Via U.S. Mail and Fax (952-829-2743)

Philip D. Ankeny Chief Financial Officer Surmodics, Inc. 9924 West 74th Street Eden Prairie, MN 55344

> RE: Forms 10-K for the fiscal year ended September 30, 2005 Filed December 14, 2005, Form 10-Q for the quarter ended December 31, 2005 Filed February 9, 2006 File No. 000-23837

Dear Mr. Ankeny:

We have reviewed the above referenced filings and have the following comments. We have limited our review to only your financial statements and related disclosures and will make no further review of your documents. As such, all persons who are responsible for the adequacy and accuracy of the disclosure are urged to be certain that they have included all information required pursuant to the Securities Exchange Act of 1934. Please address the following comments in future filings. If you disagree, we will consider your explanation as to why our comment is inapplicable or a future revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not 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 filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Mr. Philip D. Ankeny Surmodics, Inc. April 7, 2006 Page 2

Form 10-K for the year ending September 30, 2005

Item 7 Management's Discussion and Analysis, page 24

Results of Operations, page 27

1. In your discussion of revenues on page 34, you attribute the change to several factors, without quantifying or indicating the relevant weight of each factor. For example, you mention significant growth in royalties and license fees for both Drug Delivery and Hydrophilic operating segments, but you do not quantify the increase or indicate the reasons for the increase. Therefore, if material, provide a discussion of the components of revenue growth (e.g. volume of licenses, royalty fees, acquisitions, etc.) by operating segment or business unit for all periods presented. Further, with respect to your explanations amend to provide insight into the underlying business drivers or conditions that contributed to these changes. Please refer to Item 303 of Regulation S-K and the Commission's Interpretive Release on Management's Discussion and Analysis of Financial Condition and Results of Operation on our website at: http://www.sec.gov/rules/interp/33-8350.htm.

Note 1—Summary of Significant Accounting Policies Other Assets, page F-8

2. We refer to your January 18, 2005 purchase of assets and related technology of InnoRx, which you characterized as a development stage company. In accordance with Rule 11-01(d) of Regulation S-X, tell us how you determined whether or not there is sufficient continuity of operations, as the disclosure of prior financial information may well be material to an understanding of the future operations of your company.

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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 any requested supplemental information. Please file your response letter on EDGAR.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors require for an informed 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 comments, please provide, in writing, a statement from the company acknowledging that

- the company is responsible for the adequacy and accuracy of the disclosure in the filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filings; 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 filings or in response to our comments on your filings.

You may contact Joe Cascarano, Staff Accountant, at (202) 551-3376 or Robert Littlepage, Accountant Branch Chief, at (202) 551-3361 if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3810 with any other questions.

Sincerely,

Larry Spirgel
Assistant Director