

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

Mail Stop 4546

November 18, 2016

Uli Hacksell, Ph.D.
President and Chief Executive Officer
Cerecor Inc.
400 E. Pratt Street, Suite 606
Baltimore, Maryland 21202

Re: Cerecor Inc.

Registration Statement on Form S-3

Filed November 8, 2016 File No. 333-214507

Dear Dr. Hacksell:

We have limited our review of your registration statement to those issues we have addressed in our comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Prospectus Cover Page

1. It appears that you are relying on General Instruction I.B.6 of Form S-3 for this offering. If so, please revise your prospectus cover page to disclose the calculation of the aggregate market value of your outstanding voting and nonvoting common equity and the amount of all securities offered pursuant to General Instruction I.B.6 during the prior 12 calendar month period that ends on, and includes, the date of the prospectus. We refer you to Instruction 7 to General Instruction I.B.6.

Exhibit Index

2. We note that you have submitted an application for confidential treatment relating to an exhibit filed with your quarterly report on Form 10-Q on November 8, 2016. Please be advised that this application is being processed and that we will not be in a position to

Uli Hacksell, Ph.D. Cerecor Inc. November 18, 2016 Page 2

grant effectiveness to your registration statement until such time as the application has completed processing and comments to it, if any, have been resolved.

3. We note that you indicate that your Statement of Eligibility of Trustee under the Indenture will be filed by amendment or incorporated by reference to a report filed under the Exchange Act. Please be advised that you should file this Form T-1 not with a post-effective amendment or as incorporated by reference to an Exchange Act filing, but rather under form type "305B2." For guidance, please refer to Trust Indenture Act of 1939 Compliance & Disclosure Interpretation 206.01, available on the Commission's website.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Please contact Scot Foley at (202) 551-3383 or Mary Beth Breslin at (202) 551-3625 with any questions.

Sincerely,

/s/ Mary Beth Breslin for

Suzanne Hayes Assistant Director Office of Healthcare and Insurance

cc: Brent B. Siler, Esq.