

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

May 21, 2015

Via E-mail Blake M. Patterson, M.D. President and Chief Executive Officer Cerecor Inc. 400 E. Pratt Street, Suite 606 Baltimore, Maryland 21202

> Re: Cerecor Inc.

> > Amendment No. 2 to Confidential Draft Registration Statement on Form S-1

Submitted April 29, 2015 CIK No. 0001534120

Dear Dr. Patterson:

We have reviewed your amended draft registration statement and have the following comments. Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comments apply to your facts and circumstances or do not believe another amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to these comments and your next amended draft registration statement or filed registration statement, we may have additional comments.

Prospectus Summary Product Candidates and Platform, page 2

- 1. Please remove the row concerning the COMTi platform from this table and the corresponding one on page 90. Unless and until you are able to advance a product candidate from the platform into preclinical studies, as you have done with CERC-406, the information included in this row is too inchoate to be included in a chart intended to summarize your product pipeline.
- 2. Please disclose from whom you acquired CERC-501 in this summary.

Risk Factors

Risks Related to Our Business and Industry

"Our product candidates may cause undesirable side effects . . .," page 24

3. Please amend this risk factor to state the adverse effects that were identified in the Clin301-201 clinical study and whether they were the same or similar to the ones you Blake M. Patterson, M.D. Cerecor Inc. May 21, 2014 Page 2

anticipate. Also, as you intend to increase the dosage of CERC-301 in the Clin301-203 study, please disclose that the risk of serious adverse events will also increase.

Management's Discussion and Analysis of Financial Condition and Results of Operations
Critical Accounting Policies and Significant Judgments and Estimates
Determination of the Fair Market Value of Common Stock, page 79

4. We acknowledge your April 18, 2014 response to comment 21 of our January 16, 2014 letter. Once you have an estimated offering price, please provide us a separate analysis explaining the reasons for the differences between recent valuations of your common stock leading up to the IPO and the estimated offering price.

If you intend to respond to these comments with an amended draft registration statement, please submit it and any associated correspondence in accordance with the guidance we provide in the Division's October 11, 2012 announcement on the SEC website at http://www.sec.gov/divisions/corpfin/cfannouncements/drsfilingprocedures101512.htm.

Please keep in mind that we may publicly post filing review correspondence in accordance with our December 1, 2011 policy (http://www.sec.gov/divisions/corpfin/cfannouncements/edgarcorrespondence.htm). If you intend to use Rule 83 (17 CFR 200.83) to request confidential treatment of information in the correspondence you submit on EDGAR, please properly mark that information in each of your confidential submissions to us so we do not repeat or refer to that information in our comment letters to you.

You may contact Mark Brunhofer at (202) 551-3613 or James Rosenberg at (202) 551-3679 if you have questions regarding comments on the financial statements and related matters. Please contact Scot Foley at (202) 551-3383 or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ Jeffrey P. Riedler

Jeffrey P. Riedler Assistant Director

cc: Joanne R. Soslow, Esq. Kevin S. Shmelzer, Esq. Morgan, Lewis & Bockius LLP 1701 Market Street Philadelphia, PA 19103