

Prospectus Supplement No. 25
(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. 25 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, the prospectus supplement No. 5 dated December 21, 2015, the prospectus supplement No. 6 dated December 29, 2015, the prospectus supplement No. 7 dated January 5, 2016, the prospectus supplement No. 8 dated January 12, 2016, the prospectus supplement No. 9 dated January 19, 2016, the prospectus supplement No. 10 dated February 2, 2016, the prospectus supplement No. 11 dated April 11, 2016, the prospectus supplement No. 12 dated May 25, 2016, the prospectus supplement No. 13 dated May 26, 2016, the prospectus supplement No. 14 dated May 26, 2016, the prospectus supplement No. 15 dated July 20, 2016, the prospectus supplement No. 16 dated August 15, 2016, the prospectus supplement No. 17 dated August 29, 2016, the prospectus supplement No. 18 dated September 6, 2016, the prospectus supplement No. 19 dated September 12, 2016, the prospectus supplement No. 20 dated September 21, 2016, the prospectus supplement No. 21 dated September 26, 2016, the prospectus supplement No. 22 dated November 8, 2016, the prospectus supplement No. 23 dated November 29, 2016 and the prospectus supplement No. 24 dated December 5, 2016, 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 Item 3.01 of our attached Current Report on Form 8-K, which was filed with the Securities and Exchange Commission on January 20, 2017.

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 January 20, 2017

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

FORM 8-K

CURRENT REPORT

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

Date of Report (Date of earliest event reported): **January 20, 2017**

Cerecor Inc.

(Exact name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

001-37590
(Commission
File Number)

45-0705648
(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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Item 3.01. Notice of Delisting or Failure to Satisfy a Continued Listing Rule or Standard; Transfer of Listing.

On January 13, 2017, Cerecor Inc. (the “*Company*”) received a notice from the Nasdaq Listing Qualifications Staff (the “*Staff*”) that the Company is not in compliance with Nasdaq Listing Rule 5550(b)(2), as the Company's market value of listed securities (“*MVLS*”) was below the minimum \$35 million for the previous 30 consecutive business days. As a result, the Company was notified by the Staff that a deficiency exists with regard to Nasdaq Listing Rule 5550(b) (the “*Rule*”), as the Company was notified it is also not in compliance with Nasdaq Listing Rule 5550(b)(1) due to the Company's failure to maintain a minimum required stockholders' equity of \$2.5 million and Nasdaq Listing Rule 5550(b)(3) due to the Company's failure to have net income from continuing operations in the latest fiscal year or in two of the last three fiscal years. This notification has no immediate effect on the Company's listing on the Nasdaq Stock Market or on the trading of the Company's common stock, Class A warrants or Class B warrants (the “*Listed Securities*”).

In accordance with Nasdaq Listing Rule 5810(c)(3)(C), the Company has a period of 180 calendar days, or until July 12, 2017, to regain compliance with the Rule. To regain compliance, at any time during the 180 calendar day-compliance period the Company's MVLS must close at \$35 million or more for a minimum of 10 consecutive business days or the Company must report stockholders' equity of at least \$2.5 million. If the Company does not regain compliance with the Rule during the compliance period, it will receive written notification that its Listed Securities are subject to delisting, at which time the Company may appeal any delisting determination.

The Company is presently evaluating various courses of action to regain compliance. There can be no assurance that the Company will be able to regain compliance with the Rule or will otherwise be in compliance with other Nasdaq listing criteria.

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/ Uli Hacksell

Uli Hacksell

President and Chief Executive Officer

Date: January 20, 2017