

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

Mail Stop 4546

October 7, 2016

Via E-mail
Mr. Louis J. Arcudi, III
Chief Financial Officer
Idera Pharmaceuticals, Inc.
167 Sidney Street
Cambridge, MA 02139

Re: Idera Pharmaceuticals, Inc.

Form 10-K for the Fiscal Year Ended December 31, 2015

Filed March 10, 2016 File No. 001-31918

Dear Mr. Arcudi:

We have limited our review of your filing to the financial statements and related disclosures and have the following comment. In our comment, we ask you to provide us with information so we may better understand your disclosure.

Please respond to this comment within 10 business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe the comment applies to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide, we may have additional comments.

Notes to Financial Statements

6. Collaboration and License Agreements, page F-19

1. For each of your collaboration and license agreements under which you are eligible to receive future milestone payments, please provide us the amount of each milestone and a description of its triggering event. Please also explain how you considered the disclosure guidance in ASC 605-28-50-2 for those arrangements that include milestone consideration.

Mr. Louis J. Arcudi, III Idera Pharmaceuticals, Inc. October 7, 2016 Page 2

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

You may contact Rolf Sundwall, Staff Accountant, at (202) 551-3105, or Sharon Blume, Accounting Branch Chief, at (202) 551-3474 with any questions. In this regard, do not hesitate to contact me at (202) 551-3679.

Sincerely,

/s/ Jim B. Rosenberg

Jim B. Rosenberg Senior Assistant Chief Accountant Office of Healthcare and Insurance