

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

April 13, 2011

Mr. Philip D. Ankeny Senior Vice President and Chief Financial Officer SurModics, Inc. 9924 West 74th Street Eden Prairie, Minnesota 55344

Re: SurModics, Inc.

Form 10-K for Fiscal Year Ended September 30, 2010 Form 10-Q for the Quarter Ended December 31, 2010

File No. 000-23837

Dear Mr. Ankeny:

We have reviewed your March 18, 2011 response to our March 7, 2011 letter and have the following comment.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe the comment applies to your facts and circumstances, please tell us why in your response. Please furnish us a letter on EDGAR under the form type label CORRESP that keys your response to our comment.

After reviewing the information provided, we may raise additional comments and/or request that you amend your filing.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Customer research and development expenses, page 38

- 1. Please refer to prior comment four. Considering your recent reorganization into three business units, please provide proposed disclosure that describes the following:
 - A description of your research and development management process for each segment, which includes the procedures for monitoring development progress for individual projects, the criteria for prioritizing and funding projects and the key decision points for determining project continuance or termination; and
 - A breakdown of the cost components for your R&D activities in each segment. Distinguish between your internal costs and funding of customer R&D activities (if applicable).

Mr. Philip D. Ankeny SurModics, Inc. April 13, 2011 Page 2

Please contact Frank Wyman, Staff Accountant, at (202) 551-3660 or Melissa N. Rocha, Accounting Branch Chief, at (202) 551-3854, if you have any questions regarding this comment. In this regard, do not hesitate to contact me at (202) 551-3679.

Sincerely,

Jim B. Rosenberg Senior Assistant Chief Accountant