CONFIDENTIAL TREATMENT REQUEST UNDER RULE 83
The entity requesting confidential treatment is:
Idera Pharmaceuticals, Inc.
167 Sidney Street
Cambridge, MA 02139
Attn: Louis J. Arcudi, III
Chief Financial Officer
(617) 679-5517

October 24, 2016

By EDGAR Transmission

Securities and Exchange Commission
Division of Corporation Finance
100 F Street, NE
Mail Stop 4546
Washington, D.C. 20549

Attention: Jim B. Rosenberg, Senior Assistant Chief Accountant

Re: Idera Pharmaceuticals, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2015
Filed March 10, 2016
File No. 001-31918

Ladies and Gentlemen:

This letter is submitted in response to comments contained in a letter dated October 7, 2016 (the "Letter") from Jim B. Rosenberg of the Staff (the "Staff") of the Securities and Exchange Commission (the "Commission"), to Louis J. Arcudi, III, Chief Financial Officer of Idera Pharmaceuticals, Inc. (the "Company" or "Idera"). The responses are keyed to the comments in the Letter and to the headings used in the Letter.

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.*

Response:

The Company is a party to two collaboration and license agreements under which the Company is eligible to receive future milestone payments: its collaboration and license agreement with GlaxoSmithKline Intellectual Property Development Limited ("GSK") and its research and collaboration agreement with Merck & Co., Inc. ("Merck").

Collaboration and License Agreement with GSK:

In November 2015, the Company entered into a collaboration and license agreement with GSK to license, research, develop and commercialize pharmaceutical compounds from the Company's third-generation antisense technology for the treatment of selected targets in renal disease (the "GSK Agreement"). In connection with the GSK Agreement, GSK identified an initial target for the Company to attempt to identify a potential population of development candidates to address such target under a mutually agreed upon research plan. From the population of identified development candidates, GSK may designate one development candidate in its sole discretion to move forward into clinical development. Once GSK designates a development candidate, GSK would be solely responsible for the development and commercialization activities for that designated development candidate.

At any time during the first two years of the GSK Agreement, GSK has the option to select up to two additional targets for further research under mutually agreed upon research plans. GSK may then designate one development candidate for each additional target, at which time GSK would have sole responsibility to develop and commercialize each such designated development candidate.

Under the terms of the GSK Agreement, the Company is eligible to receive up to approximately $100 million in license, research, clinical development and commercialization milestone payments, including the $2.5 million payment that it received upon the execution of the GSK Agreement. To date, GSK has only selected the initial target and has not designated any development candidates, and accordingly has not paid to the Company any additional milestone payments.

Below is a summary of each individual milestone payment due, as defined in the GSK Agreement, and the respective triggering events.

Rule 83 Confidential Treatment by Idera Pharmaceuticals, Inc. Request #1

	Initial Target	Secondary Target (1)	Secondary Target (2)	Total
Upfront and Designation Payments:				
Identification of Initial Target payment	$ 2,500,000			$ 2,500,000

[**]	[**]	[**]	[**]	
[**]	[**]	[**]	[**]	
[**]	[**]	[**]	[**]	
Upfront and Designation Payments	[**]	[**]	[**]	$ 9,000,000
Clinical Milestones:				
[**]	[**]	[**]	[**]	
[**]	[**]	[**]	[**]	
Subtotal Clinical Milestones	[**]	[**]	[**]	[**]
Commercial Milestones:				
[**]	[**]	[**]	[**]	
Subtotal Commercial Milestones	[**]	[**]	[**]	[**]
Total Milestones	[**]	[**]	[**]	$ 100,500,000

Note: Milestone as used in this table is defined by the GSK Agreement, not under ASC 605-28.

The GSK Agreement provides for the Company to grant a [**] license to its technology during the research period for each selected target and to perform certain research services under the agreed upon research plan for the target. At any time during the course of the research plan, GSK at its discretion may designate a development candidate, at which time: (i) GSK will assume full responsibility for the development and commercialization of the development candidate and the Company's research obligations will end, (ii) GSK will owe Idera a development candidate designation milestone payment, as noted in the table above, and (iii) [**]. The Company has estimated that the research period for the initial target will be approximately 27 months. GSK has not identified a second or third target.

In the Notes to the Financial Statements in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2015 (the "2015 Form 10-K"), the Company noted that certain of the payments that may be received under the GSK Agreement are related to substantive milestones. Specifically, the Company had categorized the payments associated with the designation of development candidates (up to [**]) as substantive milestones. The Company now believes that such payments, as well as the payments associated with the identification of targets, are not substantive milestones as defined in ASC 605-28-20 and instead should be categorized as substantive options. The Company believes that GSK's rights to identify targets and designate development candidates, and in effect purchase (a) upon the identification of a target, a [**], non-royalty-bearing research license for the Company's proprietary technology for use solely with the target and (b) [**], are options. GSK is not contractually obligated to exercise any of these options, and due to the uncertain outcome of research activities, there is significant uncertainty as to whether GSK will decide to exercise any of these options. Accordingly, the [**] of potential future payments associated with the designation of development candidates and the [**] of potential future payments associated with the identification of up to two additional targets do not meet the definition of milestones under ASC 605-28-20.

> **Idera Pharmaceuticals, Inc. respectfully requests that the information contained in Request #1 above be treated as confidential information and that the Securities and Exchange Commission provide timely notice to Louis J. Arcudi, III, Chief Financial Officer, Idera Pharmaceuticals, Inc., 167 Sidney Street, Cambridge, MA 02139, telephone 617-679-5500, before it permits any disclosure of the bracketed information contained in Request #1.**

Payments to be received in connection with GSK's identification of additional targets and designation of development candidates are considered substantive options as a result of the uncertainties related to the research, development and commercialization activities, and the

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uncertainty as to whether GSK will exercise the options. The substantive options are not priced at a significant incremental discount. Accordingly, the substantive options are not considered deliverables at the inception of the arrangement and the associated option exercise payments are not accounted for at inception of the agreement. These will be accounted for at the time they are exercised.

With respect to the clinical and commercial milestones, the Company notes that the clinical and commercial responsibilities under the GSK Agreement are all performance obligations of GSK occurring after the Company has completed all of its obligations for the target. Accordingly, the $89.0 million of clinical and commercial milestones do not meet the definition of milestone under ASC 605-28-20; they represent contingent revenue to the Company and will be accounted for at the time the contingencies are resolved.

Accordingly, in future filings, including the Company's Form 10-Q for the quarter ended September 30, 2016, which the Company intends to file on or about October 28, 2016, the Company's disclosure regarding its accounting for these milestones will be revised as follows:

> Payments to be received in connection with GSK's identification of additional targets and designation of development candidates are considered substantive options as a result of the uncertainties related to the research, development and commercialization activities, and the uncertainty as to whether GSK will exercise the options. The substantive options are not priced at a significant incremental discount. Accordingly, the substantive options are not considered deliverables at the inception of the arrangement and the associated option exercise payments are not accounted for at inception of the agreement.
>
> The clinical and commercial milestones provided for in the GSK Agreement are all performance obligations of GSK occurring after the Company has completed its obligations. As a result, they represent contingent revenue to the Company and will be accounted for at the time the contingencies are resolved.

The Company has disclosed potential future payments under the GSK Agreement in two categories. The first category represents those payments that may be received should GSK identify additional targets and designate development candidates. This category totals approximately $9.0 million. The second category represents those payments that may be received should GSK advance the designated candidates through the clinical trial process, obtain regulatory approval

and launch commercial sales. This category totals approximately $89.0 million and such payments would be expected to occur beyond the next two years, if ever. The Company believes the aggregation in this manner provides investors with meaningful context as to the payments without providing a level of specificity that is competitively harmful.

Collaboration and License Agreement with Merck:

In December 2006, the Company entered into an exclusive license and research collaboration agreement with Merck to research, develop and commercialize vaccine products containing the Company's TLR7, TLR8, and TLR9 agonists in the fields of cancer, infectious diseases and

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Alzheimer's disease, which was amended in April 2014 (the "Merck Agreement"). Between 2006 and 2010, the Company recognized as revenue an upfront payment of $20.0 million over a four year period (ending in 2010). Merck also purchased $10.0 million of the Company's common stock upon the execution of the Merck Agreement. No milestones or royalties have been earned or paid under the Merck Agreement. Historical disclosure related to this agreement included a discussion of the above noted payments and the following description of the milestone payments, as described in the agreement, that could be paid under this agreement:

- Merck agreed to pay the Company milestone payments as follows:
  - up to $165.0 million if vaccines containing the Company's TLR9 agonist compounds are successfully developed and marketed in each of the oncology, infectious disease, and Alzheimer's disease fields;
  - up to $260.0 million if vaccines containing the Company's TLR9 agonist compounds are successfully developed and marketed for follow-on indications in the oncology field and if vaccines containing the Company's TLR7 or TLR8 agonists are successfully developed and marketed in each of the oncology, infectious disease, and Alzheimer's disease fields; and
  - if Merck develops and commercializes additional vaccines using the Company's agonists, the Company would be entitled to receive additional milestone payments.

The above milestones relate to clinical, regulatory and commercial activities. Merck is responsible for all of these activities. Given the low level of activity under the Merck Agreement, the Company determined that the agreement was no longer material, deleted it from the exhibit index to the 2015 Form 10-K and reduced the disclosure regarding the terms of the agreement. However, as the Merck Agreement is still in effect, the Company has included limited disclosure in the Notes to the Financial Statements in the 2015 Form 10-K.

Regarding disclosure under ASC 605-50-28-2, the Accounting Standards Update which was the genesis of the ASC section, ASU No. 2010-17, *Milestone Method of Revenue Recognition* (the "ASU"), was adopted by the Company on January 1, 2011. As disclosed in the Company's Form 10-K for the fiscal year ended December 31, 2011, "the Company plans to follow ASU No. 2010-17 prospectively for any future milestones." No milestones have been earned under the Merck Agreement following adoption of the ASU; accordingly, the prospective disclosure requirements of ASC 605-50-28-2 have not been required and no disclosure regarding the potential accounting for these milestones has been provided.

The Company respectfully requests that the Staff return to the undersigned this letter pursuant to Rule 418 of the Securities Act of 1933, as amended, once the Staff has completed its review. For the convenience of the Staff, the Company has provided a self-addressed stamped envelope for this purpose. The Company respectfully reserves the right to request that this letter be returned to it at an earlier date.

In addition, the Company requests confidential treatment under 17 C.F.R. § 200.83 for the contents of this letter and has submitted a separate request for confidential treatment in

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accordance therewith to the Commission's Office of Freedom of Information and Privacy Act Operations.

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If you have any further questions or comments, or if you require additional information, please contact the undersigned by telephone at (617) 679-5517 or electronically at larcudi@iderapharma.com. Thank you for your assistance.

Very truly yours,

/s/ Louis J. Arcudi, III
Louis J. Arcudi, III
Senior Vice President of Operations, Chief Financial Officer and Treasurer

cc: Mark J. Casey, Senior Vice President, General Counsel and Secretary
Stuart M. Falber, Wilmer Cutler Pickering Hale and Dorr LLP

Office of Freedom of Information and Privacy Act Operations
Securities and Exchange Commission
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Washington, D.C. 20549