Mail Stop 6010 Via Facsimile and U.S. Mail

October 19, 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 September 26, 2006 response to our September 13, 2006 letter and have the following comments. 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 filing. 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 refer to prior comment one. We continue to believe that investors will benefit from disclosure of the general nature of events triggering the \$500 million in additional license fees. Please provide this information to us in a disclosure-type format. Explain how you would be competitively disadvantaged, if you disclose these amounts.

Mr. Jean-Pierre Sommadossi Idenix Pharmaceuticals, Inc. October 19, 2006 Page 2 21. Collaborative Agreements and Contracts, page 98

2. Please acknowledge that you will disclose in your next filing the impact of the "1998 licensors" litigation on your co-operative laboratory agreements with CNRS and the University of Montpelier.

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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 file your letter on EDGAR under the form type label CORRESP.

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