

**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM S-8**  
**REGISTRATION STATEMENT**  
**Under**  
**The Securities Act of 1933**

**AXSOME THERAPEUTICS, INC.**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction  
of incorporation or organization)

**45-4241907**  
(IRS Employer Identification No.)

**25 Broadway**  
**9th Floor**  
**New York, New York 10004**  
(Address of principal executive offices) (Zip Code)

**Axsome Therapeutics, Inc. 2015 Omnibus Incentive Compensation Plan**  
(Full title of the Plans)

**Herriot Tabuteau, M.D.**  
**President and Chief Executive Officer**  
**Axsome Therapeutics, Inc.**  
**25 Broadway**  
**9th Floor**  
**New York, New York 10004**  
(Name and address of agent for service)

**(212) 332-3241**  
(Telephone number, including area code, of agent for service)

**Copies to:**

**Emilio Ragosa**  
Morgan, Lewis & Bockius LLP  
101 Park Avenue  
New York, New York 10178  
Telephone: (212) 309-6600

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)

**CALCULATION OF REGISTRATION FEE**

Title of Securities to be Registered (1)	Amount to be Registered(2)	Proposed Maximum Offering Price Per Share(3)	Proposed Maximum Aggregate Offering Price(3)	Amount of Registration Fee
Common stock, \$0.0001 par value, to be issued pursuant to the Registrant's 2015 Omnibus Incentive Compensation Plan	766,336 shares	\$ 3.60	\$ 2,758,810	\$ 319.75

- (1) This registration statement (the "Registration Statement") covers shares of the Registrant's common stock, \$0.0001 par value per share ("Common Stock"), which are issuable pursuant to the Registrant's 2015 Omnibus Incentive Compensation Plan (the "2015 Plan").
- (2) This Registration Statement shall also cover any additional shares of Common Stock which become issuable under the 2015 Plan by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without the Registrant's receipt of consideration which results in an increase in the number of the outstanding shares of Registrant's Common Stock.
- (3) Calculated solely for purposes of this offering under Rule 457(h) of the Securities Act of 1933, as amended (the "1933 Act"), on the basis of the average of the high and low prices per share of Registrant's Common Stock on March 22, 2017 as reported by The NASDAQ Stock Market.

## PART II

### Information Required in the Registration Statement

This Registration Statement relates to the registration of an additional 766,336 shares (the “Shares”) of the common stock, par value \$0.0001 per share, of Axsome Therapeutics, Inc. (the “Registrant”). The Shares are securities of the same class and relate to the same employee benefit plan, the 2015 Omnibus Incentive Compensation Plan, as those registered pursuant to the Registrant’s registration statement on Form S-8, previously filed with the Securities and Exchange Commission on December 16, 2015. In accordance with General Instruction E of Form S-8, the contents of the Registrant’s registration statement on Form S-8 (File No. 333-208579) filed with the Securities and Exchange Commission on December 16, 2015 is incorporated herein by reference and the information required by Part II is omitted, except as supplemented by the information set forth below.

#### Item 8. Exhibits

<u>Exhibit Number</u>	<u>Exhibit</u>
5.1	Opinion and Consent of Morgan, Lewis & Bockius LLP.
23.1	Consent of Morgan, Lewis & Bockius LLP is contained in Exhibit 5.1.
23.2	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm.
24	Power of Attorney. Reference is made to page 3 of this Registration Statement.
99.1	Axsome Therapeutics, Inc. 2015 Omnibus Incentive Compensation Plan (Incorporated by reference, Exhibit 10.6 to Registrant’s First Amendment of Registration Statement on Form S-1, file number 333-207393, filed on November 2, 2015.)
99.2	2015 Omnibus Incentive Compensation Plan, Form of Stock Option Agreement. (Incorporated by reference, Exhibit 99.2 to Registrant’s Registration Statement on Form S-8, file number 333-208579, filed on December 16, 2015.)



## EXHIBIT INDEX

Exhibit Number	Exhibit
5.1	Opinion and Consent of Morgan, Lewis & Bockius LLP.
23.1	Consent of Morgan, Lewis & Bockius LLP is contained in Exhibit 5.1.
23.2	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm.
24	Power of Attorney. Reference is made to page 3 of this Registration Statement.
99.1	Axxome Therapeutics, Inc. 2015 Omnibus Incentive Compensation Plan (Incorporated by reference, Exhibit 10.6 to Registrant's First Amendment of Registration Statement on Form S-1, file number 333-207393, filed on November 2, 2015.)
99.2	2015 Omnibus Incentive Compensation Plan, Form of Stock Option Agreement. (Incorporated by reference, Exhibit 99.2 to Registrant's Registration Statement on Form S-8, file number 333-208579, filed on December 16, 2015.)

OPINION AND CONSENT OF MORGAN, LEWIS & BOCKIUS LLP

March 29, 2017

Axsome Therapeutics, Inc.  
25 Broadway  
9th Floor  
New York, New York 10004

Re: Axsome Therapeutics, Inc. - Registration Statement on Form S-8 for 766,336 Shares of Common Stock

Ladies and Gentlemen:

We have acted as counsel to Axsome Therapeutics, Inc., a Delaware Corporation (the "Company"), in connection with the registration on Form S-8 (the "Registration Statement") under the Securities Act of 1933, as amended, of 766,336 shares of Common Stock (the "Shares") under the Company's 2015 Omnibus Incentive Compensation Plan (the "2015 Plan").

This opinion is being furnished in accordance with the requirements of Item 8 of Form S-8 and Item 601(b)(5)(i) of Regulation S-K.

We have reviewed the Company's charter documents and the corporate proceedings taken by the Company in connection with the establishment and implementation of the 2015 Plan. Based on such review, we are of the opinion that, if, as and when the Shares have been issued and sold (and the consideration therefor received) pursuant to the (a) provisions of option agreements duly authorized under the 2015 Plan and in accordance with the Registration Statement, or (b) duly authorized restricted stock units or other stock-based awards under the 2015 Plan and in accordance with the Registration Statement, such Shares will be duly authorized, legally issued, fully paid and nonassessable.

We consent to the filing of this opinion letter as Exhibit 5.1 to the Registration Statement. In giving the opinion set forth in this letter, we do not hereby admit that we are acting within the category of persons whose consent is required under Section 7 of the Securities Act of 1933, as amended, or the rules or regulations of the Securities and Exchange Commission thereunder.

This opinion letter is rendered as of the date first written above and we disclaim any obligation to advise you of facts, circumstances, events or developments which hereafter may be brought to our attention and which may alter, affect or modify the opinion expressed herein. Our opinion is expressly limited to the matters set forth above and we render no opinion, whether by implication or otherwise, as to any other matters relating to the Company, the 2015 Plan or the Shares.

Very truly yours,

/s/ MORGAN, LEWIS & BOCKIUS LLP

---

**Consent of Independent Registered Public Accounting Firm**

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the Axsome Therapeutics, Inc. 2015 Omnibus Incentive Compensation Plan of our report dated March 7, 2017, with respect to the consolidated financial statements of Axsome Therapeutics, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2016, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP  
New York, New York  
March 29, 2017

---