



DIVISION OF
CORPORATION FINANCE
Mail Stop 3030

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

January 26, 2010

Via U.S. Mail and Facsimile

David A. McDonald
Chief Financial Officer
Delcath Systems, Inc.
600 Fifth Avenue, 23rd Floor
New York, NY 10020

Re: Delcath Systems, Inc.
Form 10-K for the fiscal year ended December 31, 2008
Filed March 3, 2009
Form 10-Q for the fiscal quarter ended September 30, 2009
File No. 001-16133

Dear Mr. McDonald:

We have reviewed your response dated January 14, 2010 and related filings and have the following comment. Where indicated, we think you should revise your future filings in response to this comment. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In our comment, we may 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-Q for the quarterly period ended September 30, 2009

Item 1. Condensed Financial Statements (Unaudited)

Note 8. Assets and Liabilities Measured at Fair Value, page F-10

1. We note your response to prior comment 7 and your analysis that all of the inputs to the Black-Scholes model are level 2 or below. However, please tell us why the use of a valuation model does not result in the valuation of the warrant derivative liability being classified as a level 3 of the fair-value hierarchy. We refer you to FASB ASC 820-10-35-53 and 54 and 820-10-55-22.

As appropriate, please respond to this comment 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 provides any requested information. Detailed cover letters greatly facilitate our review.

You may contact Kristin Lochhead at (202) 551-3664 or me at (202) 551-3676 if you have questions regarding comments on the financial statements and related matters. Please contact Tom Jones at (202) 551-3602 or Tim Buchmiller, Senior Attorney, at (202) 551-3635 if you have any other questions.

Sincerely,

Brian Cascio
Accounting Branch Chief