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

January 16, 2013

By EDGAR Submission

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

Attn: Jeffrey Riedler

Re: Idera Pharmaceuticals, Inc.

Registration Statement on Form S-3

File No. 333-185392 Request for Acceleration

Dear Mr. Riedler:

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. 333-185392) (the "Registration Statement") so that it may become effective at 4:00 p.m., Eastern time, on January 17, 2013, or as soon thereafter as practicable. Please note that there are no underwriters involved in the offering registered by this Registration Statement, and, therefore, this acceleration request by the registrant is the only request for the acceleration effectiveness required under Rule 461.

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 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 the foregoing, please call Stuart M. Falber of Wilmer Cutler Pickering Hale and Dorr LLP at 617-526-6000.

Very truly yours,

IDERA PHARMACEUTICALS, INC.

/s/ Louis J. Arcudi III, MBA

Louis J. Arcudi III, MBA Chief Financial Officer, Treasurer and Secretary

Stuart M. Falber, Esq., Wilmer Cutler Pickering Hale and Dorr LLP