Via Facsimile and U.S. Mail
Mail Stop 6010

November 1, 2007

Ms. Caroline M. Loewy
Chief Financial 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 Ms. Loewy:

We have reviewed your September 6, 2007 response to our August 22, 2007 letter and have the following comments. In our comments, 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.

Form 10-K for the fiscal year ended December 31, 2006

Notes to Consolidated Financial Statements

Note 13: Acquisition of Picoplatin, page 70

We acknowledge your response to our previous comment in which you indicate that you capitalized your license payments associated with picoplatin in part because, at acquisition, you anticipated alternative future uses for picoplatin in research and development (R&D) as required by paragraph 11c of SFAS 2. You indicate that you evaluated alternative future uses in the context of the AICPA practice aid on Assets Acquired in a Business Combination to Be Used in Research and Development Activities (the Practice Aid); specifically paragraph 3.2.07. You also indicate that you equate the alternative future uses of picoplatin with the drug's use as a therapeutic at various stages in the treatment of different cancer indications and that you concluded that picoplatin required no future development as a molecule at the time of license acquisition. Please address the following additional comments:

1. Please clarify for us whether you licensed the rights to the picoplatin molecule or whether you licensed a formulation that incorporates the picoplatin molecule.

2. Please summarize for us the development history of picoplatin in chronological order. In this regard, please explain to us what preclinical and clinical studies were performed on the molecule prior to your acquisition. In addition, please explain to us the nature of all preclinical efforts (including any formulation activities and animal toxicity studies) and clinical trials you undertook on picoplatin since your acquisition of the rights to the molecule.

3. Please elaborate on your conclusion that picoplatin required no future development as a molecule at the time of license acquisition. In this regard:
   - Please explain to us why the molecule and not the formulation that must be approved by the FDA is the appropriate level upon which to perform your alternative future use assessment.
   - Please explain to us why your formulation efforts and other preclinical studies, if any, and the necessity to perform clinical trials does not violate the concept in paragraph 3.2.07(b) of the Practice Aid. This provision indicates that the future use of the asset should not be contingent on further development of the asset subsequent to the acquisition.

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

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