## 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  $\square$ 

Non-accelerated filer  $\square$ 

(Do not check if a smaller reporting company)

Accelerated filer ⊠
Smaller reporting company □

#### CALCULATION OF REGISTRATION FEE

| Title of Securities to be Registered (1)   | Amount to be<br>Registered(2) | Proposed Maximum<br>Offering Price<br>Per Share(3) |      | Proposed Maximum<br>Aggregate Offering<br>Price(3) |           | Amount of<br>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

| 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           | 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.)                             |  |  |
|                |   |  |  |
|                | 2   |  |  |

### **SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8, and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New York, State of New York on this 29th day of March, 2017.

### AXSOME THERAPEUTICS, INC.

| By | /s/ Herriot Tabuteau, M.D. |  |
|----|----------------------------|--|
|    | Herriot Tabuteau, M.D.     |  |
|    | Chief Executive Officer    |  |

#### POWER OF ATTORNEY

### KNOW ALL PERSONS BY THESE PRESENTS:

That each person whose signature appears below constitutes and appoints Herriot Tabuteau, M.D., Chief Executive Officer, and Constance Ames, Vice President, Finance, and each of them, as such person's true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for such person and in such person's name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his or her substitutes, may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

| Signature  | Title   | Date           |
|--|---|----------------|
| /s/ Herriot Tabuteau, M.D.<br>Herriot Tabuteau, M.D. | Chief Executive Officer and Chairman of the Board (Principal Executive Officer) | March 29, 2017 |
| /s/ Constance Ames Constance Ames                    | Vice President, Finance (Principal Financial and Accounting Officer)            | March 29, 2017 |
| /s/ Roger Jeffs, Ph.D.<br>Roger Jeffs, Ph.D.         | _ Director  | March 29, 2017 |
| /s/ Mark Coleman, M.D.<br>Mark Coleman, M.D.         | Director  | March 29, 2017 |
| /s/ Mark Saad<br>Mark Saad                           | _ Director  | March 29, 2017 |
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## EXHIBIT INDEX

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|----------------|--|--|--|
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#### 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