

SECURITIES AND EXCHANGE COMMISSION
 WASHINGTON, D.C. 20549

FORM S-3
 REGISTRATION STATEMENT
 UNDER
 THE SECURITIES ACT OF 1933

INTUITIVE SURGICAL, INC.
 (EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

DELAWARE
 (STATE OR OTHER JURISDICTION OF INCORPORATION OR ORGANIZATION)

77-0416458
 (I.R.S. EMPLOYER IDENTIFICATION NUMBER)

1340 W. MIDDLEFIELD ROAD
 MOUNTAIN VIEW, CALIFORNIA 94043
 (650) 237-7000
 (ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER, INCLUDING AREA CODE,
 OF REGISTRANT'S PRINCIPAL EXECUTIVE OFFICES)

LONNIE M. SMITH
 PRESIDENT AND CHIEF EXECUTIVE OFFICER
 INTUITIVE SURGICAL, INC.
 1340 W. MIDDLEFIELD ROAD
 MOUNTAIN VIEW, CALIFORNIA 94043
 (650) 237-7000
 (NAME, ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER, INCLUDING AREA CODE,
 OF AGENT FOR SERVICE)

COPY TO:
 ALAN C. MENDELSON, ESQ.
 LATHAM & WATKINS
 135 COMMONWEALTH DRIVE
 MENLO PARK, CALIFORNIA 94025
 (650) 463-4693

APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC:
 As soon as practicable after the effective date of this Registration Statement.

If the only securities being registered on this Form are pursuant to dividend or interest reinvestment plans, please check the following box. []

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. [X]

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. []

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. []

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. []

CALCULATION OF REGISTRATION FEE

TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED	AMOUNT TO BE REGISTERED	PROPOSED MAXIMUM OFFERING PRICE PER SHARE (1)	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE (1)	AMOUNT OF REGISTRATION FEE
Common Stock, par value \$0.001 per share	200,000	\$13.04	\$2,608,000	\$652.00

(1) Estimated solely for the purpose of computing the registration fee required by Section 6(b) of the Securities Act and computed pursuant to Rule 457(c) under the Securities Act based upon the average of the high and low prices of the Common Stock on July 11, 2001, as quoted on the Nasdaq National Market. It is not known how many shares will be purchased under this Registration Statement or at what price shares will be purchased.

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(a) OF THE SECURITIES ACT OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE SECURITIES AND EXCHANGE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(a), MAY DETERMINE.

The information in this prospectus is not complete and may be changed. The selling stockholder may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and the selling stockholder is not soliciting offers to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED JULY 16, 2001

PROSPECTUS

200,000 SHARES

INTUITIVE SURGICAL, INC.

COMMON STOCK

These shares of common stock are being offered by the selling stockholder identified in this prospectus. The selling stockholder may sell its shares of common stock in a number of different ways and at varying prices. We provide more information about how the selling stockholder may sell its shares in the section entitled "Plan of Distribution" beginning on page 4.

We are not selling any shares of our common stock under this prospectus and will not receive any proceeds from the sale of these shares.

OUR COMMON STOCK IS QUOTED ON THE NASDAQ NATIONAL MARKET UNDER THE SYMBOL "ISRG." ON JULY 11, 2001, THE LAST REPORTED SALE PRICE FOR OUR COMMON STOCK ON THE NASDAQ NATIONAL MARKET WAS \$13.00 PER SHARE.

INVESTING IN OUR COMMON STOCK INVOLVES RISKS. SEE "RISK FACTORS" BEGINNING ON PAGE 1.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

, 2001

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You should rely only on the information we have provided or incorporated by reference in this prospectus. Neither we nor the selling stockholder have authorized anyone to provide you with additional or different information. The selling stockholder is not making an offer of these securities in any jurisdiction where the offer is not permitted. You should assume that the information in this prospectus is accurate only as of the date on the front of the document and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference. In this prospectus, unless otherwise indicated, "Intuitive Surgical," "we," "us" and "our" refer to Intuitive Surgical, Inc. and its subsidiaries.

Intuitive(TM) (R), da Vinci(TM), EndoWrist(TM), InSite(TM) and Navigator(TM) are trademarks of Intuitive Surgical, Inc.

RISK FACTORS

An investment in our common stock involves a high degree of risk. You should consider carefully the risk factors contained in our most recent filing on Form 10-K and all other information contained in and incorporated by reference in this prospectus before making an investment decision. Additional risks and uncertainties that are not yet identified or that we think are immaterial may also materially harm our business, operating results and financial condition and could result in a complete loss of your investment.

ABOUT INTUITIVE SURGICAL

We design and manufacture the da Vinci Surgical System, an advanced surgical system that we believe represents a new generation of surgery -- the third generation. We believe that this new generation of surgery, which we call Intuitive surgery, is a revolutionary advance similar in scope to the previous two generations of surgery -- open surgery and minimally invasive surgery, or MIS. Our da Vinci System consists of a surgeon's console, a patient-side cart, a high performance vision system and our proprietary instruments. By placing computer-enhanced technology between the surgeon and patient, we believe that our system enables surgeons to perform better surgery in a manner never before experienced. The da Vinci Surgical System seamlessly translates the surgeon's natural hand movements on instrument controls at a console into corresponding micro-movements of instruments positioned inside the patient through small puncture incisions, or ports. Our da Vinci Surgical System is the only commercially available technology that can provide the surgeon with the intuitive control, range of motion, fine tissue manipulation capability and 3-D visualization characteristic of open surgery, while simultaneously allowing the surgeon to work through the small ports of minimally invasive surgery.

In March 1997, surgeons using an early prototype of our technology successfully performed Intuitive surgery on humans. Beginning in May 1998, surgeons using our technology successfully performed what we believe were the world's first computer-enhanced closed chest heart surgeries, including mitral valve repair, dissection of an internal mammary artery and grafting of a coronary artery. In early 2000, surgeons using our technology successfully completed what we believe was the world's first beating heart bypass procedure using only small ports. In July 2000, we received marketing clearance from the U.S. Food and Drug Administration (FDA) for the da Vinci Surgical System to assist in the control of Intuitive Surgical endoscopic instruments including: rigid endoscopes, blunt and sharp endoscopic dissectors, scissors, scalpels, forceps/pickups, needle holders, endoscopic retractors, stabilizers, electrocautery, and accessories during laparoscopic surgical procedures such as cholecystectomy or Nissen fundoplication. Additionally, we received clearance for a non-cardiac thoracoscopic surgery indication for the product in March 2001. As of December 31, 2000, we have sold 40 of our da Vinci Surgical Systems and surgeons using our technology have successfully completed over a thousand surgery procedures of various types.

The first generation of surgery, open surgery, remains the predominant form of surgery and is still used in almost every area of the body. However, the large incisions required for open surgery create significant trauma to the patient, resulting in long hospitalization and recovery times, high hospitalization costs, as well as significant pain and suffering. Over the past several decades, the second generation of surgery, MIS surgery, has reduced trauma to the patient by allowing some surgeries to be performed through small ports rather than large incisions, resulting in shorter recovery times, fewer complications and reduced hospitalization costs. MIS surgery has been widely adopted for certain surgical procedures, but it has not been widely adopted for complex procedures. We believe surgeons have been slow to adopt MIS surgery for complex procedures because they generally find that fine tissue manipulations, such as dissecting and suturing, using these techniques are more difficult to learn and perform, and are less precise, than in open surgery.

Intuitive surgery overcomes many of the shortcomings of both open surgery and MIS surgery. Surgeons operate while seated comfortably at a console viewing a bright and sharp 3-D image of the surgical field. This immersive visualization results in surgeons no longer feeling disconnected from the

surgical field and the instruments, as they do when using an endoscope in MIS surgery. While seated at the console, the surgeon manipulates instrument controls in a natural manner, just as he or she has been trained to do in open surgery. Our technology is designed to provide surgeons with a range of motion in the surgical field analogous to the motions of a human wrist, while filtering out the tremor inherent in every surgeon's hand. In designing our products, we have focused on making our technology as simple as possible to use. In our experience, based on over a thousand procedures, surgeons can learn to manipulate our instruments with only a short amount of training and can learn to perform Intuitive surgery with less training than is required for MIS surgery.

Our products are designed to make a broad range of open surgical and MIS procedures suitable for Intuitive surgery. The da Vinci Surgical System is designed to allow surgeons to perform better surgery while providing patients with the benefits of MIS surgery. We believe that these advantages will enable us to drive a fundamental change in surgery.

We were incorporated in Delaware in November 1995 as Intuitive Surgical Devices, Inc. and changed our name to Intuitive Surgical, Inc. in January 1997. Our executive offices are located at 1340 W. Middlefield Road, Mountain View, California 94043, and our telephone number is (650) 237-7000. Our website is located at <http://www.intuitivesurgical.com>. Information contained on our website is not a part of this prospectus.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Some of the statements in this prospectus, including the documents that we incorporate by reference, constitute forward-looking statements. These statements involve known and unknown risks, uncertainties and other factors that may cause our or our industry's results, levels of activity, or achievements to be materially different from any future results, levels of activity or achievements expressed or implied by such forward-looking statements.

In some cases, you can identify forward-looking statements by terminology such as "may," "will," "should," "intend," "expect," "plan," "anticipate," "believe," "estimate," "predict," "potential," or "continue," or the negative of such terms or other comparable terminology.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, events, levels of activity, performance or achievements. Except as may be required by law, we undertake no obligation to publicly update any forward-looking statements for any reason, even if new information becomes available in the future.

USE OF PROCEEDS

We will not receive any of the proceeds from the sale of the shares of common stock offered by the selling stockholder.

SELLING STOCKHOLDER

On April 26, 2000, we issued a warrant to purchase up to 200,000 shares of our common stock in a private transaction to the selling stockholder, Heartport, Inc., at an exercise price of \$3.00 per share. On June 22, 2001 the selling stockholder exercised the warrant. In connection with this issuance, we agreed to file a registration statement with the SEC covering the resale of the shares issued to the selling stockholder. The following table sets forth the name of the selling stockholder, the number of shares of our common stock that it beneficially owns as of June 30, 2001 and the number of shares which may be offered pursuant to this prospectus. Beneficial ownership is determined in accordance with Rule 13d-3 under the Securities Exchange Act of 1934. Percentage ownership is based on 35,871,075 shares of common stock outstanding as of June 30, 2001. The selling stockholder has sole voting and investment power with respect to the shares shown as beneficially owned by it. The selling stockholder may sell all, some or none of the common stock being offered.

We are unaware of any material relationship between the selling stockholder and us in the past three years other than as a result of the ownership of the shares of our common stock.

NAME AND ADDRESS OF SELLING STOCKHOLDER -----	SHARES BENEFICIALLY OWNED PRIOR TO THE OFFERING		SHARES OFFERED BY THIS PROSPECTUS	SHARES BENEFICIALLY OWNED SUBSEQUENT TO THE OFFERING (1)	
	SHARES	PERCENT		SHARES	PERCENT
Heartport, Inc. c/o Ethicon, Inc. Rt. 22 West Somerville, NJ 08876-151 -----	200,000	0.56%	200,000	0	0.0%

(1) Assumes the sale of all shares offered hereby.

We have filed a registration statement related to the shares offered hereby and have agreed to keep such registration statement effective until (a) all the common stock has been re-sold or (b) one year after the exercise of the warrant, whichever is earlier.

We will pay the registration and filing fees, printing expenses, listing fees, blue sky fees, if any, and fees and disbursements of our counsel in connection with this offering, but the selling stockholder will pay any underwriting discounts, selling commissions and similar expenses relating to the sale of the shares. In addition, we have agreed to indemnify the selling stockholder against certain liabilities, including liabilities under the Securities Act, in connection with this offering. The selling stockholder has agreed to indemnify us and our directors and officers, as well as any person that controls us, against certain liabilities, including liabilities under the Securities Act.

PLAN OF DISTRIBUTION

The selling stockholder, or, subject to applicable law, its pledgees, donees, distributees, transferees or other successors in interest, may sell shares from time to time in public transactions, on or off the Nasdaq National Market, or private transactions, at prevailing market prices or at privately negotiated prices, including but not limited to, one or any combination of the following types of transactions

- o ordinary brokers' transactions;
- o transactions involving cross or block trades or otherwise on the Nasdaq National Market;
- o purchases by brokers, dealers or underwriters as principal and resale by these purchasers for their own accounts pursuant to this prospectus;
- o "at the market," to or through market makers, or into an existing market for our common stock;
- o in other ways not involving market makers or established trading markets, including direct sales to purchasers or sales effected through agents;
- o through transactions in options, swaps or other derivatives (whether exchange-listed or otherwise);
- o in privately negotiated transactions; or
- o to cover short sales.

The selling stockholder may sell its shares either alone or in conjunction with one or more underwritten public offerings or non-underwritten public or private offerings by us or other stockholders of our common stock or other of our debt or equity securities.

In effecting sales, brokers or dealers engaged by the selling stockholder may arrange for other brokers or dealers to participate in the resales. The selling stockholder may enter into hedging transactions with broker-dealers, and in connection with those transactions, broker-dealers may engage in short sales of the shares. The selling stockholder also may sell shares short and deliver the shares to close out such short positions. The selling stockholder also may enter into option or other transactions with broker-dealers that require the delivery to the broker-dealer of the shares, which the broker-dealer may resell pursuant to this prospectus. The selling stockholder also may pledge the shares to a broker or dealer. Upon a default, the broker or dealer may effect sales of the pledged shares pursuant to this prospectus.

Brokers, dealers or agents may receive compensation in the form of commissions, discounts or concessions from the selling stockholder in amounts to be negotiated in connection with the sale. The selling stockholder and any participating brokers or dealers may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In such event, any commission, discount or concession these "underwriters" receive may be deemed to be underwriting compensation.

To the extent required, the following information will be set forth in a supplement to this prospectus:

- o information as to whether underwriters who the selling stockholder may select, or any other broker-dealer, is acting as principal or agent for the selling stockholder;

- o the compensation to be received by underwriters that the selling stockholder may select or by any broker-dealer acting as principal or agent for the selling stockholder; and
- o the compensation to be paid to other broker-dealers, in the event the compensation of such other broker-dealers is in excess of usual and customary commissions.

Any dealer or broker participating in any distribution of the shares may be required to deliver a copy of this prospectus, including a prospectus supplement, if any, to any person who purchases any of the shares from or through this dealer or broker.

We have advised the selling stockholder that it is required to comply with Regulation M promulgated under the Securities Exchange Act during such time as it may be engaged in a distribution of the shares. With some exceptions, Regulation M precludes the selling stockholder, any affiliated purchasers and any broker-dealer or other person who participates in such distribution from bidding for or purchasing, or attempting to induce any person to bid for or purchase any security that is the subject of the distribution until the entire distribution is complete. Regulation M also prohibits any bids or purchases made in order to stabilize the price of a security in connection with the distribution of that security. All of the foregoing may affect the marketability of the common stock.

We will not receive any of the proceeds from the selling stockholder's sale of our common stock.

LEGAL MATTERS

Latham & Watkins of Menlo Park, California will issue an opinion to us about certain legal matters with respect to the common stock being offered in this prospectus. Alan C. Mendelson, a partner of Latham & Watkins, owns 2,000 shares of our common stock.

EXPERTS

Ernst & Young LLP, independent auditors, have audited our financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2000, as set forth in their report, which is incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are a reporting company and file annual, quarterly and current reports, proxy statements and other information with the Securities and Exchange Commission, or the SEC. You may read and copy these reports, proxy statements and other information at the SEC's public reference rooms at 450 Fifth Street, N.W., Washington, D.C., 20549. You can request copies of these documents by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the public reference rooms. Our SEC filings are also available at the SEC's Web site at "<http://www.sec.gov>". In addition, you can read and copy our SEC filings at the office of the National Association of Securities Dealers, Inc. at 1735 K Street, Washington, D.C. 20006.

The SEC allows us to "incorporate by reference" information that we file with them, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is an important part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. Further, all filings we make under the Securities Exchange Act after the date of the initial registration statement and prior to effectiveness of the registration statement shall be deemed to be incorporated by reference into this prospectus. We incorporate by reference the documents listed below and any future filings we will make with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934:

1. Our Annual Report on Form 10-K for the year ended December 31, 2000 (including items incorporated by reference from the Registrant's Proxy Statement for its 2001 Annual Meeting of Stockholders) filed on March 30, 2001 (File No. 000-30713);
2. Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2001 filed on May 14, 2001;
3. Our Definitive Proxy Statement for our 2001 Annual Meeting of Stockholders filed on April 19, 2001;
4. Our Current Report on Form 8-K filed with the SEC on May 9, 2001;
5. The description of our common stock contained in our Registration Statement on Form 8-A (File No. 000-30713) filed on May 26, 2000.

We will provide to you at no cost a copy of any and all of the information incorporated by reference into the registration statement of which this prospectus is a part. You may make a request for copies of this information in writing or by telephone. Requests should be directed to:

Intuitive Surgical, Inc.
 Attention: Investor Relations
 1340 W. Middlefield Road
 Mountain View, CA 94043
 (650) 237-7000

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

Securities and Exchange Commission Registration Fee	\$ 652.00
Legal Fees and Expenses	5,000
Accountants' Fees and Expenses	5,000
Miscellaneous	5,000
Total	15,652.00 =====

The foregoing items, except for the Securities and Exchange Commission Registration Fee, are estimated.

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Under Section 145 of the Delaware General Corporation Law, Intuitive Surgical, Inc. has broad powers to indemnify its directors and officers against liabilities they may incur in such capacities, including liabilities under the Securities Act of 1933.

Intuitive Surgical, Inc.'s certificate of incorporation and by-laws include provisions to (1) eliminate the personal liability of its directors for monetary damages resulting from breaches of their fiduciary duty to the extent permitted by Section 102(b)(7) of the General Corporation Law of Delaware and (2) require Intuitive Surgical, Inc. to indemnify its directors and officers to the fullest extent permitted by Section 145 of the Delaware Law, including circumstances in which indemnification is otherwise discretionary. Pursuant to Section 145 of the Delaware Law, a corporation generally has the power to indemnify its present and former directors, officers, employees and agents against expenses incurred by them in connection with any suit to which they are, or are threatened to be made, a party by reason of their serving in such positions so long as they acted in good faith and in a manner they reasonably believed to be in, or not opposed to, the best interest of the corporation, and with respect to any criminal action, they had no reasonable cause to believe their conduct was unlawful. Intuitive Surgical, Inc. believes that these provisions are necessary to attract and retain qualified persons as directors and officers. These provisions do not eliminate the directors' duty of care, and, in appropriate circumstances, equitable remedies such as injunctive or other forms of non-monetary relief will remain available under Delaware law. In addition, each director will continue to be subject to liability for breach of the directors' duty of loyalty to Intuitive Surgical, Inc., for acts or omissions not in good faith or involving intentional misconduct, for knowing violations of law, for acts or omissions that the director believes to be contrary to the best interests of Intuitive Surgical, Inc. or its stockholders, for any transaction from which the director derived an improper personal benefit, for acts or omissions involving a reckless disregard for the directors' duty to Intuitive Surgical, Inc. or its stockholders when the director was aware or should have been aware of a risk of serious injury to Intuitive Surgical, Inc. or its stockholders, for acts or omissions that constitute an unexcused pattern of inattention that amounts to an abdication of the director's duty to Intuitive Surgical, Inc. or its stockholders, for improper transactions between the director and Intuitive Surgical, Inc. and for improper distributions to stockholders and loans to directors and officers. The

provision also does not affect a director's responsibilities under any other law, such as the federal securities law or state or federal environmental laws.

Intuitive Surgical, Inc. has entered into indemnity agreements with each of its directors and executive officers that require Intuitive Surgical, Inc. to indemnify such persons against expenses, judgments, fines, settlements and other amounts incurred (including expenses of a derivative action) in connection with any proceeding, whether actual or threatened, to which any such person may be made a party by reason of the fact that such person is or was a director or an executive officer of Intuitive Surgical, Inc. or any of its affiliated enterprises, provided such person acted in good faith and in a manner such persons reasonably believed to be in, or not opposed to, the best interests of Intuitive Surgical, Inc. and, with respect to any criminal proceeding, has no reasonable cause to believe his conduct was unlawful. The indemnification agreements also set forth procedures that will apply in the event of a claim for indemnification thereunder.

At present, there is no pending litigation or proceeding involving a director or officer of Intuitive Surgical, Inc. as to which indemnification is being sought.

Intuitive Surgical, Inc. has an insurance policy covering the officers and directors of Intuitive Surgical, Inc. with respect to certain liabilities, including liabilities arising under the Securities Act or otherwise.

ITEM 16. EXHIBITS

EXHIBIT NO.	DESCRIPTION OF DOCUMENT
3.2(1)	Amended and Restated Certificate of Incorporation of Registrant.
3.3(1)	Bylaws of Registrant.
4.2(1)	Specimen Stock Certificate.
4.3(1)	Warrant to Purchase Shares of Common Stock, dated April 26, 2000.
5.1(2)	Opinion of Latham & Watkins.
23.1(2)	Consent of Ernst & Young LLP, Independent Auditors.
23.2(2)	Consent of Latham & Watkins. Reference is made to Exhibit 5.1.
24.1(2)	Power of Attorney (set forth on signature page).

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(1) Incorporated by reference to exhibits filed with the Registrant's Registration Statement on Form S-1 (333-33016).

(2) Filed herewith

ITEM 17. UNDERTAKINGS

The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made pursuant to this registration statement, a post-effective amendment to this registration statement: (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933; (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or

decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof; and

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

The undersigned registrant hereby undertakes that, for the purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) of Section 15(d) of the Securities Exchange Act of 1934 that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers, and controlling persons of the registrant pursuant to the provisions described in Item 15, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer, or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

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-3 and has duly caused this Registration Statement on Form S-3 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Mountain View, County of Santa Clara, State of California, on the 11th day of July, 2001.

INTUITIVE SURGICAL, INC.

By: /s/ Lonnie M. Smith

 Lonnie M. Smith
 Title: President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSON BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Lonnie M. Smith and Alan C. Mendelson, his or her true and lawful agent, proxy and attorney-in-fact, each acting alone, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and in any and all capacities, to (1) act on, sign and file with the Securities and Exchange Commission any and all amendments (including post-effective amendments) to this registration statement together with all schedules and exhibits thereto and any subsequent registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, together with all schedules and exhibits thereto, (2) act on, sign and file such certificates, instruments, agreements and other documents as may be necessary or appropriate in connection therewith, (3) act on and file any supplement to any prospectus included in this registration statement or any such amendment or any subsequent registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and (4) take any and all actions which may be necessary or appropriate to be done, as fully for all intents and purposes as he or she might or could do in person, hereby approving, ratifying and confirming all that such agent, proxy and attorney-in-fact or any of his substitutes may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement on Form S-3 has been signed below by the following persons in the capacities and on the dates indicated.

SIGNATURE	TITLE	DATE
/s/ Lonnie M. Smith ----- Lonnie M. Smith	President and Chief Executive Officer (Principal Executive Officer)	July 11, 2001
/s/ Susan K. Barnes ----- Susan K. Barnes	Vice President, Finance, Chief Financial Officer and Assistant Secretary (Principal Financial and Accounting Officer)	July 11, 2001
/s/ Scott S. Halsted ----- Scott S. Halsted	Director	July 11, 2001

SIGNATURE

TITLE

DATE

/s/ Russell C. Hirsch

Director

July 11, 2001

Russell C. Hirsch, M.D., Ph.D.

/s/ Richard J. Kramer

Director

July 11, 2001

Richard J. Kramer

/s/ James A. Lawrence

Director

July 13, 2001

James A. Lawrence

/s/ Alan J. Levy

Director

July 13, 2001

Alan J. Levy, Ph.D.

Director

July __, 2001

Frederick H. Moll, M.D.

INDEX TO EXHIBITS

EXHIBIT NO.	DESCRIPTION OF DOCUMENT
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23.1(2)	Consent of Ernst & Young LLP, Independent Auditors.
23.2(2)	Consent of Latham & Watkins. Reference is made to Exhibit 5.1.
24.1(2)	Power of Attorney (set forth on signature page).

(1) Incorporated by reference to exhibits filed with the Registrant's
Registration Statement on Form S-1 (333-33016).

(2) Filed herewith

[LATHAM & WATKINS LETTERHEAD]

July 12, 2001

Intuitive Surgical, Inc.
1340 W. Middlefield Road
Mountain View, CA 94043

Re: Offering of 200,000 Shares of Intuitive Surgical, Inc.'s Common Stock

Ladies and Gentlemen:

In connection with the registration under the Securities Act of 1933, as amended (the "Act"), of 200,000 shares of common stock, par value \$0.001 per share (the "Shares"), of Intuitive Surgical, Inc., a Delaware corporation (the "Company"), you have requested our opinion with respect to the matters set forth below.

In our capacity as your special counsel in connection with such registration, we have made such legal and factual examinations and inquiries, including an examination of originals or copies certified or otherwise identified to our satisfaction of such documents, corporate records and instruments as we have deemed necessary or appropriate for purposes of this opinion.

In our examination, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, and the conformity to authentic original documents of all documents submitted to us as copies.

We have been furnished with, and with your consent have exclusively relied upon, certificates of officers of the Company with respect to certain factual matters. In addition, we have obtained and relied upon such certificates and assurances from public officials as we have deemed necessary.

Our opinion is limited to the Federal Laws of the United States and the General Corporation Law of the State of Delaware, and we express no opinion with respect to the applicability or effect of any other laws.

Subject to the foregoing, we advise you that, in our opinion the Shares have been duly authorized and validly issued and are fully paid and nonassessable.

We consent to your filing this opinion as an exhibit to the registration statement relating to the Shares and to the reference to our firm contained under the heading "Legal Matters."

LATHAM & WATKINS

Intuitive Surgical, Inc.
July 12, 2001
Page 2

This opinion is rendered only to you and is solely for your benefit in connection with the transactions covered hereby. This opinion may not be relied upon by you for any other purpose, or furnished to, quoted to or relied upon by any other person, firm or corporation for any purpose, without our prior written consent.

Very truly yours,

/s/ LATHAM & WATKINS

CONSENT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS

We consent to the reference to our firm under the caption "Experts" in the Registration Statement on Form S-3 and related prospectus of Intuitive Surgical, Inc. for the registration of 200,000 shares of its common stock and to the incorporation by reference therein of our report dated January 26, 2001 with respect to the financial statements of Intuitive Surgical, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2000, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Palo Alto, California
July 11, 2001