VIA EDGAR AND FACSIMILE TO 202-772-9217

April 22, 2009

Securities and Exchange Commission 100 F Street, NE

Washington, DC 20549 Attention: Mr. Micha

Mr. Michael Rosenthall

Division of Corporation Finance

Re: SurModics, Inc.

Form 10-K for the Year Ended September 30, 2008 Filed December 15, 2008, response filed February 20, 2009 File No. 000-23837

Ladies and Gentlemen:

On behalf of SurModics, Inc. (the "Company"), we are responding to your letter dated April 8, 2009 setting forth the comments of the staff (the "Staff") of the Securities and Exchange Commission (the "Commission") on our response to your letter dated February 5, 2009 regarding the Company's Form 10-K for the fiscal year ended September 30, 2008, and the proxy statement filed by the Company on December 19, 2008. Our responses to the specific comments are set forth below. For the convenience of the Staff, each comment from the April 8 letter is restated in italics prior to the response to such comment.

Item 1. Business

Patents and Proprietary Rights

1. We note your response included additional disclosure about the material intellectual property related to three of your significant technologies. While you cited previous disclosure of patents related to lateral flow immunoassay diagnostic technology in your Form 10-K, we ask that you acknowledge that the additional disclosure you provided in your response, that was not originally included in your 10-K, will be included in future filings.

Response: The Company will undertake in future filings, commencing with the Company's 10-K for fiscal 2009, to include the additional disclosure provided in our response dated February 20, 2009, along with any other material information regarding

the Company's material patents incorporated in products sold by our significant customers.

DEF 14A Filed December 19, 2008

Compensation Discussion and Analysis

Cash Elements of Compensation, page 14

2. Please expand your disclosure of business unit or department performance objectives for named executive officers to include enumeration of the specific individual goals set for each named executive officer and the extent of achievement of each of those goals that led to the individual cash incentive awarded. Alternatively, if you still believe that disclosure of these individual goals will result in competitive harm, please provide a more comprehensive analysis supporting your determination that disclosure will cause competitive harm and that the information is not material to investors, using Instruction 4 to Item 402(b) of Regulation S-K as a guide.

Response: Performance under the Company's fiscal 2008 annual incentive plan was determined based upon the achievement of (i) corporate performance objectives, and (ii) business unit or department performance objectives. The corporate objectives and the business objectives accounted for 75% and 25%, respectively, of the total cash incentive opportunity available to each of the Company's executive officers. The business objectives generally related to both financial performance measures (e.g., growth in business unit revenue) and non-financial performance measures (e.g., project development milestones, licensing objectives, or product quality). Prior to adopting the plan, the Company's Chief Executive Officer recommended the specific business objectives for each of the Company's executive officers which were then reviewed and approved by the Organization and Compensation Committee (the "Committee") of the Board of Directors. The Committee determined that these objectives would be difficult to achieve, but attainable and would appropriately focus each of the Company's executive officers on objectives pertinent to the business that officer leads and which, if achieved, would have the potential to significantly enhance shareholder value.

The specific business objectives for our named executive officers included between 6 and 28 elements, none of which represented more than 6.25% of the total cash incentive opportunity available to the named executive officer (taking into consideration the weighting of the corporate objectives relative to the business objectives). Based on the minor portion of the total cash incentive opportunity available to the named executive officers that any one element of the business objectives represents, the Company believes that disclosure of every such element would not enhance investor understanding of the Company's compensation policies and decisions. In addition, in some cases the business objectives identify performance measures associated with individual customer projects, such as specific product or clinical development milestones. Except in a limited number of cases, we are contractually prevented from disclosing the identity of our customers and the specific product or clinical development milestones associated with our customer collaborations.

In order to provide investors with a general sense for the business objectives included in our 2008 annual incentive plan, we have listed the more significant business objectives, or groups of business objectives, together with the related percentage of the portion of the cash incentive opportunity related to business objectives (which, again, was only 25% of total cash incentive opportunity) and actual achievement for each of our named executive officers in the table below. We have undertaken to describe these business objectives without disclosing the specific identity of particular customers or providing specific product or clinical development details.

Business Objectives	Maximum Achievement	Actual Achievement
Exceed corporate goal for new license and commercial agreements by 25% or	25%	25%
more.		
Sign a license agreement with a major ophthalmology or pharmaceutical company.	25%	0%
Meet or exceed cash and expense goals as set forth in the Company's fiscal 2008 operating plan.	15%	15%
Complete Vice President career development and succession plans.	15%	15%
Assure achievement of 90% or more of the Company's business unit or department performance objectives.	10%	0%
Successfully integrate Brookwood and BioFX according to an agreed upon schedule.	10%	10%
Percentage of business objectives actually achieved		65%
Achieve finance related initiatives, including integrating Brookwood and BioFX into a company-wide financial reporting system, providing input and support to facilities planning teams, and supporting customer solicitations and contract negotiations.	50%	50%
Achieve investor relations related initiatives related to increasing company visibility.	35%	26%
Achieve information systems related initiatives, including the successful implementation of a company-wide quality system.	5%	0%
Support the Company's business development initiatives.	10%	10%
Percentage of business objectives actually achieved		86%
Achieve pro forma revenue, license and commercial agreement objectives.	35%	15%
	Exceed corporate goal for new license and commercial agreements by 25% or more. Sign a license agreement with a major ophthalmology or pharmaceutical company. Meet or exceed cash and expense goals as set forth in the Company's fiscal 2008 operating plan. Complete Vice President career development and succession plans. Assure achievement of 90% or more of the Company's business unit or department performance objectives. Successfully integrate Brookwood and BioFX according to an agreed upon schedule. Percentage of business objectives actually achieved Achieve finance related initiatives, including integrating Brookwood and BioFX into a company-wide financial reporting system, providing input and support to facilities planning teams, and supporting customer solicitations and contract negotiations. Achieve investor relations related initiatives related to increasing company visibility. Achieve information systems related initiatives, including the successful implementation of a company-wide quality system. Support the Company's business development initiatives. Percentage of business objectives actually achieved	Exceed corporate goal for new license and commercial agreements by 25% or more. Sign a license agreement with a major ophthalmology or pharmaceutical 25% company. Meet or exceed cash and expense goals as set forth in the Company's fiscal 15% 2008 operating plan. Complete Vice President career development and succession plans. 15% Assure achievement of 90% or more of the Company's business unit or department performance objectives. Successfully integrate Brookwood and BioFX according to an agreed upon schedule. Percentage of business objectives actually achieved Achieve finance related initiatives, including integrating Brookwood and BioFX into a company-wide financial reporting system, providing input and support to facilities planning teams, and supporting customer solicitations and contract negotiations. Achieve investor relations related initiatives related to increasing company visibility. Achieve information systems related initiatives, including the successful implementation of a company-wide quality system. Support the Company's business development initiatives. 10% Percentage of business objectives actually achieved

Name	Business Objectives	Maximum Achievement	Actual Achievement
	Successfully initiate key customer projects.	30%	20%
	Achieve I-vation TM product development milestones.	20%	20%
	Other operational and administrative goals, none of which individually exceeds 4% of business unit cash incentive compensation potential.	15%	15%
	Percentage of business objectives actually achieved		70%
Charles W. Olson	Exceed corporate goal for new license agreements.	15%	15%
	Achieve pro forma revenue, license and commercial agreement objectives.	45%	45%
	Achieve product development and commercialization objectives.	30%	30%
	Achieve quality and customer technical assistance objectives.	10%	10%
	Percentage of business objectives actually achieved		100%
Arthur J. Tipton, Ph.D.	Achieve pro forma revenue, license and commercial agreement objectives.	38%	18%
	Achieve intellectual property, and product and technology development goals.	22%	18%
	Manufacture clinical trial materials for certain customer programs and achieve quality related initiatives.	14%	4%
	Achieve objectives related to the integration of Brookwood with SurModics corporate.	18%	16%
	Other operational and administrative goals, none of which individually exceeds 4% of business unit cash incentive compensation potential.	8%	4%
	Percentage of business objectives actually achieved		60%

As disclosed on page 16 of our most recent proxy statement, for each of the Company's executive officers, 75% of the potential cash incentive compensation was attributable to achievement of the corporate objectives, and 25% was attributable to achievement of the business objectives. For each of our named executive officers (excluding the CEO), the payouts under the plan could range between a threshold

amount of 10.7%, a target amount of 24.0%, and a maximum amount of 40.0%, of each such officer's base salary. For our CEO, payouts under the annual incentive plan could range between a threshold amount of 17.3%, a target amount of 50.0%, and a maximum amount 83.3% of his base salary. Importantly, if the minimum levels established for the corporate objectives were not achieved, none of our executive officers would have received a payout under the plan irrespective of the level achievement of such officer's business objectives.

At its first regularly scheduled meeting after our results for fiscal 2008 were released, upon the recommendation of the CEO, the Committee determined the level of achievement of the corporate and business objectives. Based on the Committee's determination, all of our named executives (excluding the CEO) were eligible to receive the target payout of 24% under the plan, of which 18% was attributable to achievement of the corporate objectives and 6% was attributable to achievement of each officer's business objectives. Similarly, our CEO was eligible to receive the target payout of 50% under the plan, of which 37.5% was attributable to achievement of the corporate objectives and 12.5% was attributable to achievement of his business objectives. The actual payout percentage for the business objectives was determined by multiplying the portion attributable to achievement of the business objectives (12.5% in the case of the CEO, and 6% in the case of the other named executive officers) by the actual level achievement of the business objectives as noted in the table above.

Below is an illustration that shows the calculation of the actual payout percentage under the plan for one of our named executive officers, Paul A. Lopez. As noted above, based on the Company's results for fiscal 2008, each named executive officer was eligible to receive the target payout of 24% under the plan (or 18% tied to achievement of the corporate objectives, and 6% tied to achievement of his business objectives). In the case of Mr. Lopez, as shown in the table above, the Committee approved the achievement of 70% of his business objectives. Accordingly, Mr. Lopez's actual payout under the plan was calculated as follows:

The same methodology was used to calculate the actual payout percentages under the plan for each of our named executive officers (excluding our CEO). Below is an illustration that shows the calculation of the actual payout under the plan for the CEO. Based on the Company's results for fiscal 2008, the CEO was eligible to receive the target payout of 50% under the plan (or 37.5% tied to achievement of the corporate objectives, and 12.5% tied to achievement of his business objectives). As shown in the table above, the Committee approved the achievement of 65% of his business objectives. Accordingly, Mr. Barclay's actual payout under the plan was calculated as follows:

In future proxy statements, to the extent the Company continues to use business objectives, the Company will provide additional disclosure regarding the business objectives used to determine payouts for our named executive officers under the annual incentive plan, such as that provided in this response, to the extent that we can without suffering competitive harm, or unless such disclosure is not necessary to achieve an understanding of the Company's compensation policies and decisions regarding our named executive officers.

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) 829-2715 or by fax at (952) 944-2984.

Very truly yours,

/s/ Philip D. Ankeny

Philip D. Ankeny

Senior Vice President and Chief Financial Officer

cc: Bruce J Barclay, SurModics, Inc. Bryan K. Phillips, SurModics, Inc.

Mark A. Lehman, SurModics, Inc. Jeffery L. Radunz, Deloitte & Touche, LLP Gordon S. Weber, Faegre & Benson LLP