

Via Facsimile and U.S. Mail
Mail Stop 6010

December 18, 2008

Michael W. Bonney
President and Chief Executive Officer
65 Hayden Avenue
Lexington, MA 02421

Re: Cubist Pharmaceuticals, Inc.
Form 10-K for the Year Ended December 31, 2007
Filed February 29, 2008
File No. 000-21379

Dear Mr. Bonney:

We have reviewed your filing and have the following comments. In our comments, we ask you to provide us with information to better understand your disclosure. Where it requests you to revise disclosure, the information you provide should show us what the revised disclosure will look like and identify the annual or quarterly filing, as applicable, in which you intend to first include it. If you do not believe that revised disclosure is necessary, explain the reason in your response. After reviewing the information provided, we may raise additional comments and/or request that you amend your filing.

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 on 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

Item 1. Business, page 4

1. Please revise the description of the license agreement with Eli Lilly to quantify the payments made to date and disclose when the license agreement expires.

2. Please revise the description of the agreement with Novartis to disclose when the agreement expires.
3. We note your statement that Hospira converts API into vialled formulation of CUBICIN. However, it appears that the agreement initially entered into with Abbott Laboratories involved development activities and potential milestone payments to be made by Cubist. Please revise the description of this agreement to describe Hospira's development obligations under the agreement, quantify the milestone payments made to date and the aggregate amount of potential remaining milestone payments.
4. Please revise the description of the agreement with ACS Dobfar to disclose the minimum purchase requirements and when the agreement expires.

Intellectual Property Portfolio, page 10

5. Please disclose when the five patents owned by Cubist related to the drug product, manufacture, and/or administration or use of daptomycin expire.

Definitive Proxy Statement

Item 11. Executive Compensation, page 9

6. Please revise the discussion to more specifically describe the corporate performance goals, each executive officer's individual goals, explain which goals were successfully met and explain how bonuses and stock option awards were determined based on the successful achievement of these goals. Please note, to the extent that the goals were quantified, the description should also be quantified.

* * * *

Please provide us the information requested within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter with your response that keys your responses to our comments and provide any requested information. Detailed cover letters greatly facilitate our review. Please furnish your letter on 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.

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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 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.

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 comment on your filing.

Please contact Laura Crotty, Staff Attorney, at (202) 551-3575, Suzanne Hayes, Legal Branch Chief, at (202) 551-3675 or myself at (202) 551-3715 if you have questions regarding the processing of your response as well as any questions regarding comments and related matters.

Sincerely,

Jeff Riedler
Assistant Director