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

**FORM S-1
REGISTRATION STATEMENT**
*Under
The Securities Act of 1933*

INTELLIA THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

2836
(Primary Standard Industrial
Classification Code Number)

36-4785571
(I.R.S. Employer
Identification Number)

**130 Brookline Street, Suite 201
Cambridge, MA 02139
(857) 285-6200**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Nessan Bermingham, Ph.D.
Founder, President and Chief Executive Officer
**130 Brookline Street, Suite 201
Cambridge, Massachusetts 02139
(857) 285-6200**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Arthur R. McGivern, Esq.
William D. Collins, Esq.
Goodwin Procter LLP
Exchange Place
Boston, Massachusetts 02109
(617) 570-1000

Copies to:
José E. Rivera, Esq.
Chief Operating Officer and Chief Legal Officer
Intellia Therapeutics, Inc.
130 Brookline Street, Suite 201
Cambridge, Massachusetts 02139
(857) 285-6200

Peter N. Handrinos, Esq.
Brandon J. Bortner, Esq.
Latham & Watkins LLP
John Hancock Tower
200 Clarendon Street
Boston, Massachusetts 02116
(617) 948-6000

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. File No. 333-210689

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

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.

Large Accelerated Filer Accelerated Filer
Non-Accelerated Filer (Do not check if a smaller reporting company) Smaller Reporting Company

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, par value \$0.0001 per share	\$4,200,000.00(1)	\$422.94(2)

- (1) Based on the public offering price. The registrant previously registered securities at an aggregate offering price not to exceed \$120,000,000 on a Registration Statement on Form S-1 (File No. 333-210689), which was declared effective on May 5, 2016. In accordance with Rule 462(b) promulgated under the Securities Act, an additional amount of securities having a proposed maximum aggregate offering price of \$4,200,000.00 is hereby registered, which includes shares issuable upon exercise of the underwriters' option to purchase additional shares and does not include the securities that the Registrant previously registered on the Registration Statement on Form S-1 (File No. 333-210689).
- (2) Pursuant to Rule 457(o) of the rules and regulations under the Securities Act of 1933, as amended, the registration fee has been calculated on the basis of the maximum aggregate offering price and the number of securities being registered has been omitted.

This Registration Statement shall become effective upon filing with the Securities and Exchange Commission in accordance with Rule 462(b) promulgated under the Securities Act.

EXPLANATORY NOTE AND INCORPORATION BY REFERENCE

This registration statement is being filed with respect to the registration of additional shares of common stock, par value \$0.0001 per share, of Intellia Therapeutics, Inc., a Delaware corporation, pursuant to Rule 462(b) under the Securities Act of 1933, as amended. The contents of the earlier registration statement on Form S-1 (File No. 333-210689), which was declared effective by the Commission on May 5, 2016, are incorporated in this registration statement by reference.

The required opinion and consents are listed on an Exhibit Index attached hereto and filed herewith.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this Registration Statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cambridge, Commonwealth of Massachusetts, on the 5th day of May, 2016.

INTELLIA THERAPEUTICS, INC.

By: /s/ Nessian Bermingham
Nessian Bermingham, Ph.D.
Founder, President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement on Form S-1 has been signed by the following person in the capacities and on the date indicated.

<u>Name</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Nessian Bermingham</u> Nessian Bermingham, Ph.D.	Founder, President, Chief Executive Officer and Director <i>(Principal Executive Officer)</i>	May 5, 2016
<u>*</u> Sapna Srivastava, Ph.D.	Chief Financial and Strategy Officer <i>(Principal Financial Officer)</i>	May 5, 2016
<u>*</u> Nicole Heifner	Chief Accounting Officer <i>(Principal Accounting Officer)</i>	May 5, 2016
<u>*</u> Caroline Dorsa	Director	May 5, 2016
<u>*</u> Jean François Formela, M.D.	Director	May 5, 2016
<u>*</u> Carl L. Gordon, Ph.D.	Director	May 5, 2016
<u>*</u> Rachel Haurwitz, Ph.D.	Director	May 5, 2016
<u>*</u> John M. Leonard, M.D.	Chief Medical Officer and Director	May 5, 2016

* Pursuant to Power of Attorney

By: /s/ Nessian Bermingham
Nessian Bermingham, Ph.D.
Attorney in Fact

EXHIBIT INDEX

<u>Exhibit No.</u>	<u>Exhibit Index</u>
5.1	Opinion of Goodwin Procter LLP
23.1	Consent of Deloitte & Touche LLP, Independent Registered Public Accounting Firm
23.2	Consent of Goodwin Procter LLP (included in Exhibit 5.1)
24.1*	Power of Attorney
24.2**	Power of Attorney for Perry Karsen

* Previously filed on the signature page to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-210689), originally filed with the Securities and Exchange Commission on April 11, 2016 and incorporated by reference herein.

** Previously filed as Exhibit 24.2 to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-210689), originally filed with the Securities and Exchange Commission on April 27, 2016 and incorporated by reference herein.

May 5, 2016

Intellia Therapeutics, Inc.
130 Brookline Street, Suite 201
Cambridge, MA 02139

Re: Securities Being Registered under Registration Statement on Form S-1

Ladies and Gentlemen:

We have acted as counsel to you in connection with your filing of (i) a Registration Statement on Form S-1 (File No. 333-210689) (the "Initial Registration Statement") pursuant to the Securities Act of 1933, as amended (the "Securities Act") and (ii) a second Registration Statement on Form S-1 filed pursuant to Rule 462(b) promulgated under the Securities Act (the "462(b) Registration Statement", and together with the Initial Registration Statement, the "Registration Statement"). This opinion letter is furnished to you in connection with your filing of the 462(b) Registration Statement, relating to the registration of the offering by Intellia Therapeutics, Inc., a Delaware corporation (the "Company"), of up to 1,150,000 shares (the "Shares") of the Company's Common Stock, \$0.0001 par value per share, including Shares purchasable by the underwriters upon their exercise of an option granted to the underwriters by the Company. The Shares are being sold to the several underwriters named in, and pursuant to, an underwriting agreement among the Company and such underwriters (the "Underwriting Agreement").

We have reviewed such documents and made such examination of law as we have deemed appropriate to give the opinions set forth below. We have relied, without independent verification, on certificates of public officials and, as to matters of fact material to the opinions set forth below, on certificates of officers of the Company.

The opinion set forth below is limited to the Delaware General Corporation Law (which includes reported judicial decisions interpreting the Delaware General Corporation Law).

Based on the foregoing, we are of the opinion that the Shares have been duly authorized and, when the Shares have been issued and delivered against payment in accordance with the terms approved by a duly authorized committee of the Board of Directors, the Shares will be validly issued, fully paid and non-assessable.

We hereby consent to the inclusion of this opinion as Exhibit 5.1 to the 462(b) Registration Statement and to the references to our firm under the caption "Legal Matters" in the Initial Registration Statement. In giving our consent, we do not 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 thereunder.

Very truly yours,

/s/ GOODWIN PROCTER LLP

GOODWIN PROCTER LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-1 of our report dated March 16, 2016 (April 25, 2016 as to the effects of the reverse split discussed in Note 2) relating to the financial statements of Intellia Therapeutics, Inc. (successor to Intellia Therapeutics, LLC) and subsidiaries, and incorporated by reference in the Prospectus included in Registration Statement No. 333-210689, as amended.

We also consent to the reference to us under the heading “Experts” in such Prospectus.

/s/ Deloitte & Touche LLP

Boston, Massachusetts

May 5, 2016