors has approved the transaction. Any provision of Cerecor's amended and restated certificate of incorporation or second amended and restated bylaws or Delaware law that has the effect of delaying or deterring a change of control could limit the opportunity for Cerecor's stockholders to receive a premium for their shares of Cerecor's common stock, and could also affect the price that some investors are willing to pay for Cerecor's securities.

Risk Related to this Offering

Our management will have broad discretion in the use of the net proceeds from this offering and might not use them effectively.

Our management will have broad discretion in the application of the net proceeds from this offering, and our stockholders will not have the opportunity as part of their investment decision to assess whether the net proceeds are being used appropriately. Because of the number and variability of factors that will determine our use of the net proceeds from this offering, their ultimate use may vary substantially from their currently intended use. The failure by our management to apply these funds effectively could harm our business. See "Use of Proceeds" on page S-60 of this prospectus supplement for a description of our proposed use of proceeds from this offering.

You will experience immediate and substantial dilution in the net tangible book value per share of the common stock you purchase.

The offering price per share of our common stock being offered is substantially higher than the net tangible book value per share of our outstanding common stock. As a result, the investors purchasing shares of our common stock in this offering will incur immediate dilution of $4.41 per share, after giving effect to the sale of an aggregate of 1,306,282 shares of our common stock at a public offering price of $3.98 per share, and after deducting commissions and estimated offering expenses payable by us. See "Dilution" on page S-61 of this prospectus supplement for a more detailed discussion of the dilution you will incur if you purchase shares in this offering.

You may experience future dilution as a result of future equity offerings.

To raise additional capital, we may in the future offer additional shares of our common stock or other securities convertible into or exchangeable for our common stock at prices that might not be the same as the price per share in this offering. We may sell shares or other securities in any other offering at a price per share that is less than the price per share paid by investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders.

The price per share at which we sell additional shares of our common stock, or securities convertible or exchangeable into common stock, in future transactions may be higher or lower than the price per share paid by investors in this offering.

USE OF PROCEEDS

We estimate that the net proceeds from this offering will be approximately $5.0 million, after deducting the placement agent fees and estimated offering expenses payable by us.

We intend to use the net proceeds for general corporate purposes and working capital, primarily to support the ongoing clinical development of key assets within our pipeline and to pay for recent transaction costs associated with our Merger with Aevi Genomic Medicine. Our management will retain broad discretion in the allocation and use of the net proceeds of this offering, and investors will be relying on the judgment of our management with regard to the use of these net proceeds. Pending application of the net proceeds for the purposes as described above, we expect to invest the net proceeds in short-term, interest-bearing securities, investment grade securities, certificates of deposit or direct or guaranteed obligations of the U.S. government.

DIVIDEND POLICY

We have never declared or paid cash dividends on our common stock. We anticipate that we will retain all of our future earnings, if any, for use in the expansion and operation of our business and do not anticipate paying cash dividends in the foreseeable future. Payment of future dividends, if any, will be at the discretion of our Board of Directors.

DILUTION

If you invest in our common stock, you will experience dilution to the extent of the difference between the public offering price per share and the net tangible book value per share of our common stock immediately after this offering.

Our net tangible book value on September 30, 2019 was negative $24,785,088, or negative $0.56 per share of our common stock. "Net tangible book value" is total assets minus the sum of liabilities and intangible assets. "Net tangible book value per share" is net tangible book value divided by the total number of shares outstanding. Dilution in net tangible book value per share represents the difference between the amount per share paid by purchasers of shares of common stock in this offering and the net tangible book value per share of our common stock immediately after this offering.

After giving effect to the sale of 1,306,282 shares of our common stock in this offering at the public offering price of $3.98 per share and after deducting the placement agent fees and estimated offering expenses payable by us, our net tangible book value as of September 30, 2019, would have been negative $19,752,035, or negative $0.43 per share. This represents an immediate increase in net tangible book value of $0.13 per share to existing stockholders and immediate dilution in net tangible book value of $4.41 per share to new investors purchasing our common stock in this offering at the public offering price. The following table illustrates this dilution on a per share basis:

Public offering price per share of common stock		$ 3.98
Net tangible book value per share as of September 30, 2019	$ (0.56)	
Increase in net tangible book value per share attributable to new investors	$ 0.13	
As adjusted Net tangible book value per share as of September 30, 2019, after giving effect to this offering		$ (0.43)
Dilution in net tangible book value per share to investors in this offering		$ 4.41

The above discussion and table are based on 44,106,794 shares of our common stock outstanding as of September 30, 2019 and excludes, as of that date, the following:

- 5,297,124 shares of common stock issuable upon the exercise of outstanding options having a weighted average exercise price of $4.75 per share;
- 4,024,708 shares of common stock issuable upon the exercise of outstanding warrants having a weighted average exercise price of $12.47 per share;
- 14,285,715 shares of common stock issuable upon the conversion of Series B Non-Voting Convertible Preferred Stock outstanding as of September 30, 2019;
- 1,963,869 shares of common stock reserved for future issuance under the Amended and Restated 2016 Equity Incentive Plan;
- 267,500 shares of nonvested restricted stock units outstanding as of September 30, 2020;
- 1,148,085 shares of common stock reserved for future issuance under the Employee Stock Purchase Plan; and
- 40,000 shares of common stock issuable upon the exercise of an outstanding unit purchase warrant at a price of $7.48 per share.

As described above, we closed our Merger with Aevi on February 3, 2020. Therefore, the above discussion and table excludes the following issuances associated with the closing of the Merger:

- 3,889,801 shares of common stock issuable to the former stockholders of Aevi;

- 2,375,000 shares of common stock issuable upon the exercise of outstanding inducement options granted to new Cerecor employees upon closing of the Merger having a weighted average exercise price of $3.98 per share; and

- 1,014,000 shares of common stock issuable upon the exercise of outstanding options granted to new Cerecor employees and a new member of our board of directors under the Amended and Restated 2016 Equity Incentive Plan upon closing of the Merger having a weighted average exercise price of $3.98 per share.

Because there is no minimum offering amount required as a condition to the closing of this offering, the dilution per share to the new investors may be more than that indicated above in the event that the actual number of shares sold, if any, is less than the maximum number of shares of our common stock we are offering.

The above illustration of dilution per share to the investors participating in this offering assumes no exercise of outstanding options to purchase our common stock or warrants to purchase shares of our common stock that will be outstanding after this offering. The exercise, if any, of outstanding options and warrants that will be outstanding after this offering having an exercise price less than the offering price will increase dilution to the new investors.

PLAN OF DISTRIBUTION

We engaged Wedbush Securities Inc., or Wedbush PacGrow or the placement agent, to act as our exclusive placement agent to solicit offers to purchase the shares of our common stock offered by this prospectus supplement and the accompanying prospectus. Wedbush PacGrow is not purchasing or selling any such shares, nor is it required to arrange for the purchase and sale of any specific number or dollar amount of such shares, other than to use its "reasonable best efforts" to arrange for the sale of such shares by us. Therefore, we may not sell all of the shares of our common stock being offered. The terms of this offering were subject to market conditions and negotiations between us, Wedbush PacGrow and prospective investors. Wedbush PacGrow will have no authority to bind us by virtue of the engagement letter. We will enter into a securities purchase agreement directly with the investors who have agreed to purchase shares of our common stock in this offering. We will only sell to investors who have entered into the securities purchase agreement.

Delivery of the shares of common stock offered hereby is expected to take place on or about February 6, 2020, subject to satisfaction of certain conditions.

We have agreed to pay the placement agent a total cash fee equal to 2.1% of the aggregate gross proceeds of this offering.

The following table shows provides information regarding the amount of the placement agent fees to be paid to the placement agent by us, before expenses, assuming the purchase of all of the shares offered hereby and assuming no purchase of shares by Armistice in this offering:

	Per Share	Total
Public offering price	$ 3.9800	$ 5,199,002.36
Placement agent fees	$ 0.0842	$ 109,950.05

Because there is no minimum offering amount required as a condition to closing in this offering, the actual total offering commissions, if any, are not presently determinable and may be substantially less than the maximum amount set forth above. In addition, we have agreed to reimburse the placement agent for its reasonable out-of-pocket expenses incurred in connection with this offering, including the reasonable fees and disbursements of counsel to the placement agent.

The placement agent may be deemed to be an underwriter within the meaning of Section 2(a)(11) of the Securities Act, and any commissions received by it and any profit realized on the sale of our shares of common stock offered hereby by it while acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. The placement agent will be required to comply with the requirements of the Securities Act and the Exchange Act, including, without limitation, Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of our securities by the placement agent. Under these rules and regulations, the placement agent may not (i) engage in any stabilization activity in connection with our securities; and (ii) bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until they have completed their participation in the distribution.

Indemnification

We have agreed to indemnify the placement agent against certain liabilities, including liabilities under the Securities Act and liabilities arising from breaches of representations and warranties contained in our engagement letter with the placement agent. We have also agreed to contribute to payments the placement agent may be required to make in respect of such liabilities.

In addition, we will indemnify the purchaser of shares of our common stock in this offering against liabilities arising out of or relating to (i) any breach of any of the representations, warranties, covenants

or agreements made by us in the securities purchase agreement or related documents or (ii) any action instituted against a purchaser by a third party (other than a third party who is affiliated with such purchaser) with respect to the securities purchase agreement or related documents and the transactions contemplated thereby, subject to certain exceptions.

Other Relationships

From time to time, Wedbush PacGrow may provide in the future various advisory, investment and commercial banking and other services to us in the ordinary course of business, for which they have received and may continue to receive customary fees and commissions. However, except as disclosed in this prospectus supplement, we have no present arrangements with Wedbush PacGrow for any further services.

Wedbush PacGrow acted as the financial advisor to Aevi in connection with the Aevi Merger. Aevi paid Wedbush PacGrow a nonrefundable retainer of $50,000 at the time of the engagement and an opinion fee of $500,000 for the delivery of its fairness opinion. Aevi agreed to pay Wedbush PacGrow a success fee of $1.5 million contingent upon the closing of the Aevi Merger and has agreed to reimburse Wedbush PacGrow for certain out-of-pocket expenses in connection with its engagement.

Trading Market; Transfer Agent

Our common stock is listed on The Nasdaq Capital Market under the symbol "CERC".

The transfer agent for our common stock is American Stock Transfer & Trust Company, LLC. The transfer agent and registrar's address is 6201 15th Avenue, Brooklyn, NY 11219.

LEGAL MATTERS

The validity of the common stock being offered under this prospectus supplement by us will be passed upon for us by Wyrick Robbins Yates & Ponton LLP, Raleigh, North Carolina. Lowenstein Sandler, LLP, New York, New York is acting as counsel for the placement agent in connection with this offering.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited Cerecor's consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2018, as set forth in their report, which is incorporated herein and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

Ernst & Young LLP, independent registered public accounting firm, has audited Aevi's consolidated financial statements for the years ended December 31, 2017 and December 31, 2018, as set forth in their report, which is incorporated herein and elsewhere in the registration statement. Aevi's financial statements are incorporated by reference in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed a registration statement on Form S-3 with the SEC for the securities we are offering by this prospectus supplement. This prospectus supplement does not include all of the information contained in the registration statement. You should refer to the registration statement and its exhibits for additional information. We will provide to each person, including any beneficial owner, to whom a prospectus supplement is delivered, a copy of any or all of the information that has been incorporated by reference in the prospectus supplement but not delivered with the prospectus supplement.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. The SEC maintains a website at www.sec.gov that contains reports, proxy and information statements and other information regarding registrants. Our SEC filings, including our registration statement and the exhibits and schedules thereto, are available on the SEC website at www.sec.gov.

We maintain a website at www.cerecor.com. Information contained in or accessible through our website does not constitute a part of this prospectus.

INCORPORATION OF DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" information that we file with them. Incorporation by reference allows us to disclose important information to you by referring you to those other documents. The information incorporated by reference is an important part of this prospectus supplement and the accompanying prospectus, and information that we file later with the SEC will automatically update and supersede this information. We filed a registration statement on Form S-3 under the Securities Act of 1933, as amended, with the SEC with respect to the securities being offered pursuant to this prospectus supplement and the accompanying prospectus. This prospectus supplement and the accompanying prospectus omit certain information contained in the registration statement, as permitted by the SEC. You should refer to the registration statement, including the exhibits, for further information about us and the securities being offered pursuant to this prospectus supplement and the accompanying prospectus. Statements in this prospectus supplement and the accompanying prospectus regarding the provisions of certain documents filed with, or incorporated by reference in, the registration statement are not necessarily complete and each statement is qualified in all respects by that reference. Copies of all or any part of the registration statement, including the documents

incorporated by reference or the exhibits, may be obtained upon payment of the prescribed rates at the offices of the SEC listed above in "Where You Can Find More Information." The documents we are incorporating by reference into this prospectus supplement are:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2018, as filed with the SEC on March 18, 2019, and amended on April 23, 2019, pursuant to Section 13(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act");
- our Quarterly Report on Form 10-Q for the quarter ended March 31, 2019, filed with the SEC on May 9, 2019, pursuant to Section 13(a) of the Exchange Act
- our Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2019, as filed with the Commission on August 8, 2019, pursuant to Section 13(a) of the Exchange Act;
- our Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 2019, as filed with the Commission on November 14, 2019, pursuant to Section 13(a) of the Exchange Act;
- our Current Reports on Form 8-K filed with the SEC on March 6, March 29, April 12, June 12, August 8, two filings September 9, October 15, November 4, December 5, December 9, and December 23, 2019, and February 3, 2020; to the extent the information in such report is filed and not furnished;
- our amended Current Reports on Form 8-K/A filed with the SEC on September 19 and December 11, 2019;
- our Definitive Proxy Statement on Schedule 14A, filed with the SEC on June 19, 2019; and
- the description of our common stock contained in our Registration Statement on Form 8-A, filed with the SEC on October 9, 2015, including any amendments or reports filed for the purposes of updating this description.

We also incorporate by reference into this prospectus supplement all documents (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items) that are filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, (i) after the date of the initial filing of the registration statement of which this prospectus forms a part and prior to effectiveness of the registration statement, or (ii) after the date of this prospectus but prior to the termination of the offering. These documents include periodic reports, such as Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, as well as proxy statements.

We will furnish without charge to you, on written or oral request, a copy of any or all of the documents incorporated by reference in this prospectus, including exhibits to these documents. You should direct any requests for documents to Cerecor, Inc., 540 Gaither Road, Suite 400, Rockville, Maryland 20850; telephone: (410) 522-8707.

Any statement contained herein or in a document incorporated or deemed to be incorporated by reference into this document will be deemed to be modified or superseded for purposes of the document to the extent that a statement contained in this document or any other subsequently filed document that is deemed to be incorporated by reference into this document modifies or supersedes the statement.

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PROSPECTUS

$100,000,000 of
Common Stock
Preferred Stock
Debt Securities and/or
Warrants

From time to time, we may offer up to $100,000,000 of any combination of the securities described in this prospectus in one or more offerings. We may also offer securities as may be issuable upon conversion, redemption, repurchase, exchange or exercise of any securities registered hereunder, including any applicable anti-dilution provisions.

This prospectus provides you with a general description of the securities we may offer. A prospectus supplement containing specific information about the terms of the securities being offered and the offering, including the compensation of any underwriter, agent or dealer, will accompany this prospectus. Any prospectus supplement may also add, update or change information contained in this prospectus. If information in any prospectus supplement is inconsistent with the information in this prospectus, then the information in that prospectus supplement will apply and will supersede the information in this prospectus.

Our common stock is traded on The Nasdaq Capital Market under the symbol "CERC." On October 16, 2019, the last reported sale price of our common stock was $3.44 per share. The aggregate market value of our outstanding common stock held by non-affiliates as of the date of this prospectus is $50.0 million based on 14,847,557 shares of outstanding common stock held by non-affiliates, and a per share price of $3.37 based on the closing sale price of our common stock on September 26, 2019 (a date within 60 days of the date hereof). Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell securities registered on the registration statement of which this prospectus is a part in a public primary offering with a value exceeding more than one-third of our public float in any 12-month period if our public float, measured in accordance with such instruction, remains below $75.0 million. As of the date hereof, we have not offered any securities pursuant to General Instruction I.B.6 of Form S-3 during the 12 calendar months prior to and including the date of this prospectus. The applicable prospectus supplement will contain information, where applicable, as to any other listing on The Nasdaq Capital Market or any securities market or other exchange of the securities, if any, covered by the prospectus supplement.

This prospectus may not be used by us to consummate a sale of securities unless accompanied by the applicable prospectus supplement. You should carefully read both this prospectus and any prospectus supplement, together with additional information described in "*Where You Can Find Additional Information*" and "*Incorporation of Certain Information by Reference*", before you invest in our securities.

Investing in our securities involves a high degree of risk. See "*Risk Factors*" beginning on page 6 of this prospectus, in any accompanying prospectus supplement and in the documents incorporated by reference into this prospectus, to read about factors you should consider before investing in our securities.

Neither the Securities and Exchange Commission nor any other regulatory body has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

Prospectus dated October 24, 2019

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, utilizing a shelf registration process. Under this shelf registration process, we may offer shares of our common stock; shares of our preferred stock; debt securities; or warrants for such securities, in one or more offerings, up to a total dollar amount of $100,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will contain specific information about the terms of that offering.

We may sell the securities (a) through agents; (b) through underwriters or dealers; (c) directly to one or more purchasers; or (d) through a combination of any of these methods of sale. We and our agents reserve the sole right to accept and to reject in whole or in part any proposed purchase of securities. See "*Plan of Distribution*" below. A prospectus supplement (or pricing supplement), which we will provide to you each time we offer securities, will provide the names of any underwriters, dealers, or agents involved in the sale of the securities, and any applicable fee, commission or discount arrangements with them.

This prospectus does not contain all of the information included in the registration statement. For a more complete understanding of the offering of the securities, you should refer to the registration statement, including its exhibits. Prospectus supplements may also add, update or change information contained or incorporated by reference in this prospectus. However, no prospectus supplement will fundamentally change the terms that are set forth in this prospectus or offer a security that is not registered and described in this prospectus at the time of its effectiveness. This prospectus, together with the applicable prospectus supplements and the documents incorporated by reference into this prospectus, will include material information relating to the offering. You should carefully read this prospectus, the applicable prospectus supplement, the information and documents incorporated herein by reference and the additional information under the heading "*Where You Can Find Additional Information*" before making an investment decision.

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

To the extent there are inconsistencies between this prospectus, any prospectus supplement and any documents incorporated by reference, the document with the most recent date will control.

This prospectus may not be used to consummate sales of our securities, unless it is accompanied by a prospectus supplement.

Unless the context indicates otherwise, references in this prospectus to "Cerecor," "Company," "we," "us" and "our" refer to Cerecor Inc.

PROSPECTUS SUMMARY

This summary highlights selected information from this prospectus and does not contain all of the information that you need to consider in making your investment decision. You should carefully read the entire prospectus, the applicable prospectus supplement and any related free writing prospectus, including the risks of investing in our securities discussed under the heading "Risk Factors" contained in the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus. You should also carefully read the information incorporated by reference into this prospectus, including our financial statements, and the exhibits to the registration statement of which this prospectus is a part.

Company Overview

We are a fully integrated biopharmaceutical company with commercial operations and research and development capabilities. The Company is building a pipeline of innovative therapies in orphan diseases, neurology and pediatric healthcare. The Company's pediatric orphan disease pipeline is led by CERC-801, CERC-802 and CERC-803. All three compounds are therapies for inborn errors of metabolism, specifically 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 CERC-800 compounds, thus qualifying the Company to receive a Priority Review Voucher ("PRV") upon approval of a new drug application ("NDA"). 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, CERC-913, for the treatment of mitochondrial DNA Depletion Syndrome. The Company's neurology pipeline is led by CERC-301, a Glutamate NR2B selective, NMDA Receptor antagonist, which Cerecor is currently developing as a novel treatment for orthostatic hypotension ("OH"). The Company is also developing CERC-406, a CNS-targeted COMT inhibitor for Parkinson's Disease.

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®, Karbinal™ ER, AcipHex® Sprinkle™ and Cefaclor for Oral Suspension.

Our Strategy

Our strategy for increasing shareholder value includes:

- Advancing our pipeline of compounds through development and to regulatory approval;
- Acquiring or licensing rights to 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;
- 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; and
- Opportunistically out-licensing rights to indications or geographies.

Corporate Information

Our principal executive offices are located at 540 Gaither Road, Suite 400, Rockville, Maryland 20850 and our telephone number is (410) 522-8707. Our website address is *www.cerecor.com*. The information contained on, or that can be accessed through, our website is not a part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

The trademarks, trade names and service marks appearing in this prospectus are the property of their respective owners. We do not intend our use or display of other companies' trademarks, trade names or service marks to imply a relationship with, or endorsement or sponsorship of us by, any other companies or products.

Offerings Under This Prospectus

We may offer shares of our common stock; shares of our preferred stock; debt securities; or warrants for such securities, with a total value of up to $100,000,000 from time to time under this prospectus at prices and on terms to be determined by market conditions at the time of any offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities.

The prospectus supplement also may add, update or change information contained in this prospectus or in documents we have incorporated by reference into this prospectus. However, no prospectus supplement will fundamentally change the terms that are set forth in this prospectus or offer a security that is not registered and described in this prospectus at the time of its effectiveness.

This prospectus may not be used to consummate a sale of any securities unless it is accompanied by a prospectus supplement.

We may sell the securities directly to investors or to or through agents, underwriters or dealers. We, and our agents or underwriters, reserve the right to accept or reject all or part of any proposed purchase of securities. If we offer securities through agents or underwriters, we will include in the applicable prospectus supplement:

- the names of those agents or underwriters;
- applicable fees, discounts and commissions to be paid to them;
- details regarding over-allotment options, if any; and
- the net proceeds to us.

Common Stock

Under our amended and restated certificate of incorporation, we are authorized to issue up to 200,000,000 shares of common stock, $0.001 par value per share. As of June 30, 2019, we had 42,898,251 shares of common stock outstanding. Each holder of 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. Subject to preferences that may be applicable to any then-outstanding preferred stock, 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.

In the event of our liquidation, dissolution or winding up, holders of our common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the

payment of all of our debts and other liabilities, and the satisfaction of any liquidation preference granted to the holders of any then-outstanding shares of preferred stock. Holders of our common stock have no preemptive, conversion or subscription rights, and there are no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of the holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate in the future.

Preferred Stock

Pursuant to our amended and restated certificate of incorporation, our board of directors has the authority, without further action by the stockholders (unless such stockholder action is required by applicable law or stock exchange listing rules), to designate and issue up to 5,000,000 shares of preferred stock in one or more series, to establish from time to time the number of shares to be included in each such series, to fix the designations, powers, preferences, privileges and relative participating, optional or special rights and the qualifications, limitations or restrictions thereof, including dividend rights, conversion rights, voting rights, terms of redemption and liquidation preferences, any or all of which may be greater than the rights of the common stock, and to increase or decrease the number of shares of any such series, but not below the number of shares of such series then outstanding. As of June 30, 2019, we had 2,857,143 shares of preferred stock outstanding.

Our board of directors, without stockholder approval, can issue preferred stock with voting, conversion or other rights that could adversely affect the voting power and other rights of the holders of common stock. Preferred stock could be issued quickly with terms designed to delay or prevent a change in control of our company or make removal of management more difficult. Additionally, the issuance of preferred stock may have the effect of decreasing the market price of the common stock and may adversely affect the voting power of holders of common stock and reduce the likelihood that common stockholders will receive dividend payments and payments upon liquidation.

Our board of directors will fix the designations, voting powers, preferences and rights of each series, as well as the qualifications, limitations or restrictions thereof, of the preferred stock of each series that we offer under this prospectus and applicable prospectus supplements in the certificate of designation relating to that series.

Warrants

We may issue warrants for the purchase of common stock, preferred stock and/or debt securities (described below) in one or more series. We may issue warrants independently or together with common stock, preferred stock and/or debt securities, and the warrants may be attached to or separate from these securities. We will evidence each series of warrants by warrant certificates that we will issue under a separate agreement. We may enter into warrant agreements with a bank or trust company that we select to be our warrant agent. We will indicate the name and address of the warrant agent in the applicable prospectus supplement relating to a particular series of warrants.

In this prospectus, we have summarized certain general features of warrants. We urge you, however, to read the applicable prospectus supplement related to the particular series of warrants being offered, as well as the warrant agreements and warrant certificates that contain the terms of the warrants. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of warrant agreement and warrant certificate containing the terms of the warrants we are offering before the issuance of the warrants.

Debt Securities

We may offer debt securities from time to time, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. The senior debt securities will rank equally with any other unsecured and unsubordinated debt. Any subordinated debt securities will be subordinate and junior in right of payment, to the extent and in the manner described in the instrument governing the debt, to all of our senior indebtedness. Any convertible debt securities will be convertible into or exchangeable for our common stock or our other securities. Conversion may be mandatory or at your option or both and would be at prescribed conversion rates.

With respect to any debt securities that we issue, we will issue such debt securities under an indenture, which we would enter into with the trustee named in the indenture. The form of indenture is filed as an exhibit to the registration statement of which this prospectus is a part and is incorporated herein by reference. Any indenture would be qualified under the Trust Indenture Act of 1939, as amended.

Listing

If any securities are to be listed or quoted on a securities exchange or quotation system, the applicable prospectus supplement will so indicate. Our common stock is listed on The Nasdaq Capital Market and trades under the symbol "CERC".

RISK FACTORS

Investing in our securities involves a high degree of risk. You should consider carefully the risks and uncertainties described in the section entitled "*Risk Factors*" contained in our Annual Report on Form 10-K for the year ended December 31, 2018, as filed with SEC on March 18, 2019, as amended on April 23, 2019, which descriptions are incorporated in this prospectus by reference in their entirety, as well as in any prospectus supplement hereto. These risks and uncertainties are not the only risks and uncertainties we face. Additional risks and uncertainties not currently known to us, or that we currently view as immaterial, may also impair our business. If any of the risks or uncertainties described in our SEC filings or any additional risks and uncertainties actually occur, our business, financial condition, results of operations and cash flow could be materially and adversely affected. In that case, the trading price of our common stock could decline and you might lose all or part of your investment.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the information incorporated by reference in this prospectus include "forward-looking statements" within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and Section 27A of the Securities Act. For these purposes, any statements contained or incorporated by reference herein regarding our strategy, future operations, financial position, future revenues, projected costs, prospects, plans and objectives of management, other than statements of historical facts, are forward-looking statements. In some cases, you can identify forward-looking statements by the words "may," "might," "can," "will," "to be," "could," "would," "should," "expect," "intend," "plan," "objective," "anticipate," "believe," "estimate," "predict," "project," "potential," "likely," "continue" and "ongoing," or the negative of these terms, or other comparable terminology intended to identify statements about the future, although not all forward-looking statements contain these words. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. We cannot guarantee that we actually will achieve the plans, intentions or expectations expressed or implied in our forward-looking statements. There are a number of important factors that could cause actual results, levels of activity, performance or events to differ materially from those expressed or implied in the forward-looking statements we make. These important factors include our "critical accounting estimates" described in Part II, Item 7. "*Management's Discussion and Analysis of Financial Condition and Results of Operations-Application of Critical Accounting Estimates*" of our most recent annual report filed on Form 10-K, and the factors set forth under and incorporated by reference in the caption "*Risk Factors*" in this prospectus.

You should refer to the "*Risk Factors*" section contained in the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus, for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. Given these risks, uncertainties and other factors, many of which are beyond our control, we cannot assure you that the forward-looking statements in this prospectus will prove to be accurate, and you should not place undue reliance on these forward-looking statements. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified timeframe, or at all.

Any forward-looking statement speaks only as of the date on which it is made. Although we may elect to update forward-looking statements in the future, we specifically disclaim any obligation to do so, except as may be required by law, even if our estimates change, and readers should not rely on our forward-looking statements as representing our views as of any date subsequent to the date the statements were made.

USE OF PROCEEDS

In the case of a sale of securities covered by this prospectus, the use of proceeds will be specified in the applicable prospectus supplement or free writing prospectus.

PLAN OF DISTRIBUTION

We may sell the securities from time to time pursuant to underwritten public offerings, negotiated transactions, block trades or a combination of these methods. We may sell the securities to or through underwriters or dealers, through agents, or directly to one or more purchasers. We may distribute securities from time to time in one or more transactions:

- at a fixed price or prices, which may be changed;
- at market prices prevailing at the time of sale;
- at prices related to such prevailing market prices; or
- at negotiated prices.

We may also sell equity securities covered by this registration statement in an "at the market offering" as defined in Rule 415 under the Securities Act. Such offering may be made into an existing trading market for such securities in transactions at other than a fixed price, either:

- on or through the facilities of The Nasdaq Capital Market or any other security exchange or quotation or trading service on which such securities may be listed, quoted or traded at the time of sale; and/or
- other than on The Nasdaq Capital Market or such other securities exchanges or quotation or trading services.

Such at the market offerings, if any, may be conducted by underwriters acting as principal or agent.

A prospectus supplement or supplements (and any related free writing prospectus that we may authorize to be provided to you) will describe the terms of the offering of the securities, including, to the extent applicable:

- the name or names of any underwriters, dealers or agents, if any;
- the purchase price of the securities and the proceeds we will receive from the sale;
- any over-allotment options under which underwriters may purchase additional securities from us;
- any agency fees or underwriting discounts and other items constituting agents' or underwriters' compensation;
- any public offering price;
- any discounts or concessions allowed or reallowed or paid to dealers; and
- any securities exchange or market on which the securities may be listed.

Only underwriters named in the prospectus supplement are underwriters of the securities offered by the prospectus supplement.

If underwriters are used in the sale, they will acquire the securities for their own account and may resell the securities from time to time in one or more transactions at a fixed public offering price or at varying prices determined at the time of sale. The obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. Subject to certain conditions, the underwriters will be obligated to purchase all of the securities offered by the prospectus supplement. Any public offering price and any discounts or concessions allowed or reallowed or paid to dealers may change from time to time.

We may use underwriters with whom we have a material relationship. We will describe in the prospectus supplement, naming the underwriter, the nature of any such relationship.

We may sell securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities, and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, our agent will act on a best-efforts basis for the period of its appointment.

We may authorize agents or underwriters to solicit offers by certain types of institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

We may provide agents and underwriters with indemnification against civil liabilities related to this offering, including liabilities under the Securities Act, or contribution with respect to payments that the agents or underwriters may make with respect to these liabilities. Agents and underwriters may engage in transactions with, or perform services for, us in the ordinary course of business.

All securities we offer, other than common stock, will be new issues of securities with no established trading market. Any underwriters may make a market in these securities, but will not be obligated to do so and may discontinue any market making at any time without notice. We cannot guarantee the liquidity of the trading markets for any securities.

Any underwriter may engage in overallotment, stabilizing transactions, short covering transactions and penalty bids. Overallotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Short covering transactions involve purchases of the securities in the open market after the distribution is completed to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a stabilizing or covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time. These transactions may be effected on any exchange or over-the-counter market or otherwise.

Any underwriters who are qualified market makers on The Nasdaq Capital Market may engage in passive market making transactions in the securities on The Nasdaq Capital Market in accordance with Rule 103 of Regulation M, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the securities. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded. Passive market making may stabilize the market price of the securities at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

DESCRIPTION OF OUR CAPITAL STOCK

The following description of our capital stock and provisions of our amended and restated certificate of incorporation and amended and restated bylaws are summaries. You should also refer to the amended and restated certificate of incorporation and the amended and restated bylaws, which are filed as exhibits to the registration statement of which this prospectus is a part.

General

Under our amended and restated certificate of incorporation, we are authorized to issue up to 200,000,000 shares of common stock, $0.001 par value per share, and 5,000,000 shares of preferred stock, $0.001 par value per share, all of which shares of preferred stock are undesignated. Our board of directors may establish the rights and preferences of the preferred stock from time to time. As of June 30, 2019, we had 42,898,251 shares of common stock outstanding and 2,857,143 shares of preferred stock outstanding. The preferred stock has the same rights and preferences as common stock other than it is non-voting and has the ability to convert to shares of common stock on a 1 for 5 ratio at the holder's option.

Common Stock

Voting

Each holder of 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

Subject to preferences that may be applicable to any then-outstanding preferred stock, 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 our liquidation, dissolution or winding up, holders of our common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities, and the satisfaction of any liquidation preference granted to the holders of any then-outstanding shares of preferred stock.

Rights and Preferences

Holders of our common stock have no preemptive, conversion or subscription rights, and there are no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of the holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate in the future.

Options

As of June 30, 2019, options to purchase an aggregate of 5,476,547 shares of our common stock, with a weighted average exercise price of $4.81 per share, were outstanding under our 2016 Equity Incentive Plan.

Restricted Stock Units

As of June 30, 2019, we had 278,750 shares of non-vested restricted stock outstanding. The restricted shares vest annually over a four-year period beginning on the first anniversary of the award.

Underwriters' Unit Purchase Option

We issued the underwriters of our initial public offering a unit purchase option (the "UPO") in 2015 that 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.

Warrants

As of June 30, 2019, we had outstanding 4,024,708 warrants to purchase shares of our common stock at a weighted average exercise price of $12.47 per share. Please see "*Description of Warrants-Outstanding Warrants to Purchase Common Stock*" for more information.

Preferred Stock

Pursuant to our amended and restated certificate of incorporation, our board of directors has the authority, without further action by the stockholders (unless such stockholder action is required by applicable law or stock exchange listing rules), to designate and issue up to 5,000,000 shares of preferred stock in one or more series, to establish from time to time the number of shares to be included in each such series, to fix the designations, powers, preferences, privileges and relative participating, optional or special rights and the qualifications, limitations or restrictions thereof, including dividend rights, conversion rights, voting rights, terms of redemption and liquidation preferences, any or all of which may be greater than the rights of the common stock, and to increase or decrease the number of shares of any such series, but not below the number of shares of such series then outstanding.

Our board of directors, without stockholder approval, can issue preferred stock with voting, conversion or other rights that could adversely affect the voting power and other rights of the holders of common stock. Preferred stock could be issued quickly with terms designed to delay or prevent a change in control of our company or make removal of management more difficult. Additionally, the issuance of preferred stock may have the effect of decreasing the market price of the common stock and may adversely affect the voting power of holders of common stock and reduce the likelihood that common stockholders will receive dividend payments and payments upon liquidation.

Our board of directors will fix the designations, voting powers, preferences and rights of each series, as well as the qualifications, limitations or restrictions thereof, of the preferred stock of each series that we offer under this prospectus and applicable prospectus supplements in the certificate of designation relating to that series. We will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of any certificate of designation that describes the terms of the series of preferred stock we are offering before the issuance of that series of preferred stock. This description will include:

- the title and stated value;
- the number of shares we are offering;
- the liquidation preference per share;

- the purchase price per share;
- the dividend rate per share, dividend period and payment dates and method of calculation for dividends;
- whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
- our right, if any, to defer payment of dividends and the maximum length of any such deferral period;
- the procedures for any auction and remarketing, if any;
- the provisions for a sinking fund, if any;
- the provisions for redemption or repurchase, if applicable, and any restrictions on our ability to exercise those redemption and repurchase rights;
- any listing of the preferred stock on any securities exchange or market;
- whether the preferred stock will be convertible into our common stock or other securities of ours, including depositary shares and warrants, and, if applicable, the conversion period, the conversion price, or how it will be calculated, and under what circumstances it may be adjusted;
- whether the preferred stock will be exchangeable into debt securities, and, if applicable, the exchange period, the exchange price, or how it will be calculated, and under what circumstances it may be adjusted;
- voting rights, if any, of the preferred stock;
- preemption rights, if any;
- restrictions on transfer, sale or other assignment, if any;
- whether interests in the preferred stock will be represented by depositary shares;
- a discussion of any material or special U.S. federal income tax considerations applicable to the preferred stock;
- the relative ranking and preferences of the preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs;
- any limitations on issuances of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock being issued as to dividend rights and rights if we liquidate, dissolve or wind up our affairs; and
- any other specific terms, rights, preferences, privileges, qualifications or restrictions of the preferred stock.

The Delaware General Corporation Law, the corporate law of our state of our incorporation, provides that the holders of preferred stock will have the right to vote separately as a class (or, in some cases, as a series) on an amendment to our certificate of incorporation if the amendment would change the par value or, unless the certificate of incorporation provided otherwise, the number of authorized shares of the class or change the powers, preferences or special rights of the class or series so as to adversely affect the class or series, as the case may be. This right is in addition to any voting rights that may be provided for in the applicable certificate of designation.

Registration Rights

Second Amended and Restated Investors' Rights Agreement

We and certain holders of shares of our common stock issued upon the conversion of our Series A convertible preferred stock, Series A-1 convertible preferred stock and Series B convertible preferred stock, or the Investors' Rights Agreement Shares, upon the closing of our initial public offering in October 2015 are parties to our Second Amended and Restated Investors' Rights Agreement, or the Investors' Rights Agreement. Under the Investors' Rights Agreement, these holders have certain registration rights, as described below.

Demand Registration Rights

The holders of a majority of the Investors' Rights Agreement Shares may request that we register all or a portion of their shares of common stock for sale under the Securities Act. We will effect the registration as requested so long as the aggregate price to the public, net of expenses, in connection with any such offering is at least $10 million unless, in the good faith judgment of our board of directors, such registration would be materially detrimental to our company and its stockholders and should be delayed. We are not obligated to file a registration statement pursuant to this provision on more than two occasions.

Registration on Form S-3

The holders of a majority of the Investors' Rights Agreement Shares may request that we register all or a portion of their common stock for sale under the Securities Act on Form S-3, or any successor form, so long as the aggregate price to the public, net of expenses, in connection with any such offering is at least $1 million unless, in the good faith judgment of our board of directors, such registration would be materially detrimental to our company and its stockholders and should be delayed. We are not obligated to file a Form S-3 pursuant to this provision on more than two occasions in any 12-month period.

Piggyback Registration Rights

If at any time we propose to register any shares of our common stock under the Securities Act for public sale either for our own account or for the account of other stockholders, the holders of the Investors' Rights Agreement Shares are entitled to notice of the registration and may request that include all or a portion of their shares of common stock be included in the registration. These piggyback registration rights are subject to specified conditions and limitations, including the right of the underwriters to limit the number of shares included in any such registration under specified circumstances. The holders of piggyback registration rights under the Investors' Rights Agreement have waived these rights as they may apply to the filing of the registration statement of which this prospectus is a part.

Expenses of Registration

We will pay all registration expenses, other than underwriting discounts and selling commissions, and the reasonable fees and expenses of a single special counsel for the selling stockholders, related to any demand, piggyback and Form S-3 registration.

Termination of Registration Rights

The registration rights described above will expire upon the earlier of (i) October 20, 2020, (ii) the date that a holder holds less than one percent of all the Investors' Rights Agreement Shares and the holder may sell all of its registrable securities subject to the Investors' Rights Agreement pursuant to

Rule 144 without restrictions during any three-months period or (iii) the closing of a Deemed Liquidation Event, as such term is defined in our amended and restated certificate of incorporation as in effect prior to the closing of our initial public offering.

Anti-Takeover Effects of Delaware Law and Our Charter and Bylaws

Provisions of Delaware law and our amended and restated certificate of incorporation and amended and restated bylaws could make it more difficult to acquire us by means of a tender offer, a proxy contest, open market purchases, removal of incumbent directors and otherwise. These provisions, summarized below, are expected to discourage types of coercive takeover practices and inadequate takeover bids and to encourage persons to acquire control of us to first negotiate with us. We believe that the benefits of increase protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging takeover or acquisition proposals because negotiation of these proposals could result in an improvement of their terms.

Delaware Anti-Takeover Law

We are subject to section 203 of the Delaware General Corporation Law, or Section 203. Section 203 generally prohibits a public Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder, unless:

- prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding (i) shares owned by persons who are directors and also officers and (ii) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or subsequent to the date of the transaction, the business combination is approved by the board and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least $66^{2}/_{3}\%$ of the outstanding voting stock which is not owned by the interested stockholder.

Section 203 defines a business combination to include:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition involving the interested stockholder of 10% or more of the assets of the corporation;
- subject to exceptions, any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder;
- subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder; and
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by the entity or person.

The existence of this provision generally will have an anti-takeover effect for transactions not approved in advance by the board of directors, including discouraging attempts that might result in a premium over the market price for the shares of common stock held by stockholders.

Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Provisions of our amended and restated certificate of incorporation and amended and restated bylaws may delay or discourage transactions involving an actual or potential change in our control or change in our management, including transactions in which stockholders might otherwise receive a premium for their shares or transactions that our stockholders might otherwise deem to be in their best interests. Therefore, these provisions could adversely affect the price of our common stock. Among other things, our amended and restated certificate of incorporation and amended and restated bylaws:

- permit our board of directors to issue up to 5,000,000 shares of preferred stock, with any rights, preferences and privileges as they may designate (including the right to approve an acquisition or other change in our control);
- provide that the authorized number of directors may be changed only be resolution of our board of directors;
- provide that all vacancies, including newly created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum;
- require that any action to be taken by our stockholders must be effected at a duly called annual or special meeting of stockholders and not be taken by written consent;
- provide that stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide notice in writing in a timely manner, and also specify requirements as to the form and content of a stockholder's notice;
- do not provide for cumulative voting rights (therefore allowing the holders of a majority of the shares of common stock entitled to vote in any election of directors to elect all of the directors standing for election, if they should so choose); and
- provide that special meetings of our stockholders may be called only by the chairman of the board, our chief executive officers or by our board of directors pursuant to a resolution adopted by a majority of the total number of authorized directors.

The amendment of any of these provisions, with the exception of the ability of our board of directors to issue shares of preferred stock and designate any rights, preferences and privileges thereto, would require approval by the holders of at least 66 2/3% of our then outstanding common stock.

Choice of Forum

Our amended and restated certificate of incorporation provides that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware is the exclusive forum for:

- any derivative action or proceeding brought on our behalf;
- any action asserting a claim of breach of a fiduciary duty;

- any action asserting a claim against us arising pursuant to any provision of the Delaware General Corporation Law, our amended and restated certificate of incorporation or our amended and restated bylaws; or

- any action asserting a claim against us that is governed by the internal affairs doctrine.

The enforceability of similar choice of forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that, in connection with any action, a court could find the choice of forum provisions contained in our amended and restated certificate of incorporation to be inapplicable or unenforceable in such action. These provisions would not apply to suits brought to enforce a duty or liability created by the Exchange Act, Securities Act or any other claim for which the federal courts have exclusive or concurrent jurisdiction. Any person or entity purchasing or otherwise acquiring any interest in our securities shall be deemed to have notice of and consented to these provisions. Our exclusive forum provision will not relieve us of our duties to comply with the federal securities laws and the rules and regulations thereunder, and our shareholders will not be deemed to have waived our compliance with these laws, rules and regulations.

The provisions of the DGCL, our amended and restated certificate of incorporation and our amended and restated bylaws could have the effect of discouraging others from attempting hostile takeovers and may also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interests.

Nasdaq Capital Market Listing

Our common stock is listed on The Nasdaq Capital Market under the symbol "CERC."

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC. The transfer agent and registrar's address is 6201 15th Avenue, Brooklyn, NY 11219.

DESCRIPTION OF WARRANTS

The following description, together with the additional information we may include in any applicable prospectus supplement and free writing prospectus, summarizes the material terms and provisions of the warrants that we may offer under this prospectus, which may consist of warrants to purchase common stock, preferred stock or debt securities and may be issued in one or more series. Warrants may be issued independently or together with common stock, preferred stock or debt securities offered by any prospectus supplement, and may be attached to or separate from those securities. While the terms we have summarized below will apply generally to any warrants that we may offer under this prospectus, we will describe the particular terms of any series of warrants that we may offer in more detail in the applicable prospectus supplement and any applicable free writing prospectus. The terms of any warrants offered under a prospectus supplement may differ from the terms described below. However, no prospectus supplement will fundamentally change the terms that are set forth in this prospectus or offer a security that is not registered and described in this prospectus at the time of its effectiveness.

We have filed forms of the warrant agreements as exhibits to the registration statement of which this prospectus is a part. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of warrant agreement, if any, including a form of warrant certificate, that describes the terms of the particular series of warrants we are offering. The following summaries of material provisions of the warrants and the warrant agreements are subject to, and qualified in their entirety by reference to, all the provisions of the warrant agreement and warrant certificate applicable to the particular series of warrants that we may offer under this prospectus. We urge you to read the applicable prospectus supplements related to the particular series of warrants that we may offer under this prospectus, as well as any related free writing prospectuses, and the complete warrant agreements and warrant certificates that contain the terms of the warrants.

General

We will describe in the applicable prospectus supplement the terms relating to a series of warrants being offered, including:

- the title of such securities;
- the offering price or prices and aggregate number of warrants offered;
- the currency or currencies for which the warrants may be purchased;
- if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;
- if applicable, the date on and after which the warrants and the related securities will be separately transferable;
- if applicable, the minimum or maximum amount of such warrants which may be exercised at any one time;
- in the case of warrants to purchase debt securities, the principal amount of debt securities purchasable upon exercise of one warrant and the price at which, and currency in which, this principal amount of debt securities may be purchased upon such exercise;
- in the case of warrants to purchase common stock or preferred stock, the number of shares of common stock or preferred stock, as the case may be, purchasable upon the exercise of one warrant and the price at which, and the currency in which, these shares may be purchased upon such exercise;

- the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreements and the warrants;
- the terms of any rights to redeem or call the warrants;
- the terms of any rights to force the exercise of the warrants;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;
- the dates on which the right to exercise the warrants will commence and expire;
- the manner in which the warrant agreements and warrants may be modified;
- a discussion of any material or special U.S. federal income tax consequences of holding or exercising the warrants;
- the terms of the securities issuable upon exercise of the warrants; and
- any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including:

- in the case of warrants to purchase debt securities, the right to receive payments of principal of, or premium, if any, or interest on, the debt securities purchasable upon exercise or to enforce covenants in the applicable indenture; or
- in the case of warrants to purchase common stock or preferred stock, the right to receive dividends, if any, or, payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

Exercise of Warrants

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to the specified time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with specified information, and paying the required amount to the warrant agent in immediately available funds, as provided in the applicable prospectus supplement. We will set forth on the reverse side of the warrant certificate and in the applicable prospectus supplement the information that the holder of the warrant will be required to deliver to the warrant agent in connection with the exercise of the warrant.

Upon receipt of the required payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will issue and deliver the securities purchasable upon such exercise. If fewer than all of the warrants represented by the warrant certificate are exercised, then we will issue a new warrant certificate for the remaining amount of warrants. If we so indicate in the applicable prospectus supplement, holders of the warrants may surrender securities as all or part of the exercise price for warrants.

Governing Law

Unless we provide otherwise in the applicable prospectus supplement, the warrants and warrant agreements, and any claim, controversy or dispute arising under or related to the warrants or warrant agreements, will be governed by and construed in accordance with the laws of the State of New York.

Enforceability of Rights by Holders of Warrants

Each warrant agent will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action its right to exercise, and receive the securities purchasable upon exercise of, its warrants.

Outstanding Warrants to Purchase Common Stock

As of June 30, 2019, we had outstanding 4,024,708 warrants to purchase shares of our common stock at a weighted average exercise price of $12.47 per share and which expire between October 2020 and June 2024.

DESCRIPTION OF DEBT SECURITIES

The following description, together with the additional information we include in any applicable prospectus supplement, summarizes the material terms and provisions of any debt securities that we may offer under this prospectus. While the terms we have summarized below will apply generally to any future debt securities we offer, we will describe the particular terms of any debt securities that we may offer in more detail in the applicable prospectus supplement. The terms of any debt securities we may offer under a prospectus supplement may differ from the terms described below. For any debt securities that we offer, an indenture (and any relevant supplemental indenture), if required, will contain additional important terms and provisions, the form of which we filed as an exhibit to the Registration Statement of which this prospectus is a part and is incorporated therein by reference. We will file any definitive indenture as an exhibit to reports that we file with the SEC and incorporate by reference in this prospectus and the applicable prospectus supplement. Any indenture would be qualified under the Trust Indenture Act of 1939, as amended.

With respect to any debt securities that we issue, we will describe in each prospectus supplement the following terms relating to a series of debt securities:

- the title;
- the principal amount being offered, and if a series, the total amount authorized and the total amount outstanding;
- any limit on the amount that may be issued;
- whether or not we will issue the series of debt securities in global form, and if so, the terms and who the depository will be;
- the maturity date;
- the principal amount due at maturity;
- whether and under what circumstances, if any, we will pay additional amounts on any debt securities held by a person who is not a United States person for tax purposes, and whether we can redeem the debt securities if we have to pay such additional amounts;
- the annual interest rate, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;
- whether or not the debt securities will be convertible into shares of our common stock or our preferred stock and, if so, the terms of such conversion;
- whether or not the debt securities will be secured or unsecured by some or all of our assets, and the terms of any secured debt;
- the terms of the subordination of any series of subordinated debt;
- the place where payments will be payable;
- restrictions on transfer, sale or other assignment, if any;
- our right, if any, to defer payment or interest and the maximum length of any such deferral period;
- the date, if any, after which and the conditions upon which, and the price at which, we may, at our option, redeem the series of debt securities pursuant to any optional or provisional redemption provisions and the terms of those redemption provisions;

- the date, if any, on which, and the price at which we are obligated, pursuant to any mandatory sinking fund or analogous fund provisions or otherwise, to redeem, or at the holder's option to purchase, the series of debt securities and the currency or currency unit in which the debt securities are payable;
- whether the indenture will restrict our ability to pay dividends, or will require us to maintain any asset ratios or reserves;
- whether we will be restricted from incurring any additional indebtedness, issuing additional securities, or entering into a merger, consolidation or sale of our business;
- a discussion of any material or special U.S. federal income tax considerations applicable to the debt securities;
- information describing any book-entry features;
- any provisions for payment of additional amounts for taxes;
- whether the debt securities are to be offered at a price such that they will be deemed to be offered at an "original issue discount" as defined in paragraph (a) of Section 1273 of the Internal Revenue Code of 1986, as amended;
- the denominations in which we will issue the series of debt securities, if other than denominations of $1,000 and any integral multiple thereof;
- events of default;
- whether we and/or the indenture trustee may change an indenture without the consent of any holders;
- the form of debt security and how it may be exchanged and transferred;
- description of the indenture trustee and paying agent, and the method of payments; and
- any other specified terms, preferences, rights or limitations of, or restrictions on, the debt securities and any terms that may be required by us or advisable under applicable laws or regulations.

We summarize below the material terms of the form of indenture, if required, or indicate which material terms will be described in the applicable prospectus supplement. The indenture:

- does not limit the amount of debt securities that we may issue;
- allows us to issue debt securities in one or more series;
- does not require us to issue all of the debt securities of a series at the same time;
- allows us to reopen a series to issue additional debt securities without the consent of the holders of the debt securities of such series; and
- provides that the debt securities may be secured or unsecured, as may be set forth in the applicable prospectus supplement.

LEGAL MATTERS

The validity of the securities being offered hereby will be passed upon for us by Wyrick Robbins Yates & Ponton LLP, Raleigh, North Carolina.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2018, as set forth in their report, which is incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

This prospectus is part of a registration statement we filed with the SEC. This prospectus does not contain all of the information set forth in the registration statement and the exhibits to the registration statement. For further information with respect to us and the securities we are offering under this prospectus, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. You should rely only on the information contained in this prospectus or incorporated by reference. We have not authorized anyone else to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus is accurate as of any date other than the date on the front page of this prospectus, regardless of the time of delivery of this prospectus or any sale of the securities offered by this prospectus.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. The SEC maintains a website at *www.sec.gov* that contains reports, proxy and information statements and other information regarding registrants. Our SEC filings, including our registration statement and the exhibits and schedules thereto, are available on the SEC website at *www.sec.gov*.

We maintain a website at *www.cerecor.com*. Information contained in or accessible through our website does not constitute a part of this prospectus.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" information into this prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The SEC file number for the documents incorporated by reference in this prospectus is 001-33609. The documents incorporated by reference into this prospectus contain important information that you should read about us.

The following documents are incorporated by reference into this document:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2018, as filed with the SEC on March 18, 2019, and amended on April 23, 2019, pursuant to Section 13(a) of the Exchange Act;
- our Quarterly Report on Form 10-Q for the quarter ended March 31, 2019, filed with the SEC on May 9, 2019, pursuant to Section 13(a) of the Exchange Act;
- our Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2019, as filed with the Commission on August 8, 2019, pursuant to Section 13(a) of the Exchange Act;

- our Current Reports on Form 8-K filed with the SEC on March 6, March 29, April 12, June 12, August 8, two filings September 9, and October 15, 2019 to the extent the information in such report is filed and not furnished;
- our amended Current Report on Form 8-K/A filed with the SEC on September 19, 2019;
- our Definitive Proxy Statement on Schedule 14A, filed with the SEC on June 19, 2019; and
- the description of our common stock contained in our Registration Statement on Form 8-A, filed with the SEC on October 9, 2015, including any amendments or reports filed for the purposes of updating this description.

We also incorporate by reference into this prospectus all documents (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items) that are filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (i) after the date of the initial filing of the registration statement of which this prospectus forms a part and prior to effectiveness of the registration statement, or (ii) after the date of this prospectus but prior to the termination of the offering. These documents include periodic reports, such as Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, as well as proxy statements.

We will furnish without charge to you, on written or oral request, a copy of any or all of the documents incorporated by reference in this prospectus, including exhibits to these documents. You should direct any requests for documents to Cerecor, Inc., 540 Gaither Road, Suite 400 Rockville, Maryland 20850; telephone: (410) 522-8707.

Any statement contained herein or in a document incorporated or deemed to be incorporated by reference into this document will be deemed to be modified or superseded for purposes of the document to the extent that a statement contained in this document or any other subsequently filed document that is deemed to be incorporated by reference into this document modifies or supersedes the statement.

1,306,282 Shares of Common Stock

PROSPECTUS SUPPLEMENT

Wedbush PacGrow

February 3, 2020