As filed with the Securities and Exchange Commission on February 26, 2010

Registration No. 333-

SECURITIES AND EXCHANGE COMMISSION

Washington, D. C. 20549

FORM S-8

REGISTRATION STATEMENT Under THE SECURITIES ACT OF 1933

SurModics, Inc.

(Exact name of Registrant as specified in its charter)

Minnesota

(State or other jurisdiction of incorporation or organization)

9924 West 74th Street Eden Prairie, Minnesota

(Address of principal executive offices)

41-1356149 (I.R.S. Employer Identification No.)

> 55344 (Zip Code)

SURMODICS, INC. 1999 EMPLOYEE STOCK PURCHASE PLAN

(Full title of the plan)

Bryan K. Phillips Vice President, General Counsel and Secretary 9924 West 74th Street Eden Prairie, Minnesota 55344 (Name and address of agent for service)

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(952) 829-2700

(Telephone number, including area code, of agent for service)

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer: o

Accelerated filer: \Box

Non-accelerated filer: o (Do not check if a smaller reporting company)

Smaller reporting company: o

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price Per Share (2)	Proposed Maximum Aggregate Offering Price (2)	Amount of Registration Fee
Common Stock,	200,000			
\$.05 par value	shares	\$19.42	\$3,884,000	\$276.93

(1) Pursuant to Rule 416 under the Securities Act of 1933, as amended, this Registration Statement will also cover any additional shares of common stock, par value \$.05 ("Common Stock"), of SurModics, Inc. that become issuable under the SurModics, Inc. 1999 Employee Stock Purchase Plan (as amended and restated as of November 30, 2009) by reason of any stock dividend, stock split, reorganization or other similar transaction effected without the registrant's receipt of consideration that results in an increase in the number of outstanding shares of the Common Stock.

(2) Estimated solely for the purpose of determining the registration fee pursuant to the provisions of Rule 457(h) under the Securities Act of 1933 based on the average of the high and low sale prices per share of the Registrant's Common Stock as quoted on the NASDAQ Global Select Market on February 23, 2010.

SURMODICS, INC.

EXPLANATORY NOTE

This Registration Statement on Form S-8 is being filed for the purpose of registering an additional 200,000 shares of SurModics, Inc.'s (hereinafter the "Company" or the "Registrant") Common Stock to be issued pursuant to the Registrant's 1999 Employee Stock Purchase Plan (as amended and restated as of November 30, 2009) (the "Plan"). The Registration Statement previously filed with the Commission relating to the Plan (File No. 333-54266) is incorporated by reference herein.

EXHIBITS

Exhib	it Description
4.1	Amended and Restated Articles of Incorporation (1)
4.2	Amended and Restated Bylaws (2)
5	Opinion of Faegre & Benson LLP as to the legality of the shares being registered
23.1	Consent of Faegre & Benson LLP (contained in Exhibit 5 to this Registration Statement)
23.2	Consent of Deloitte & Touche LLP
24	Powers of Attorney (included on page 2 of this Registration Statement)
99	SurModics, Inc. 1999 Employee Stock Purchase Plan (as amended and restated as of November 30, 2009) (3)
(1)	Incorporated by reference to Exhibit 3.1 of the Company's Quarterly Report on Form 10-QSB for the quarter ended December 31, 1999, (File No. 0-23837).
(2)	Incorporated by reference to Exhibit 3.2 of the Company's Quarterly Report on Form 10-Q for the fiscal year ended December 31, 2009, (File No. 0-23837).

(3) Incorporated by reference to Appendix B to the Company's Definitive Proxy Statement on Schedule 14A, filed with the Commission on December 18, 2009 (File No. 0-23827).

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Company certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Eden Prairie, State of Minnesota, on February 26, 2010.

SURMODICS, INC.

By /s/ Philip D. Ankeny

Philip D. Ankeny Senior Vice President and Chief Financial Officer

POWERS OF ATTORNEY

Each of the undersigned hereby appoints Bruce J Barclay and Philip D. Ankeny, and each of them (with full power to act alone), as attorneys and agents for the undersigned, with full power of substitution, for and in the name, place and stead of the undersigned, to sign and file with the Securities and Exchange Commission under the Securities Act of 1933, as amended, any and all amendments and exhibits to this Registration Statement and any and all applications, instruments and other documents to be filed with the Securities and Exchange Commission pertaining to the registration of the securities covered hereby, with full power and authority to do and perform any and all acts and things whatsoever requisite and necessary or desirable.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed below by the following persons, representing a majority of the Board of Directors, in the capacities indicated on February 26, 2010.

Signature	Title	
/s/ Bruce J Barclay	President and Chief Executive Officer	
Bruce J Barclay	(Principal Executive Officer) and Director	
/s/ Philip D. Ankeny	Senior Vice President and Chief Financial Officer	
Philip D. Ankeny	(Principal Financial Officer)	
/s/ Mark A. Lehman	Corporate Controller (Principal Accounting Officer)	
Mark A. Lehman		
/s/ Robert C. Buhrmaster	Chairman	
Robert C. Buhrmaster		
/s/ José H. Bedoya	Director	
José H. Bedoya		
/s/ John W. Benson	Director	
John W. Benson		
/s/ Mary K. Brainerd	Director	
Mary K. Brainerd		
/s/ Gerald B. Fischer	Director	
Gerald B. Fischer		

Signature /s/ Kenneth H. Keller, Ph.D. Kenneth H. Keller, Ph.D.

/s/ Susan E. Knight Susan E. Knight

/s/ John A. Meslow John A. Meslow Director

Title

Director

Director

INDEX TO EXHIBITS

Exhibit 4.1	Description Amended and Restated Articles of Incorporation (1)	Method of Filing Incorporated by Reference
4.2	Amended and Restated Bylaws (2)	Incorporated by Reference
5	Opinion of Faegre & Benson LLP as to the legality of the shares being registered	Filed Herewith
23.1	Consent of Faegre & Benson LLP (contained in Exhibit 5 to this Registration Statement)	
23.2	Consent of Deloitte & Touche LLP	Filed Herewith
24	Powers of Attorney (included on page 2 of this Registration Statement)	
99	SurModics, Inc. 1999 Employee Stock Purchase Plan (as amended and restated as of November 30, 2009) (3)	Incorporated by Reference
(1) Incorpo		r 31, 1999. (File No. 0-

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(3) Incorporated by reference to Appendix B to the Company's Definitive Proxy Statement on Schedule 14A, filed with the Commission on December 18, 2009, (File No. 0-23827).

FAEGRE & BENSON LLP 2200 Wells Fargo Center, 90 South Seventh Street Minneapolis, Minnesota 55402-3901

February 26, 2010

Board of Directors SurModics, Inc. 9924 West 74th Street Eden Prairie, Minnesota 55344

In connection with the Registration Statement on Form S-8 under the Securities Act of 1933, as amended (the "*Registration Statement*"), relating to the offering of up to 200,000 additional shares of Common Stock, par value \$0.05 per share (the "*Shares*"), of SurModics, Inc., a Minnesota corporation (the "*Company*"), pursuant to the SurModics, Inc. 1999 Employee Stock Purchase Plan (as amended and restated as of November 30, 2009), we have examined such corporate records and other documents, including the Registration Statement, and have reviewed such matters of law as we have deemed relevant hereto, and, based upon such examination and review, it is our opinion that all necessary corporate action on the part of the Company has been taken to authorize the issuance and sale of the Shares and that, when issued and sold as contemplated in the Registration Statement, the Shares will be legally and validly issued, fully paid and nonassessable.

We consent to the filing of this opinion as an exhibit to the Registration Statement.

Very truly yours,

FAEGRE & BENSON LLP

By: /s/ Gordon S. Weber

Gordon S. Weber

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated December 11, 2009, relating to the consolidated financial statements and financial statement schedule of SurModics, Inc. (which report expresses an unqualified opinion and includes an explanatory paragraph relating to SurModics, Inc.'s adoption of new accounting guidance on the accounting for uncertainty in income taxes), appearing in the Annual Report on Form 10-K/A of SurModics, Inc. for the year ended September 30, 2009, and our report dated December 11, 2009 relating to the effectiveness of SurModics, Inc.'s internal control over financial reporting, appearing in the Annual Report on Form 10-K of SurModics, Inc. for the year ended September 30, 2009.

/s/ DELOITTE & TOUCHE LLP

Minneapolis, Minnesota February 22, 2010