

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

**FORM S-8
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

Arsanis, Inc.

(Exact Name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction of
Incorporation or Organization)

27-3181608
(I.R.S. Employer
Identification No.)

890 Winter Street, Suite 230
Waltham, Massachusetts
(Address of Principal Executive Offices)

02451
(Zip Code)

2017 Equity Incentive Plan
(Full Title of the Plan)

René Russo, Pharm.D., BCPS
President and Chief Executive Officer
Arsanis, Inc.

890 Winter Street, Suite 230
Waltham, Massachusetts
(Name and Address of Agent For Service)

(781) 819-5704
(Telephone Number, Including Area Code, of Agent For Service)

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

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

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, par value \$0.001 per share	571,776 shares (2)	\$15.55 (3)	\$8,891,116.80 (3)	\$1,107.00

- (1) In accordance with Rule 416 under the Securities Act of 1933, as amended, this registration statement shall be deemed to cover any additional securities that may from time to time be offered or issued to prevent dilution resulting from stock splits, stock dividends or similar transactions.
(2) Consists of 571,776 shares issuable under the 2017 Equity Incentive Plan.

- (3) Estimated solely for the purpose of calculating the registration fee pursuant to Rules 457(c) and 457(h) of the Securities Act of 1933, as amended, and based upon the average of the high and low prices of the Registrant's Common Stock as reported on the Nasdaq Global Market on March 2, 2018.
-

EXPLANATORY NOTE

This Registration Statement on Form S-8, relating to the 2017 Equity Incentive Plan of Arsanis, Inc. (the “Registrant”), is being filed for the purpose of registering additional securities of the same class as other securities for which a Registration Statement on Form S-8 has previously been filed and is effective. Accordingly, this Registration Statement incorporates by reference the contents of the Registration Statement on Form S-8, File No. 333-221622, filed with the Securities and Exchange Commission on November 16, 2017 by the Registrant, relating to the Registrant’s 2010 Special Stock Incentive Plan, 2011 Stock Incentive Plan, 2017 Equity Incentive Plan and 2017 Employee Stock Purchase Plan, except for Item 8, Exhibits, with respect to which the Exhibit Index below is incorporated herein by reference.

Item 8. Exhibits.

Exhibit No.	Description	Incorporation by Reference			
		Form	SEC Filing Date	Exhibit Number	Filed with this S-8
4.1	Restated Certificate of Incorporation of the Company	8-K	11/20/2017	3.1	
4.2	Amended and Restated By-laws of the Company	8-K	11/20/2017	3.2	
5.1	Opinion of Wilmer Cutler Pickering Hale and Dorr LLP, counsel to the Registrant				X
23.1	Consent of Wilmer Cutler Pickering Hale and Dorr LLP (included in Exhibit 5.1)				X
23.2	Consent of PricewaterhouseCoopers LLC, independent registered public accounting firm				X
24.1	Power of attorney (included on the signature pages of this registration statement)				X
99.1	2017 Equity Incentive Plan	S-1	10/20/2017	10.7	

WILMERHALE

+1 617 526 6000 (t)
+1 617 526 5000 (f)
wilmerhale.com

March 9, 2018

Arsanis, Inc.
890 Winter Street, Suite 230
Waltham, MA 02451

Re: 2017 Equity Incentive Plan

Ladies and Gentlemen:

We have assisted in the preparation of a Registration Statement on Form S-8 (the “**Registration Statement**”) to be filed with the Securities and Exchange Commission (the “**Commission**”) under the Securities Act of 1933, as amended (the “**Securities Act**”), relating to 571,776 shares of common stock, par value \$0.001 per share (the “**Shares**”), of Arsanis, Inc., a Delaware corporation (the “**Company**”), issuable under the Company’s 2017 Equity Incentive Plan (the “**Plan**”).

We have examined the Certificate of Incorporation and By-laws of the Company, each as amended and restated to date, and originals, or copies certified to our satisfaction, of all pertinent records of the meetings of the directors and stockholders of the Company, the Registration Statement and such other documents relating to the Company as we have deemed material for the purposes of this opinion.

In our examination of the foregoing documents, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified, photostatic or other copies, the authenticity of the originals of any such documents and the legal competence of all signatories to such documents.

We assume that the appropriate action will be taken, prior to the offer and sale of the Shares in accordance with the Plan, to register and qualify the Shares for sale under all applicable state securities or “blue sky” laws.

We express no opinion herein as to the laws of any state or jurisdiction other than the state laws of the Commonwealth of Massachusetts, the General Corporation Law of the State of Delaware and the federal laws of the United States of America.

It is understood that this opinion is to be used only in connection with the offer and sale of the Shares while the Registration Statement is in effect.

Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized for issuance and, when the Shares are issued and paid for in accordance with the terms and conditions of the Plan, the Shares will be validly issued, fully paid and nonassessable.

Wilmer Cutler Pickering Hale and Dorr LLP, 60 State Street, Boston, Massachusetts 02109
Beijing Berlin Boston Brussels Denver Frankfurt London Los Angeles New York Oxford Palo Alto Washington

We hereby consent to the filing of this opinion with the Commission in connection with the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act. In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission.

Very truly yours,

WILMER CUTLER PICKERING
HALE AND DORR LLP

By: /s/ Cynthia T. Mazareas
Cynthia T. Mazareas, a Partner

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of Arsanis, Inc. of our report dated March 9, 2018, relating to the consolidated financial statements, which appears in Arsanis, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2017.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts
March 9, 2018