

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

December 24, 2012

Via E-mail

Sudhir Agrawal, D. Phil.
Chairman of the Board of Directors, President and Chief Executive Officer Idera Pharmaceuticals, Inc.
167 Sidney Street
Cambridge, Massachusetts 02139

Re: Idera Pharmaceuticals, Inc.
Registration Statement on Form S-3
Filed December 11, 2012

File No. 333-185392

Dear Dr. Agrawal:

We have limited our review of your registration statement to the issue we have addressed in our comment. Please respond to this letter by amending your registration statement as requested. If you do not believe our comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in a response.

After reviewing any amendment to your registration statement, we may have additional comments.

Incorporation of Certain Documents by Reference, page 25

1. Please include the Current Report on Form 8-K you filed on February 17, 2012 among the documents you are incorporating by reference.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

• should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;

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- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; 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.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Please contact Scot Foley at (202) 551-3383 or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ Daniel Greenspan for

Jeffrey P. Riedler Assistant Director

cc: Stuart M. Falber, Esq.
Wilmer Cutler Pickering Hale and Dorr LLP
60 State Street
Boston, Massachusetts 02109