



VIA EDGAR AND FACSIMILE TO (202) 772-9198

April 27, 2011

Mr. Jim B. Rosenberg, Senior Assistant Chief Accountant
Securities and Exchange Commission
100 F Street NE
Washington, DC 20549

**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. Rosenberg:

On behalf of SurModics, Inc. (the "Company"), we are responding to your letter dated April 13, 2011 setting forth the comments of the staff (the "Staff") of the Securities and Exchange Commission (the "Commission") on our response to your letter dated March 7, 2011 regarding the Company's Form 10-K for the fiscal year ended September 30, 2010 filed by the Company on December 14, 2010, and our Form 10-Q for the quarter ended December 31, 2010 filed by the Company on February 4, 2011. Our responses to the specific comment are set forth below. For the convenience of the Staff, the comment from the April 13 letter is restated in italics prior to the response to such comment.

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).*

Response: Our fiscal 2010 Form 10-K provided an overview of the Company's R&D activities on pages 11-12. In future filings, including our Form 10-Q for the quarter ended March 31, 2011, we will include the following additional information to provide readers with insights into the Company's research and development management process for each of our three segments, making sure to identify processes unique to a specific segment, as appropriate.

Overview of research and development activities

“We manage our customer-sponsored R&D programs (“Customer R&D”), based largely on the requirements of our customers. In this regard, our customers typically establish the various measures and metrics that are used to monitor a program’s progress, including key deliverables, milestones, timelines, and an overall program budget. The customer is ultimately responsible for deciding whether to continue or terminate a program, and does so based on research results (relative to the above measures and metrics) and other factors, including their own strategic and/or business priorities. Customer R&D programs are mainly in our Medical Device and Pharmaceuticals segments and the processes do not differ significantly.

For our internal R&D programs (included in “Other R&D”) in our three segments, we utilize R&D review committees to prioritize these programs based on a number of factors, including a program’s strategic fit, commercial impact, potential competitive advantage, technical feasibility, and the amount of investment required. The measures and metrics used to monitor a program’s progress varies based on the program, and typically includes many of the same factors discussed above with respect to our Customer R&D programs. We typically make decisions to continue or terminate a program based on research results (relative to the above measures and metrics) and other factors, including our own strategic and/or business priorities, and the amount of additional investment required.

With respect to cost components, R&D expenses in each of our three segments consist of labor, materials and overhead costs (utilities, depreciation, indirect labor, etc.) for both Customer R&D and Other R&D programs. We manage our R&D organization in a flexible manner, balancing workloads/resources between Customer R&D and Other R&D programs primarily based on the level of customer program activity. Therefore, costs incurred for Customer R&D and Other R&D can shift as customer activity increases or decreases. As a result of the recent economic conditions, some customers have delayed, slowed or cancelled development projects, which has affected the R&D expense mix between Customer R&D and Other R&D.”

As, as part of our expanded discussion of results in future filings, we will discuss R&D expense trends and uncertainties by segment, as applicable, when the impact of these expenses may be material to the operating results of the appropriate segment. We are still in the process of analyzing detailed information for the quarter ended March 31, 2011 and thus are unable to provided specific disclosures in our response. However, an example of our expected disclosure, which would not be the complete disclosure for the expense category, is anticipated to be along the lines of:

Customer research and development (“R&D”) expenses.

“Customer R&D expenses were \$5.0 million, an increase of \$0.2 million, or 5% compared with the second quarter of fiscal 2010. The increase was in our Pharmaceuticals segment and is driven by higher overhead costs for validation activities and seasonal utility costs.”

As requested in the Staff's comment letter, the Company makes the acknowledgement 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.

If you have any questions regarding this letter, or if you require additional information, please contact me by telephone at (952) 500-7015 or by fax at (952) 500-7021.

Very truly yours,
SurModics, Inc.



Philip D. Ankeny
Senior Vice President and Chief Financial Officer

cc: Gary R. Maharaj, SurModics, Inc.
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