

Mail Stop 6010
Via Facsimile and U.S. Mail

September 13, 2006

Mr. Jean-Pierre Sommadossi
Chairman and Chief Executive Officer
Idenix Pharmaceuticals, Inc.
60 Hampshire Street
Cambridge, Massachusetts 02139

Re: Idenix Pharmaceuticals, Inc.
Form 10-K for Fiscal Year Ended December 31, 2005
Filed on March 16, 2006
File No. 000-49839

Dear Mr. Sommadossi:

We have reviewed your filing and have the following comments. We have limited our review of your filing to only your financial statements and related disclosures and do not intend to expand our review to other portions of your document. In our comments, we ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filings. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for fiscal year ended December 31, 2005

Notes to the Consolidated Financial Statements

3. Novartis Relationship, page 81

1. Please provide us in disclosure-type format the nature of events that will trigger the \$500 million in additional license fees and milestone payments and the \$357 million to selling shareholders.

21. Collaborative Agreements and Contracts, page 98

2. Please tell us where you disclose, or provide to us in disclosure-type format, information that quantifies the amount of royalties you will have to pay to University of Montpellier and the University of Cagliari upon commencing sale of any product developed. Also, explain the impact of your ongoing litigation with the "1998 licensors," which include CNRS, on your co-operative laboratory agreements with CNRS and the University of Montpellier.

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Please respond to these comments within 10 business days or tell us when you will provide us with a response. Your letter should key your responses to our comments. Detailed letters greatly facilitate our review. Please furnish the letter to us via EDGAR under the form type label CORRESP.

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 all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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.

In connection with responding to our comments, please provide, in your letter, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filings;
- 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Frank Wyman, Staff Accountant, at 202-551-3660 or Lisa Vanjoske, Assistant Chief Accountant, at 202-551-3614, if you have questions regarding the comments. In this regard, do not hesitate to contact me, at 202-551-3679.

Sincerely,

Jim B. Rosenberg
Senior Assistant Chief Accountant