

**Prospectus Supplement No. 6
(To Prospectus dated October 14, 2015)**



**4,000,000 shares of common stock issuable upon the
exercise of the 4,000,000 outstanding Class A warrants**

and

**2,000,000 shares of common stock issuable upon the
exercise of the 4,000,000 outstanding Class B warrants**

This prospectus supplement No. 6 supplements the prospectus dated October 14, 2015 filed pursuant to Rule 424(b)(4) by Cerecor Inc. (the “Company” or “we”), as supplemented by the prospectus supplement No. 1 dated October 20, 2015, the prospectus supplement No. 2 dated November 13, 2015, the prospectus supplement No. 3 dated November 23, 2015, the prospectus supplement No. 4 dated December 17, 2015 and the prospectus supplement No. 5 dated December 21, 2015, each filed pursuant to Rule 424(b)(3) by the Company (collectively, the “Prospectus”). Pursuant to the Prospectus, this prospectus supplement relates to the continuous offering of 4,000,000 shares of common stock underlying our Class A warrants and 2,000,000 shares of our common stock underlying Class B warrants. Each warrant was a component of a unit that we issued in our initial public offering, which closed on October 20, 2015. The components of the units began to trade separately on November 13, 2015. Each Class A warrant became exercisable on the date when the units detached and the components began to trade separately and will expire on October 20, 2018, or earlier upon redemption. Each Class B warrant became exercisable on the date the units detached and the components began to trade separately and will expire on April 20, 2017.

This prospectus supplement incorporates into our Prospectus the information contained in our attached Amendment No. 1 to Current Report on Form 8-K, which was filed with the Securities and Exchange Commission on December 29, 2015.

You should read this prospectus supplement in conjunction with the Prospectus, including any supplements and amendments thereto. This prospectus supplement is qualified by reference to the Prospectus except to the extent that the information in this prospectus supplement supersedes the information contained in the Prospectus.

This prospectus supplement is not complete without, and may not be delivered or utilized except in connection with, the Prospectus, including any supplements and amendments thereto.

Our common stock, the Class A warrants and the Class B warrants are traded on The NASDAQ Capital Market under the symbols “CERC,” “CERCW,” and “CERCZ,” respectively.

AN INVESTMENT IN OUR SECURITIES INVOLVES A HIGH DEGREE OF RISK. SEE THE
SECTION ENTITLED “RISK FACTORS” BEGINNING ON PAGE 16 OF THE PROSPECTUS
FOR A DISCUSSION OF INFORMATION THAT SHOULD BE CAREFULLY CONSIDERED IN CONNECTION WITH AN
INVESTMENT IN OUR SECURITIES

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this Prospectus is truthful

or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is December 29, 2015

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

**FORM 8-K/A
Amendment No. 1**

**CURRENT REPORT
Pursuant to Section 13 or 15(d) of
the Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported): **December 17, 2015**

Cerecor Inc.

(Exact name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

001-37590

45-0705648
(Commission File Number) (IRS
Employer Identification No.)

**400 E. Pratt Street
Suite 606
Baltimore, Maryland**
(Address of Principal Executive Offices)

21202
(Zip Code)

Registrant's Telephone Number, Including Area Code: **(410) 522-8707**

Not Applicable
(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instructions A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
 - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
 - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
 - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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EXPLANATORY NOTE

This report amends the Current Report on Form 8-K of Cerecor Inc. (the “*Company*”), dated December 17, 2015 and filed with the Securities and Exchange Commission on December 21, 2015, to report the employment agreement of Uli Hacksell, Ph.D., who was appointed as the Company’s Chief Executive Officer, effective January 1, 2016, by the Board of Directors of the Company (the “*Board*”) on December 20, 2015.

Item 5.02. Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

(e) *Employment Agreement with Uli Hacksell*

In connection with his appointment as Chief Executive Officer, Dr. Hacksell and the Company entered into an employment agreement, to be effective January 1, 2016 (the “*Effective Date*”).

Dr. Hacksell’s base salary under the employment agreement is initially \$500,000 per year, subject to review and adjustment by the Board from time to time. Dr. Hacksell is eligible for an annual discretionary cash bonus of up to 45% of his base salary, subject to his achievement of any applicable performance targets and goals established by the Board. Pursuant to the employment agreement, the Company will grant Dr. Hacksell an option to purchase 360,459 shares of the Company’s common stock (the “*Initial Option Grant*”) at an exercise price equal to the closing price of the last reported sale of the Company’s common stock on the NASDAQ Capital Market on the last trading day preceding the Effective Date. One third of the shares subject to the Initial Option Grant will vest on the first anniversary of the Effective Date and the remaining two thirds of the shares subject to the Initial Option Grant will vest in equal monthly installments on each monthly anniversary date of the first vesting date over the following 24 months.

Dr. Hacksell is eligible to participate in the Company’s other employee benefit plans as in effect from time to time on the same basis as are generally made available to other senior executives of the Company. The Company will reimburse Dr. Hacksell for the costs of reasonable living quarters in the Baltimore, Maryland area, as well as related reasonable coach travel from his home in Florida to the Baltimore, Maryland/Washington, DC area, in a combined maximum gross amount of \$5,000 per month.

In the event that Dr. Hacksell’s employment is terminated by the Company without “Cause” or by Dr. Hacksell for “Good Reason” (each as defined in his employment agreement), in each case subject to Dr. Hacksell entering into and not revoking a separation agreement in a form acceptable to the Company, Dr. Hacksell will be eligible to receive:

- severance payments equal to his then-current base salary for a period of 12 months, as well as the average of the annual full-year cash bonuses Dr. Hacksell received from the Company for the three completed calendar years prior to the date of his termination (or fewer full year periods if the employment term is less than three years, pro-rated for the portion of the year in which such termination occurred);
- if he timely elects and remains eligible for continued coverage under COBRA, the COBRA premiums necessary to continue the health insurance coverage in effect for Dr. Hacksell and his covered dependents prior to the date of termination, until the earliest of (x) the first anniversary of Dr. Hacksell’s termination; (y) the date when Dr. Hacksell becomes eligible for substantially equivalent health insurance coverage in connection with new employment or self-employment; or (z) the date Dr. Hacksell ceases to be eligible for COBRA continuation coverage for any reason, including plan termination; and
- accelerated vesting of 100% of any then-unvested shares subject to the Initial Option Grant and any stock option or stock award granted during the employment term.

In the event of Dr. Hacksell’s death or disability, Dr. Hacksell (or his estate, if applicable) will be entitled to receive the same average of the past three years’ annual bonuses described above that would otherwise apply if Dr. Hacksell’s employment had been terminated without cause or for good reason.

The foregoing description of the employment agreement is a summary, is not complete and is qualified in its entirety by reference to the employment agreement, which will be filed as an exhibit to the Company’s Annual Report on Form 10-K for the year ending December 31, 2015.

SIGNATURES

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

Cerecor Inc.

By: /s/ Mariam Morris
Mariam Morris
Chief Financial Officer

Date: December 29, 2015

