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

VIA EDGAR AND FACSIMILE

May 3, 2016

United States Securities and Exchange Commission Division of Corporation Finance Mail Stop 4720 100 F Street, N.E. Washington, D.C. 20549 Attention: Christina Thomas

RE: Intellia Therapeutics, Inc. Registration Statement on Form S-1 File No. 333-210689

Dear Ms. Thomas:

Pursuant to Rule 461 under the Securities Act of 1933, as amended (the "**Act**"), Intellia Therapeutics, Inc. (the "**Company**") hereby requests that the effective date of the above-referenced registration statement (the "**Registration Statement**") be accelerated to May 5, 2016, at 4:00 p.m., Eastern Time, or as soon thereafter as practicable, unless we or our outside counsel, Goodwin Procter LLP, request by telephone that such Registration Statement be declared effective at some other time. In making this acceleration request, the Company acknowledges that it is aware of its responsibilities under the Act.

Once the Registration Statement is effective, please orally confirm the event with our counsel, Goodwin Procter LLP by calling Arthur McGivern at (617) 570-1971. We also respectfully request that a copy of the written order from the Securities and Exchange Commission (the "**Commission**") verifying the effective time and date of the Registration Statement be sent to our counsel, Goodwin Procter LLP, Attention: Arthur McGivern, by facsimile to (617) 801-8626.

In connection with the foregoing, the Company hereby acknowledges the following:

- should the Commission or the staff of the Commission, acting pursuant to delegated authority, declare the Registration Statement effective, it does not foreclose the Commission from taking any action with respect to the Registration Statement;
- the action of the Commission or the staff of the Commission, acting pursuant to delegated authority, in declaring the Registration Statement effective, does not relieve the Company from its full responsibility for the adequacy and accuracy of the disclosure in the Registration Statement; and
- the Company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any
 person under the federal securities laws of the United States.

If you have any questions regarding this request, please contact Arthur McGivern of Goodwin Procter LLP at (617) 570-1971.

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Sincerely,

INTELLIA THERAPEUTICS, INC.

/s/ Nessan Bermingham

Nessan Bermingham President and Chief Executive Officer

cc: José E. Rivera, Esq., Intellia Therapeutics, Inc. Sapna Srivastava, Ph.D. Intellia Therapeutics, Inc. Nicole Heifner, Intellia Therapeutics, Inc. Arthur R. McGivern, Esq., Goodwin Procter LLP William D. Collins, Esq., Goodwin Procter LLP