

October 9, 2009

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Via EDGAR

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 are the responses of the Company to the comments of the staff (the "Staff") of the Securities Exchange Commission (the "Commission") set forth in the letter to Sudhir Agrawal, dated September 28, 2009, from Jeffrey P. Riedler, Assistant Director (the "Letter").

We have set forth below in italics each of the Staff's comments set forth in the Letter and have keyed the Company's responses to the heading and numbering of those comments. The responses are based on information provided to us by representatives of the Company. For convenience, capitalized terms in the responses below are used with the meanings ascribed to them in the filing to which they refer.

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

- We note that in your draft disclosure for your 2010 proxy statement you state, "The individual performance goals of each named executive officer consist primarily of the key objectives and goals from our annual business plan that relate to the functional area or business unit for which the named executive officer is responsible." Please expand your draft disclosure here further to include each of the individual goals that were set for each named executive officer. While you may not consider any individual goals to be material, we consider these goals material to an understanding of the process by which bonuses are determined.*

The Company respectively submits that, in the context of its compensation program and processes, the disclosure of each individual goal for each of the named executive officers of the Company is not material to an understanding of the process by which bonuses are determined, particularly in light of the disclosure that the Company proposed for its 2010 proxy statement (the "proposed disclosure") in the Company's letter to the Staff dated August 25, 2009 (the "prior response letter").

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Item 402(b) of Regulation S-K states that Compensation Discussion and Analysis shall explain “material elements of the registrant’s compensation of the named executive officers” and Instruction 1 thereto states that the purpose of the Compensation Discussion and Analysis is to “provide to investors material information that is necessary to an understanding of the registrant’s compensation policies and decisions regarding the named executive officers.” Accordingly, a listing of the individual goals is required to be included in the Compensation Discussion and Analysis only if such information is material to or comprises material elements of the Company’s compensation of its named executive officers and is necessary to an understanding of the Company’s compensation policies and decisions for its named executive officers.

The standard for assessing materiality in the context of the securities laws is well established. As stated by the Supreme Court in *TSC Industries, Inc. v. Northway, Inc.* and elsewhere, “[a]n omitted fact is material if there is a substantial likelihood that a reasonable shareholder would consider it important in deciding how to vote” and making other decisions regarding the stock.<sup>1</sup> For the reasons described below, the Company believes that (i) a “reasonable” shareholder would not find disclosure of specific individual goals to be “important” in making any voting or other decision, and (ii) adding specific disclosure of each of the individual goals for each named executive officer to the disclosure already contained in the proposed disclosure for the 2010 proxy statement would not aid investors in any meaningful way.

As described in the proposed disclosure for the 2010 proxy statement, the Company grants annual bonuses as part of the annual compensation package for its executive officers. However, the Company does not maintain any bonus program or formal bonus plan, does not have bonus targets and does not employ a formula to determine bonus awards. Executive officers of the Company understand that any bonus they receive will be heavily based on the achievement of corporate goals, but that the compensation committee will also take into account the executives’ individual performance and that the achievement or non-achievement of individual goals are only an element of the assessment of the executive’s individual performance.

The corporate goals and individual goals are set at the beginning of the year, with the corporate goals being discussed with the Board of Directors and approved by the compensation committee. Individual goals are determined between the Chief Executive Officer and each executive and are reflective of the Chief Executive Officer’s expectations for such executive’s performance during the year and not linked to bonus. While the compensation committee reviews, discusses and provides input on and feedback to the Chief Executive Officer regarding the individual goals for the executive officers, it does not formally approve or adopt those individual goals. In contrast, the compensation committee formally approves and adopts the corporate goals, which as noted in the proposed disclosure track to the individual goals for the Chief Executive Officer. As noted in the prior response letter, the individual goals for 2009 range from 8 to 18 specific goals for each officer and do not include any specific quantitative or financial targets.

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<sup>1</sup> *TSC Indus., Inc. v. Northway, Inc.*, 426 U.S. 438, 449 (1976).

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In determining bonuses, the compensation committee gives substantial weight to the achievement of corporate goals and specifically evaluates the achievement or non-achievement of each of the corporate goals. The achievement or non-achievement of each corporate goal has a direct impact on the amount of bonus to be awarded. The compensation committee also evaluates individual performance. In doing so, the compensation committee reviews the performance evaluations presented by the Chief Executive Officer for each of the executive officers. Achievement of the executive officer's individual goals on a general basis is part of that evaluation, but the performance evaluation does not address the achievement or non-achievement of each specific goal and the committee does not review each individual goal or assess whether each goal has been achieved. As noted in the proposed disclosure for the 2010 proxy statement, in assessing individual performance for purposes of the annual bonus determination, the compensation committee also reviews subjective criteria, including (i) leadership, (ii) management, (iii) judgment and decision-making skills, (iv) results orientation and (v) communication.

As stated in the prior response letter, the Company recognizes that, to the extent that achievement or non-achievement of specific individual goals is cited as affecting the compensation committee's bonus determination, the Company will disclose that fact. However, where achievement or non-achievement of the individual goals is not specifically reviewed by the compensation committee and does not have a direct impact, whether negative or positive, on the bonus awarded, the Company believes disclosure of the individual goals is not warranted.

The Company also notes that it provides a general description of the nature of the individual goals, stating in the proposed disclosure that "the individual goals of each named executive officer consist primarily of the key objectives and goals from the Company's annual business plan that relate to the functional area or business unit for which the named executive officer is responsible." Consequently, in the absence of a specific individual goal having a material impact on the bonus determination, the Company believes that the disclosure of the individual goals will not provide investors with any meaningful additional information and is not necessary to an understanding of the Company's compensation of its named executive officers. As an example, the Company supplementally notes to the Staff that one of the 2009 corporate goals is "Filing of IND for IMO-3100" and the individual goals related thereto for the named executive officers are "File IND for IMO-3100" (Dr. Agrawal), "Provide clinical leadership and review for 3100 IND" (Dr. Bexon), and "Open an IND within budget" (Dr. Sullivan)."

In assessing the materiality of disclosure regarding individual goals, the Company notes that its proposed disclosure for the 2010 proxy statement contains a significant amount of information regarding the process that the Company uses to determine bonuses. Specifically, the Company notes that the disclosure in the 2010 proxy statement will provide the following:

- information regarding the various factors considered by the compensation committee in determining bonuses;
  - a statement that the determination of annual bonuses for the Company's executive officers, including the Company's named executive officers, is heavily weighted on the Company's corporate performance and the achievement or non-achievement of the corporate goals;
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- a list of the corporate goals and a description of how they are determined;
- a statement as to whether each corporate goal was achieved and the impact on bonuses;
- a statement regarding the role of individual performance and the achievement and non-achievement of individual goals in bonus determination; and
- a statement that individual goals consist of objectives that relate to the business plan, which is reflected in the corporate goals that are disclosed.

In addition, the Company agrees that it will disclose in its 2010 proxy statement any factors that are individually material to the determination of the bonus award to each named executive officer.

In view of all of the disclosures already contained in the proposed disclosure for the 2010 proxy statement, the Company believes that its disclosure is appropriate and provides investors with an understanding of its compensation policies and decisions, including the process by which bonuses are determined. 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 otherwise material and, therefore, is not required under Item 402 of Regulation S-K.

### Exhibits

2. *We note your response to comment 4. Please note that we will not be in a position to clear this comment until the exhibit has been filed.*

The Company acknowledges that the Staff will not be in a position to clear this comment until the exhibit has been filed.

\* \* \*

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.
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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

Stuart M. Falber, Esq.

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