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

**FORM S-8
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

INTUITIVE SURGICAL, INC.
(Exact Name of Registrant as Specified in Its Charter)

Delaware
(State of Incorporation)

77-0416458
(I.R.S. Employer Identification No.)

**1266 Kifer Road
Sunnyvale, California 94086**
(Address of Principal Executive Offices including Zip Code)

**2000 EQUITY INCENTIVE PLAN
2000 EMPLOYEE STOCK PURCHASE PLAN
2000 NON-EMPLOYEE DIRECTORS' STOCK OPTION PLAN**

(Full Title of the Plans)

**Lonnie Smith
Chairman of the Board and Chief Executive Officer
Intuitive Surgical, Inc.
1266 Kifer Road
Sunnyvale, California 94086
(408) 523-2100**

**Copy to:
Alan C. Mendelson, Esq.
Latham & Watkins LLP
140 Scott Drive
Menlo Park, California 94025
(650) 328-4600**

(Name, Address, Including Zip Code, and Telephone Number,
Including Area Code for 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 12b2 of the Exchange Act.

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

- Accelerated filer
Smaller reporting company

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share	Maximum Amount of Aggregate Offering Price	Amount of Registration Fee
Common Stock, \$0.001 par value	2,294,327(2)	\$326.42(3)	\$748,914,219.34(3)	\$29,432.33

- (1) This registration statement shall also cover any additional shares of common stock which become issuable under the 2000 Equity Incentive Plan, the 2000 Employee Stock Purchase Plan and the 2000 Non-Employee Directors' Stock Option Plan (the "Plans") by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without the receipt of consideration, which results in an increase in the number of outstanding shares of the registrant's common stock.
 - (2) Represents (i) 1,994,843 shares available for future grants under the 2000 Equity Incentive Plan, (ii) 199,484 shares available for future issuance under the 2000 Employee Stock Purchase Plan, and (iii) 100,000 shares available for future grants under the 2000 Non-Employee Directors' Stock Option Plan.
 - (3) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) for the 2,294,327 shares registered hereunder (based on the average of the high (\$320.03) and low (\$332.80) prices for the Company's Common Stock reported by NASDAQ Global Select Market on July 24, 2008).
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REGISTRATION OF ADDITIONAL SECURITIES

Intuitive Surgical, Inc. (the "Company") filed with the Securities and Exchange Commission the following Registration Statements on Form S-8 relating to shares of the Company's common stock, par value \$0.001 per share (the "Common Stock"), to be offered and sold under the 2000 Equity Incentive Plan, the 2000 Employee Stock Purchase Plan and the 2000 Non-Employee Directors' Stock Option Plan (the "Plans") and the contents of such prior Registration Statements are incorporated by reference in this Registration Statement: (1) Registration Statement on Form S-8 filed August 11, 2000 (File No. 333-43558); (2) Registration Statement on Form S-8 filed July 18, 2001 (File No. 333-65342); (3) Registration Statement on Form S-8 filed September 20, 2002 (File No. 333-99893); (4) Registration Statement on Form S-8 filed June 15, 2004 (File No. 333-116499); (5) Registration Statement on Form S-8 filed August 3, 2005 (File No. 333-127162), (6) Registration Statement on Form S-8 filed June 14, 2006 (File No. 333-135004); and (7) Registration Statement on Form S-8 filed June 1, 2007 (File No. 333-143433). The Company is hereby registering an additional 1,994,843 shares issuable under the 2000 Equity Incentive Plan, 199,484 shares issuable under the 2000 Employee Stock Purchase Plan and 100,000 shares issuable under the 2000 Non-Employee Directors' Stock Option Plan, none of which have been issued as of the date of this Registration Statement.

Item 8. Exhibits.

See Index to Exhibits.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant 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 Sunnyvale, State of California, on this 25th day of July, 2008.

Intuitive Surgical, Inc.

By: /s/ Lonnie M. Smith
Lonnie M. Smith
Chairman of the Board and Chief
Executive Officer

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Lonnie M. Smith and Marshall L. Mohr, and each or any of them, his true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him and in his name, place and stead in any and all capacities, to sign any and all amendments (including post-effective amendments) and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Lonnie M. Smith</u> Lonnie M. Smith	Chairman of the Board and Chief Executive Officer (Principal Executive Officer)	July 25, 2008
<u>/s/ Marshall L. Mohr</u> Marshall L. Mohr	Senior Vice President and Chief Financial Officer (Principal Financial Officer)	July 25, 2008
<u>/s/ Floyd D. Loop, M.D.</u> Floyd D. Loop, M.D.	Director	July 25, 2008
<u>/s/ D. Keith Grossman</u> D. Keith Grossman	Director	July 25, 2008
<u>/s/ Eric H. Halvorson</u> Eric H. Halvorson	Director	July 25, 2008
<u>/s/ Richard J. Kramer</u> Richard J. Kramer	Director	July 25, 2008

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Alan J. Levy, Ph.D.</u> Alan J. Levy, Ph.D.	Director	July 25, 2008
<u>/s/ Robert W. Duggan</u> Robert W. Duggan	Director	July 25, 2008
<u>/s/ George J. Stalk</u> George J. Stalk	Director	July 25, 2008
<u>/s/ Mark J. Rubash</u> Mark J. Rubash	Director	July 25, 2008

INDEX TO EXHIBITS

**Exhibit
Number**

4.1*	Intuitive Surgical, Inc. 2000 Equity Incentive Plan
4.2*	Intuitive Surgical, Inc. 2000 Employee Stock Purchase Plan
4.3*	Intuitive Surgical, Inc. 2000 Non-Employee Directors' Stock Option Plan
4.4**	Amendment to the Intuitive Surgical, Inc. 2000 Non-Employee Directors' Stock Option Plan approved June 30, 2003
5.1	Opinion of Latham & Watkins LLP
23.1	Consent of Latham & Watkins LLP (included in Exhibit 5.1).
23.2	Consent of Independent Registered Public Accounting Firm.
24.1	Power of Attorney (included on signature page of this registration statement).

* Incorporated by reference to the Company's Registration Statement on Form S-1, as amended (File No. 333-33016), originally filed with the Securities and Exchange Commission on March 22, 2000.

** Incorporated by reference to the Company's Registration Statement on Form S-4, as amended (File No. 333-104093), originally filed with the Securities and Exchange Commission on March 28, 2003.

[Latham & Watkins Letterhead]

July 25, 2008

Intuitive Surgical, Inc.
1266 Kifer Rd
Sunnyvale, CA 94086

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

We have acted as special counsel to Intuitive Surgical, Inc., a Delaware corporation (the "Company"), in connection with the registration of 2,294,327 shares of common stock, par value \$0.001 per share (the "Shares"), issuable under the Company's 2000 Equity Incentive Plan, 2000 Employee Stock Purchase Plan, and 2000 Non-Employee Directors Stock Option Plan (collectively, the "Plans"), under the Securities Act of 1933, as amended (the "Act"), pursuant to a Registration Statement on Form S-8 filed with the Securities and Exchange Commission on July 25, 2008 (the "Registration Statement"). This opinion is being furnished in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Act, and no opinion is expressed herein as to any matter pertaining to the contents of the Registration Statement or Prospectus, other than as expressly stated herein with respect to the issue of the Shares.

As such counsel, we have examined such matters of fact and questions of law as we have considered appropriate for purposes of this letter. With your consent, we have relied upon certificates and other assurances of officers of the Company and others as to factual matters without having independently verified such factual matters.

We are opining herein only as to the General Corporation Law of the State of Delaware, and we express no opinion with respect to any other laws.

Subject to the foregoing and the other matters set forth herein, it is our opinion that, as of the date hereof, when certificates representing the Shares in the form of the specimen certificate examined by us have been manually signed by an authorized officer of the transfer agent and registrar therefor, when duly awarded and issued upon satisfaction of rights to purchase such Shares in accordance with the terms of the applicable Plan, and assuming the Company completes all actions and proceedings required on its part to be taken prior to the issuance and delivery of the Shares pursuant to the terms of the applicable Plan, including without limitation, collection of required payment for the Shares, the issuance and sale of the Shares will have been duly authorized by all necessary corporate action of the Company, and the Shares will be validly issued, fully paid and nonassessable.

This opinion is for your benefit in connection with the Registration Statement and may be relied upon by you and by persons entitled to rely upon it pursuant to the applicable provisions of the Act. We consent to your filing this opinion as an exhibit to the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Latham & Watkins LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the 2000 Equity Incentive Plan, 2000 Employee Stock Purchase Plan and 2000 Non-Employee Directors' Stock Option Plan, of Intuitive Surgical, Inc. of our reports dated February 11, 2008, with respect to the consolidated financial statements and schedule of Intuitive Surgical, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2007, and the effectiveness of internal control over financial reporting of Intuitive Surgical, Inc., filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Palo Alto, California
July 24, 2008