Via Facsimile and U.S. Mail Mail Stop 6010

August 22, 2007

Mr. Gerald McMahon Chairman, President and Chief Executive Officer Poniard Pharmaceuticals, Inc. 7000 Shoreline Court Suite 270 South San Francisco, CA 94080

Re: Poniard Pharmaceuticals, Inc.

Form 10-K for Fiscal Year Ended December 31, 2006

File No. 0-16614

Dear Mr. McMahon:

We have reviewed your filing and have the following comment. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. In our comment, we ask you to provide us with more 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 comment 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 the fiscal year ended December 31, 2006

Notes to Consolidated Financial Statements

Note 13: Acquisition of Picoplatin, page 70

1. You disclose that you acquired under a license agreement the worldwide exclusive rights to develop, manufacture and commercialize picoplatin. You also indicate that you capitalized the \$12 million in payments made/due under the amended license agreement. Please tell us how your capitalization of these license payments complies with paragraph 11c of SFAS 2. In your response, please demonstrate to us how you have alternative future uses for picoplatin.

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Also in your response, please clarify whether picoplatin is approved for marketing by the FDA for any other indications not included in your license.

Please respond to this comment within 10 business days or tell us when you will provide us with a response. Please furnish a letter that provides the requested information. Detailed letters greatly facilitate our review. Please furnish your 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 comment, 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 comments on your filing.

If you have any questions, please contact Mark Brunhofer, Senior Staff Accountant, at (202) 551-3638. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg Senior Assistant Chief Accountant