UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-A

FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES PURSUANT TO SECTION 12(b) OR 12(g) OF THE **SECURITIES EXCHANGE ACT OF 1934**

CERECOR INC.

(Exact name of registrant as specified in its charter)

45-0705648 Delaware

(State of incorporation or organization) (I.R.S. Employer Identification No.)

400 E. Pratt Street, Suite 606 Baltimore, Maryland

21202 (Address of principal executive offices) (Zip Code)

Securities to be registered pursuant to Section 12(b) of the Act:

Title of each class Name of each exchange on which to be so registered each class is to be registered

The NASDAQ Stock Market LLC

Units, each consisting of one share of common stock, one class A warrant, and one class B warrant

Common stock, \$0.001 par value per share The NASDAQ Stock Market LLC

Class A warrant, exercisable for one share of The NASDAQ Stock Market LLC common stock

Class B warrant, exercisable for one-half share of The NASDAQ Stock Market LLC common stock

If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A.(c), check the following box. ⊠

If this form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A.(d), check the following box. □

Securities Act registration statement file number to which this Form relates: 333-204905

Securities to be registered pursuant to Section 12(g) of the Act: None

INFORMATION REQUIRED IN REGISTRATION STATEMENT

Item 1. Description of Registrant's Securities to be Registered.

The description of the units, the shares of common stock, \$0.001 par value per share, the Class A Warrants and the Class B Warrants of Cerecor Inc. (the "Registrant") to be registered hereunder is set forth under the heading "Description of Securities" in the Registrant's Registration Statement on Form S-1 (File No. 333-204905) originally filed with the Securities and Exchange Commission on June 12, 2015, as amended by any amendments to such Registration Statement and by any prospectus subsequently filed pursuant to Rule 424(b) under the Securities Act of 1933, as amended, which information is incorporated herein by reference.

Item 2. Exhibits.

Under the "Instructions as to Exhibits" with respect to Form 8-A, no exhibits are required to be filed because no other securities of the Registrant are registered on The NASDAQ Stock Market LLC and the securities registered hereby are not being registered pursuant to Section 12(g) of the Securities Exchange Act of 1934, as amended.

SIGNATURES

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereto duly authorized.

Date: October 8, 2015

CERECOR INC.

By: /s/ Mariam E. Morris

Name: Mariam E. Morris Title: Chief Financial Officer