

FOIA CONFIDENTIAL TREATMENT REQUEST

The entity requesting confidential treatment is:

Arsanis, Inc.
890 Winter Street, Suite 230
Waltham, MA 02451
Attn: René Russo
President and Chief Executive Officer
(781) 819-5704

October 26, 2017

VIA EDGAR SUBMISSION

Securities and Exchange Commission
Division of Corporation Finance
100 F Street, NE
Washington, DC 20549
Attention: Dorrie Yale

Re: Arsanis, Inc.
Registration Statement on Form S-1
Filed October 20, 2017
File No. 333-221050

Ladies and Gentlemen:

On behalf of Arsanis, Inc. (the "Company"), set forth below is additional information to supplement the Company's prior response to comment 12 contained in the letter dated September 6, 2017 from the staff (the "Staff") of the Office of Healthcare & Insurance of the Division of Corporate Finance of the Securities and Exchange Commission (the "Commission") relating to the Draft Registration Statement on Form S-1 (File No. 377-01662), submitted by the Company to the Commission on August 10, 2017. Such Draft Registration Statement has been updated by the Company as reflected in the registration statement referenced above (File No. 333-221050), which was publicly filed by the Company on October 20, 2017 (the "Registration Statement"). The supplemental response set forth below is based upon information provided to Wilmer Cutler Pickering Hale and Dorr LLP by the Company.

* * *

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

The Company respectfully submits the below additional information to assist the Staff in its review of the Company's position with respect to its determination of the fair value of its common stock underlying its outstanding equity awards and the reasons for the differences between the recent valuation of its common stock and the estimated offering price for its initial public offering ("IPO").

**Rule 83 Confidential Treatment Request by Arsanis, Inc.
Request #1**

Preliminary IPO Price Range

The Company advises the Staff that it preliminarily estimates a price range of approximately \$[**] to \$[**] per share (the "Preliminary Price Range") for its IPO, before giving effect to a reverse stock split that the Company plans to implement prior to effectiveness of the Registration Statement. The actual price range to be included in a subsequent amendment to the Registration Statement (which will comply with the Staff's interpretation regarding the parameters of a *bona fide* price range) has not yet been determined and remains subject to adjustment based on factors outside of the Company's control. However, the Company believes that the foregoing indicative price range will not be subject to significant change.

Arsanis, Inc. respectfully requests that the information contained in the response be treated as confidential information and that the Commission provide timely notice to René Russo, President and Chief Executive Officer, Arsanis, Inc., 890 Winter Street, Suite 230, Waltham, Massachusetts 02451, (781) 819-5704, before it permits any disclosure of the bracketed information in Request #1.

Determining the Fair Value of Common Stock Prior to the IPO

As there has been no public market for the Company's common stock to date, the estimated fair value of its common stock has been determined by the Company's board of directors (the "Board") as of the date of each option grant, with input from management, considering the Company's most recent third-party valuations of its common stock and the Board's assessment of additional objective and subjective factors that it believed were relevant and which may have changed from the date of the most recent third-party valuation through the date of the grant. As disclosed in the Registration Statement, the Company obtained third-party valuations of its common stock as of December 31, 2015, April 22, 2016, December 31, 2016 and April 24, 2017 that were prepared using the option-pricing method. These third-party valuations were performed in accordance with the guidance outlined in the American Institute of Certified Public Accountants' Accounting and Valuation Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*.

The Company advises the Staff that the only equity awards it has granted during last twelve months consisted of the grant of stock options on June 19, 2017, when the Company granted options to purchase an aggregate of 2,245,450 shares of common stock at an exercise price of \$1.17 per share, which the Board determined to be the fair value per share of its common stock on that date. The Board's determination of this fair value was based, in part, on the results of a third-party valuation of the Company's common stock as of April 24, 2017 (the "April 2017 Valuation"). The April 2017 Valuation was prepared taking into account the sale of shares of the Company's Series D preferred stock on April 24, 2017 at a price of \$3.2457 per share. In particular, the April 2017 Valuation determined the Company's equity value using an option-pricing model backsolve approach that was based on the actual price paid for its Series D preferred stock in this contemporaneous, arm's-length transaction with new and existing investors. The April 2017 Valuation then applied a discount for lack of marketability to arrive at an indication of value of the Company's common stock and resulted in a valuation of the Company's common stock of \$1.17 per share. From April 24, 2017 to June 19, 2017, the Company continued to operate its business in the ordinary course and there were no significant developments in its business. The Board considered the results of the April 2017 Valuation, input from management and the objective and subjective factors listed on page 88 of the Registration Statement and determined that the fair value of the Company's common stock was \$1.17 per share at the time of the June 19, 2017 option grants.

Comparison of Most Recent Valuation and the Preliminary Price Range

As is typical in IPOs, the Preliminary Price Range was not derived using a formal determination of fair value, but was determined based on discussions between the Company and the underwriters. Prior to October 24, 2017, the Company and underwriters had not had any specific discussions regarding the Preliminary Price Range. Among the factors that were considered in setting the Preliminary Price Range were the following:

- the general conditions of the securities market and the recent market prices of, and the demand for, publicly traded common stock of comparable companies;
- the Company's financial condition and prospects;
- estimates of business potential and earnings prospects for the Company and the industry in which it operates;
- recent performance of IPOs of companies in the biotechnology sector; and
- progress and stage of development of the Company's development programs.

**Rule 83 Confidential Treatment Request by Arsanis, Inc.
Request #2**

The Company believes that the difference between the fair value of its common stock as of June 19, 2017 of \$1.17 per share and the Preliminary Price Range of \$[**] to \$[**] per share is the result of the factors above and the following factors and positive developments with respect to the Company's business that occurred subsequent to June 19, 2017:

- The Preliminary Price Range necessarily assumes that the Company's IPO has occurred and a public market for the Company's common stock has been created, and therefore excludes any discount for lack of marketability of the Company's common stock. In contrast, a discount for lack of marketability of [**]% was applied to arrive at the fair value of common stock determined in the April 2017 Valuation.

Arsanis, Inc. respectfully requests that the information contained in the response be treated as confidential information and that the Commission provide timely notice to René Russo, President and Chief Executive Officer, Arsanis, Inc., 890 Winter Street, Suite 230, Waltham, Massachusetts 02451, (781) 819-5704, before it permits any disclosure of the bracketed information in Request #2.

- The Preliminary Price Range necessarily assumes that all of the Company's preferred stock has converted into common stock in connection with this IPO. The Company's preferred stock currently has substantial economic rights and preferences over the Company's common stock. Upon the closing of this IPO, all outstanding shares of the Company's preferred stock will convert into common stock, thus eliminating the superior rights and preferences of the preferred stock as compared to the common stock.
- Since the June 19, 2017 date of the Company's most recent determination of the value of its common stock, the Company has taken several steps towards the completion of an IPO, including:
 - in mid-July, the Company held its IPO organizational meeting;
 - in September and October 2017, the Company held "testing-the-waters" meetings at which the Company received positive feedback from potential investors; and
 - on October 20, 2017, the Company publicly filed the Registration Statement with the Commission.

- Since the June 19, 2017 date of the Company's most recent determination of the value of its common stock, the Company also made further progress in the advancement of its lead development programs and the execution of its business strategies, including:
 - continued successful enrollment of its leading Phase 2 clinical trial of ASN100 for the prevention of *S. aureus* pneumonia in high-risk, mechanically ventilated patients;
 - initiation of activities to support a study of ASN100 for the treatment of *S. aureus* pneumonia in mechanically ventilated patients who do not meet the enrollment criteria for the ongoing Phase 2 trial due to having already developed pneumonia;
 - the advancement of multiple development candidates into *in vitro* assays and *in vivo* models of RSV in the Company's ASN500 program; and
 - the addition of two new members to the Company's Board who possess relevant strategic, financial, fundraising and biotechnology and pharmaceutical industry experience.
- The proceeds of a successful IPO would substantially strengthen the Company's balance sheet by increasing its cash resources. In addition, the completion of this IPO would provide the Company with more ready access to the public company equity and debt markets.

The Company respectfully submits that the difference between the latest valuation and the Preliminary Price Range is reasonable. The Company will continue to update its disclosure for all equity related transactions through the effective date of the Registration Statement.

The Company respectfully requests that the Staff return to the undersigned this letter pursuant to Rule 418 of the Securities Act of 1933, as amended, once the Staff has completed its review. For the convenience of the Staff, we have provided a self-addressed stamped envelope for this purpose. We respectfully reserve the right to request that this letter be returned to us at an earlier date.

In addition, the Company requests confidential treatment under 17 C.F.R. § 200.83 for the contents of this letter and has submitted a separate request for confidential treatment in accordance therewith to the Commission's Office of Freedom of Information and Privacy Act Operations.

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If you have any further questions or comments, or if you require any additional information, please contact the undersigned by telephone at (617) 526-6393. Thank you for your assistance.

Very truly yours,

/s/ Cynthia T. Mazareas
Cynthia T. Mazareas

cc: René Russo, Arsanis, Inc.

Office of Freedom of Information and Privacy Act Operations
Securities and Exchange Commission
100 F Street N.E., Mail Stop 2736
Washington, D.C. 20549