

Stuart M. Falber

December 1, 2009

Via EDGAR

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SECURITIES AND EXCHANGE COMMISSION  
Division of Corporation Finance  
100 F Street, N.E.  
Washington, DC 20549  
Attention: Michael Rosenthal, Esq.

Re: Idera Pharmaceuticals, Inc.  
Form 10-K for the year ended 12/31/2008  
Filed March 11, 2009  
File No. 001-31918

Dear Mr. Rosenthal:

On behalf of our client, Idera Pharmaceuticals, Inc. (the "Company"), set forth below is the response of the Company to the comment of the staff (the "Staff") of the Securities Exchange Commission (the "Commission") set forth in the letter to Sudhir Agrawal, dated November 16, 2009, from Jeffrey P. Riedler, Assistant Director (the "Letter").

We have set forth below in italics the Staff's comment contained in the Letter. The response is based on information provided to us by representatives of the Company.

**Overview of Compensation Program and Philosophy, page 15**

- 1. We note your response to our prior comment 1, but we are not persuaded by your argument that the individual goals set for the named executive officers to be used in determining their incentive compensation are not material. We reassert that the Staff's position is that these goals are material to an investor's understanding of the process by which bonuses are determined, and thus reissue our prior comment asking that you please expand your draft disclosure here further to include each of the individual goals that were set for each named executive officer. If you are concerned that disclosure of such goals may be competitively harmful then you may request confidential treatment for your response pursuant to Rule 83.*

The Company respectively submits that the disclosure of each individual goal for each named executive officer of the Company is not material to an understanding of the process by which bonuses are determined. The Company notes that individual goals are determined by and between the Chief Executive Officer and each named executive officer. The individual goals reflect the Chief Executive Officer's expectation for overall job performance for each named executive officer and are more a description of the duties and responsibilities of the named executive officer for the relevant period than a list of performance goals for the named executive officer. The individual goals are not performance goals that, if achieved, will result in the grant of a bonus and the named executive officers understand that.

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Moreover, the individual goals are not used as criteria in the determination of bonus grants. The compensation committee does not determine or approve the individual goals for named executive officers. In making the bonus determination, the compensation committee considers individual performance but does not review the achievement or non-achievement of individual goals by the named executive officer. Instead, it bases its assessment of individual performance of the named executive officers on the Chief Executive Officer's general performance evaluation of each officer and his recommendation to the compensation committee regarding such officer's compensation, including bonus. The Chief Executive Officer's evaluations and recommendations are not based specifically on the achievement or non-achievement of each individual performance goal. For the reasons described above, the Company respectfully submits that the disclosure of specific individual goals would not add significantly to an "understanding of the Company's compensation policies and decisions," is not material to an investor's understanding of the process by which bonuses are determined, and, therefore, is not required disclosure under Item 402 of Regulation S-K.

\* \* \*

The Company acknowledges that:

- the Company is responsible for the adequacy and accuracy of the disclosure in the filing;
- Staff comments or changes to disclosure in response to Staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the Company may not assert Staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please do not hesitate to telephone the undersigned at 617-526-6663 if you have any questions regarding this response letter.

Very truly yours,

/s/ Stuart M. Falber  
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Stuart M. Falber, Esq.

cc: Sudhir Agrawal, D. Phil.  
Louis J. Arcudi, III