

IDERA PHARMACEUTICALS, INC.
167 Sidney Street
Cambridge, Massachusetts 02139

April 25, 2016

By EDGAR Submission

Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549

Re: Idera Pharmaceuticals, Inc.
Registration Statement on Form S-3
File No. 333-210140
Request for Acceleration

Ladies and Gentlemen:

Pursuant to Rule 461 promulgated under the Securities Act of 1933, as amended, Idera Pharmaceuticals, Inc. (the "**Registrant**") hereby requests acceleration of the effective date of its Registration Statement on Form S-3 (File No. 333-210140) (the "**Registration Statement**") so that it may become effective at 4:00 p.m., Eastern time, on April 26, 2016, or as soon thereafter as practicable.

The Registrant hereby acknowledges that:

- should the Securities and Exchange Commission (the "**Commission**") or the staff, 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, acting pursuant to delegated authority, in declaring the Registration Statement effective, does not relieve the Registrant from its full responsibility for the adequacy and accuracy of the disclosure in the Registration Statement; and
- the Registrant may not assert staff comments and the declaration of effectiveness of the Registration Statement as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

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Very truly yours,

IDERA PHARMACEUTICALS, INC.

/s/ Mark J. Casey

Mark J. Casey

Senior Vice President, General Counsel and Secretary
