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 yvale, California 9400 pal Executive Offices include COMMENCEMENT (Full Title of the Plan) | ling Zip Code) | | | |
| Gary S. Guthart President 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 | | | |
| Indicate by check | (Name, Address, Including Zip Code, and mark whether the registrant is a large accelerat | • | | , | orting company. Se | ee |
| the definitions of "large | accelerated filer," "accelerated filer" and "smal | ler reporting company | in Rule 12b-2 of the E | Exchange Act. | | |
| Large accelerated filer | \boxtimes | | | Accelerated f | iler | |
| Non-accelerated filer | \square (Do not check if a smaller reporting com | pany) | | Smaller repor | ting company | |
| | CALCULAT | ION OF REGISTRAT | ΓΙΟΝ FEE | | | |
| | e of Securities to be Registered | Amount to be Registered (1) | Proposed Maximum Offering Price Per Share | Proposed Maximum Aggregate Offering Price | Amount of Registration Fee | |
| Common Stock, par value \$0.001 per share | | 180,000 | \$393.18(2) | \$70,772,400(2) | \$8,216.68 | |

This Registration Statement shall also cover any additional shares of Common Stock which become issuable under the 2009 Employment Commencement Incentive Plan by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without the receipt of consideration, which

Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) for the 180,000 shares registered hereunder (based on the average of the high (\$397.81) and low (\$388.55) prices for the Registrant's Common Stock reported by NASDAQ Global Select Market on July 28, 2011).

results in an increase in the number of outstanding shares of the Registrant's Common Stock.

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 2009 Employment Commencement Incentive Plan (the "Plan") and the contents of such prior Registration Statements are incorporated by reference in this Registration Statement: Registration Statement on Form S-8 filed April 29, 2011 (File No. 333-173803) and Registration Statement on Form S-8 filed January 29, 2010 (File No. 333-164586). The Company is hereby registering an additional 180,000 shares of Common Stock issuable under the 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 29th day of July, 2011.

Intuitive Surgical, Inc.

By: /s/ Gary S. Guthart
. Gary S. Guthart, Ph. D
President and Chief Executive Officer

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Gary S. Guthart and Marshall L. Mohr, and each or any of them, such person's true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for such person and in such person's 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 or she 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 of 1933, 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> |
|-------------------------|--|---------------|
| /s/ Gary S. Guthart | President and Chief Executive Officer and Director | |
| Gary S. Guthart, Ph.D. | (Principal Executive Officer) | July 29, 2011 |
| /s/ Marshall L. Mohr | Senior Vice President and Chief Financial Officer | |
| Marshall L. Mohr | (Principal Financial Officer) | July 29, 2011 |
| /s/ Lonnie M. Smith | Chairman of the Board of Directors | July 29, 2011 |
| Lonnie M. Smith | | |
| /s/ Craig H. Barratt | Director | July 29, 2011 |
| Craig H. Barratt, Ph.D. | | |
| /s/ Eric H. Halvorson | Director | July 29, 2011 |
| Eric H. Halvorson | | |
| /s/ Amal M. Johnson | Director | July 29, 2011 |
| Amal M. Johnson | | , i |
| /s/ Alan J. Levy | Director | July 29, 2011 |
| Alan J. Levy, Ph.D. | | 5 . |

| /s/ Floyd D. Loop Floyd D. Loop, M.D. | Director | July 29, 2011 |
|--|----------|---------------|
| /s/ Mark J. Rubash Mark J. Rubash | Director | July 29, 2011 |
| /s/ George Stalk George Stalk | Director | July 29, 2011 |

INDEX TO EXHIBITS

| Exhibit Number 4.1* | Intuitive Surgical, Inc. 2009 Employment Commencement Incentive Plan, as amended and restated |
|---------------------------|---|
| 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 Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the period ended June 30, 2011 (File No. 000-30713) filed with the Securities and Exchange Commission on July 20, 2011.

LATHAM & WATKINS LLP

July 29, 2011

Intuitive Surgical, Inc. 1266 Kifer Road Sunnyvale, CA 94086 140 Scott Drive

Menlo Park, California 94025

Tel: +1.650.328.4600 Fax: +1.650.463.2600

www.lw.com

FIRM / AFFILIATE OFFICES

Abu Dhabi Moscow
Barcelona Munich
Beijing New Jersey
Boston New York
Brussels Orange County

Chicago Paris Doha Rivadh Dubai Rome Frankfurt San Diego Hamburg San Francisco Hong Kong Shanghai Houston Silicon Valley London Singapore Los Angeles Tokvo

Madrid Washington, D.C.

Milan

Re: Registration Statement on Form S-8: 180,000 shares of Common Stock, par value \$0.001 per share

Ladies and Gentlemen:

We have acted as special counsel to Intuitive Surgical, Inc., a Delaware corporation (the "Company"), in connection with the registration of 180,000 shares of common stock of the Company, par value \$0.001 per share (the "Shares"), issuable under the 2009 Employment Commencement Incentive Plan (the "Plan"), 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 (the "Commission") on July 29, 2011 (the "Registration Statement"). This opinion is being furnished in connection 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 related 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 Plan and related award agreements, and assuming the

July 29, 2011 Page 2

LATHAM & WATKINS LLP

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 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 2009 Employment Commencement Incentive Plan of Intuitive Surgical, Inc. of our reports dated February 1, 2011, with respect to the consolidated financial statements and schedule of Intuitive Surgical, Inc. and the effectiveness of internal control over financial reporting of Intuitive Surgical, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2010, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Redwood City, California July 29, 2011