

Prospectus Supplement No. 3
(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. 3 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 and the prospectus supplement No. 2 dated November 13, 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 to our quarterly report on Form 10-Q/A, which was filed with the Securities and Exchange Commission on November 23, 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.

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, DC 20549

FORM 10-Q/A
(Amendment No. 1)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

for the quarterly period ended September 30, 2015

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

for the transition period from to .

COMMISSION FILE NUMBER: 001-37590

Cerecor Inc.

(Exact name of registrant as specified in its charter)

DELAWARE
(State of incorporation)

45-0705648
(I.R.S. Employer Identification No.)

400 E. Pratt Street, Suite 606
Baltimore, Maryland 21202
(Address of Principal Executive Offices,
including Zip Code)

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

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No *

* The registrant has not been subject to the filing requirements for the past 90 days as it commenced trading following its initial public offering on October 14, 2015, but has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 since such time.

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company
(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

As of November 13, 2015, the registrant had 8,630,143 shares of common stock outstanding.

EXPLANATORY NOTE

Cerecor Inc. (the “Company”) is filing this Amendment No. 1 on Form 10-Q/A (“Amendment No. 1”) to our Quarterly Report on Form 10-Q for the quarter ended September 30, 2015 (the “Form 10-Q”), filed with the U.S. Securities and Exchange Commission on November 13, 2015, solely to correct an error set forth in Part II, Item 2, “Unregistered Sales of Equity Securities and Use of Proceeds” of the Form 10-Q and to include a signature page to the Form 10-Q. Part II, Item 2 of the Form 10-Q incorrectly stated that the underwriter of the Company’s initial public offering (“IPO”) exercised its over-allotment option for another 600,000 Units for additional gross proceeds of \$3,900,000 when such exercise had not occurred and the signature page to the Form 10-Q was inadvertently omitted. Amendment No. 1 correctly omits any discussion with respect to the exercise of the over-allotment option in connection with the Company’s IPO and includes a signature page of the Company.

As required by Rule 12b-15 of the Securities and Exchange Act of 1934, as amended, the Company is also filing as exhibits to Amendment No. 1 the certifications required under Section 302 of the Sarbanes-Oxley Act of 2002.

This Amendment No. 1 should be read in conjunction with the original Form 10-Q, which continues to speak as of the date of the Form 10-Q. Except as specifically noted above, this Amendment No. 1 does not modify or update disclosures in the original Form 10-Q. Accordingly, this Amendment No. 1 does not reflect events occurring after the filing of the Form 10-Q or modify or update any related or other disclosures.

PART II — OTHER INFORMATION

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Unregistered Sales of Equity Securities

None.

Use of Proceeds from Registered Securities.

Pursuant to the Registration Statement on Form S-1 (File No. 333-204905), as amended, that was declared effective by the SEC on October 14, 2015, we registered the Units to be sold in the IPO (including 600,000 Units with respect to an over-allotment option granted by us to the underwriters in the Offering).

We sold a total of 4,000,000 units in the IPO at an initial public offering price per unit of \$6.50 for gross proceeds of \$26,000,000. The net proceeds of the IPO, before offering expenses, to the Company were approximately \$23.6 million, determined as follows:

	Total
Initial public offering price	\$ 26,000,000
Underwriting discounts and commissions	(1,950,000)
Non-accountable expense allowance	(390,000)
Underwriting legal fees	(100,000)
	<u>\$ 23,560,000</u>

We will use the proceeds of this offering together with our cash and cash equivalents to fund the cost of our Phase 2 clinical development programs for CERC-301 and CERC-501, to fund research and development to advance our preclinical lead candidates under the COMTi platform and for working capital, general corporate purposes and potential in-licensing or other acquisitions.

No offering expenses were paid directly or indirectly to any of our directors or officers (or their associates) or persons owning ten percent or more of any class of our equity securities or to any other affiliates. There has been no material change in the planned use of proceeds from our IPO as described in our IPO Prospectus.

Item 6. EXHIBITS

Exhibit No.	Exhibit Description	Incorporated by Reference			Filed Herewith
		Form	Date	Number	
3.1	Amended and Restated Certificate of Incorporation of Cerecor Inc.	S-1	6/12/15	3.1	
3.2	Bylaws of Cerecor Inc., as currently in effect.	S-1	6/12/15	3.3	
4.1	Form of Unit Purchase Option	S-1/A			
4.2	Form of Class A Warrant Agreement	S-1/A	10/13/15	4.8	
4.3	Specimen Class A Warrant Certificate	S-1/A	10/13/15	4.9	
4.4	Form of Class B Warrant Agreement	S-1/A	10/13/15	4.11	
4.5	Specimen Class B Warrant Certificate	S-1/A	10/13/15	4.12	
10.2	Cerecor Inc. 2015 Omnibus Incentive Plan, including form of				

31.1	Nonqualified Stock Option Agreements thereunder Certification of Chief Executive Officer (Principal Executive Officer) pursuant to Rule 13a-14(a)/15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	S-1/A	9/8/2015	10.5	
31.2	Certification of Chief Financial Officer (Principal Financial Officer) pursuant to Rule 13a-14(a)/15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002				X
32.1	Certification of the Chief Executive Office (Principal Executive Officer) and Chief Financial Officer (Principal Financial Officer) pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002				X
101.INS	XBRL Instance Document	10-Q	11/13/15		
101.SCH	XBRL Taxonomy Extension Schema Document	10-Q	11/13/15		
101.CAL	XBRL Taxonomy Extension Calculation Linkbase	10-Q	11/13/15		
101.DEF	XBRL Taxonomy Extension Definition Linkbase	10-Q	11/13/15		
101.LAB	XBRL Taxonomy Extension Label Linkbase	10-Q	11/13/15		
101.PRE	XBRL Taxonomy Extension Presentation Linkbase	10-Q	11/13/15		

3

SIGNATURES

Pursuant to the requirements of 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.

Date: November 23, 2015

By: /s/ MARIAM M. MORRIS

Name: Mariam M. Morris
Title: Chief Financial Officer
(Principal Executive Officer)

4

Exhibit 31.1

**CERTIFICATION OF PERIODIC REPORT
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Blake M. Paterson, certify that:

1. I have reviewed this Quarterly Report on Amendment No. 1 to the Quarterly Report on Form 10-Q/A of Cerecor Inc.; and
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.

Date November 23, 2015

/s/ Blake M. Paterson

Blake M. Paterson
Chief Executive Officer
Principal Executive Officer

1

Exhibit 31.2

**CERTIFICATION OF PERIODIC REPORT PURSUANT TO SECTION 302 OF THE
SARBANES-OXLEY ACT OF 2002**

I, Mariam E. Morris, certify that:

1. I have reviewed this Quarterly Report on Amendment No. 1 to the Quarterly Report on Form 10-Q/A of Cerecor Inc.; and
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to

make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.

Date November 23, 2015

/s/ Mariam E. Morris

Mariam E. Morris

Chief Financial Officer

Principal Financial and Accounting Officer