AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION ON NOVEMBER 12, 1996

REGISTRATION NO. 333-9207

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

AMENDMENT NO. 3

то

FORM SB-2 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

INTEGRATED SURGICAL SYSTEMS, INC. (NAME OF SMALL BUSINESS ISSUER IN ITS CHARTER)

DELAWARE	3841	68-0232575
(STATE OR OTHER	(PRIMARY STANDARD	(I.R.S. EMPLOYER
JURISDICTION	INDUSTRIAL	IDENTIFICATION NO.)
OF INCORPORATION OR	CLASSIFICATION CODE	
ORGANIZATION)	NUMBER)	

829 West Stadium Lane Sacramento, California 95834 Telephone: (916) 646-3487 Telecopier: (916) 646-4075 (ADDRESS AND TELEPHONE NUMBER OF PRINCIPAL EXECUTIVE OFFICES)

DR. RAMESH C. TRIVEDI CHIEF EXECUTIVE OFFICER AND PRESIDENT INTEGRATED SURGICAL SYSTEMS, INC. 829 West Stadium Lane Sacramento, California 95834 Telephone: (916) 646-3487 Telecopier: (916) 646-4075 (NAME, ADDRESS AND TELEPHONE NUMBER OF AGENT FOR SERVICE)

COPIES TO:

JACK BECKER, ESQ. SNOW BECKER KRAUSS P.C. 605 Third Avenue New York, New York 10158-0125 Telephone: (212) 687-3860 Telecopier: (212) 949-7052 CHARLES P. GREENMAN, ESQ. TIMOTHY I. KAHLER, ESQ. PARKER CHAPIN FLATTAU & KLIMPL, LLP 1211 Avenue of the Americas New York, New York 10036 Telephone: (212) 704-6000 Telecopier: (212) 704-6288

 $\label{eq:approximate date of PROPOSED SALE TO THE PUBLIC: As soon as practicable after the effective date of this registration statement.$

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. $[\]$

If any of the securities on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act please check the following box. $[\rm X]$

TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED	AMOUNT TO BE REGISTERED	PROPOSED MAXIMUM OFFERING PRICE PER SECURITY(1)	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE(1)	AMOUNT OF REGISTRATION FEE
Common Stock, \$.01 par value	1,725,000(2)	\$6.00	\$10,350,000	\$3,568.97
Warrants to purchase shares of Common Stock	1,725,000(3)	\$0.10	\$172,500	\$59.48
Common Stock issuable upon exercise of Warrants	1,725,000(4)	\$7.00	\$12,075,000	\$4,163.79
Underwriters' Warrants to purchase shares of Common Stock	150,000	\$0.000033	\$5	(5)
Underwriters' Warrants to purchase Warrants	150,000	\$0.000033	\$5	(5)
Common Stock issuable upon exercise of Underwriters' Warrants	150,000(4)	\$9.90	\$1,485,000	\$512.07
Warrants issuable upon exercise of Underwriters' Warrants	150,000	\$0.165	\$24,750	\$8.53
Common Stock issuable upon exercise of Warrants underlying Underwriters' Warrants	150,000(4)	\$7.00	\$1,050,000	\$362.07
Total Registration Fee				\$8,674.91(6)

- (1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457 promulgated under the Securities Act of 1933.
- (2) Includes 225,000 shares of Common Stock which may be purchased by the Underwriters to cover over-allotments, if any.
- (3) Includes 225,000 Warrants which may be purchased by the Underwriters to cover over-allotments, if any.
- (4) Pursuant to Rule 416, there are also being registered such indeterminate number of additional shares as may become issuable pursuant to the anti-dilution provisions of the Warrants, the Underwriters' Warrants and the Warrants issuable upon exercise of the Underwriters' Warrants.
- (5) Pursuant to Rule 457(g) promulgated under the Securities Act of 1933, no filing fee is required.
- (6) Previously paid.

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 OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(A), MAY DETERMINE.

- -----

INTEGRATED SURGICAL SYSTEMS, INC.

CROSS REFERENCE SHEET SHOWING LOCATION IN PROSPECTUS OF INFORMATION REQUIRED BY ITEMS 1 THROUGH 23, PART I OF FORM SB-2

ITEM AND HEADING LOCATION IN PROSPECTUS -----Forepart of the Registration Statement 1. Outside Front Cover Page and Outside Front Cover Page of Prospectus Inside Front and Outside Back 2. Inside Front and Outside Cover Pages of Prospectus Back Cover Pages of Prospectus; Description of Securities - Reports to Stockholders Summary Information, Risk Factors Prospectus Summary; Risk Factors з. Use of Proceeds Use of Proceeds 4. Determination of Offering Price 5. Outside Front Cover Page; Risk Factors; Underwriting 6. Dilution Dilution Selling Security Holders Plan of Distribution Not Applicable 7. Underwriting 8. Business -- Litigation Legal Proceedings 9. Directors, Executive Officers Management 10. Promoters and/Control Persons Security Ownership of Certain 11. Security Ownership of Certain Beneficial Owners and Management Beneficial Owners and Management 12. Description of the Securities Description of the Securities 13. Interest of Named Experts and Counsel Not Applicable 14. Disclosure of Commission Position on Management -- Indemnification of Officers Indemnification for Securities Act and Directors and Limitation on Director Liabilities Liability 15. Organization Within Last Five Years Not Applicable Description of Business Prospectus Summary; Business 16. Management's Discussion and Analysis Management's Discussion and Analysis of 17. or Plan of Operation Financial Condition and Results of **Operations** Description of Property Business -- Facilities 18. 19. Certain Relationships and Related Certain Transactions Transactions 20. Market for Common Equity and Related Description of Securities Stockholder Matters 21. Executive Compensation Management Consolidated Financial Statements Financial Statements 22. Changes in and Disagreements with Not Applicable 23. Accountants on Accounting and Financial Disclosure

INFORMATION CONTAINED HEREIN IS SUBJECT TO COMPLETION OR AMENDMENT. A REGISTRATION STATEMENT RELATING TO THESE SECURITIES HAS BEEN FILED WITH THE SECURITIES AND EXCHANGE COMMISSION. THESE SECURITIES MAY NOT BE SOLD NOR MAY OFFERS TO BUY BE ACCEPTED PRIOR TO THE TIME THE REGISTRATION STATEMENT BECOMES EFFECTIVE. THIS PROSPECTUS SHALL NOT CONSTITUTE AN OFFER TO SELL OR THE SOLICITATION OF AN OFFER TO BUY NOR SHALL THERE BE ANY SALE OF THESE SECURITIES IN ANY STATE IN WHICH SUCH OFFER, SOLICITATION OR SALE WOULD BE UNLAWFUL PRIOR TO REGISTRATION OR QUALIFICATION UNDER THE SECURITIES LAWS OF ANY SUCH STATE.

PRELIMINARY PROSPECTUS, SUBJECT TO COMPLETION, DATED NOVEMBER 12, 1996

INTEGRATED SURGICAL SYSTEMS, INC. 1,500,000 SHARES OF COMMON STOCK AND 1,500,000 REDEEMABLE COMMON STOCK PURCHASE WARRANTS

This Prospectus relates to an offering (the "Offering") by Integrated Surgical Systems, Inc. (the "Company") of 1,500,000 shares of common stock, par value \$.01 per share (the "Common Stock"), and 1,500,000 redeemable Common Stock purchase warrants (the "Warrants") through Rickel & Associates, Inc. (the "Representative") and Aegis Capital Corp. ("Aegis" and, together with the Representative, the "Underwriters"). The shares of Common Stock and the Warrants offered hereby may be purchased separately and the Warrants will be transferable separately after issuance. The Common Stock is being offered at \$5.00 per share and the Warrants at \$.10 per Warrant.

Each Warrant entitles the registered holder thereof to purchase one share of Common Stock at an exercise price of \$6.00 per share, subject to adjustment in certain events, at any time during the period commencing November , 1997 (or earlier upon notice of redemption as provided below), and ending November , 2001 (the "Exercise Period"). The Warrants are subject to redemption by the Company at \$.10 per Warrant at any time during the Exercise Period (or earlier with the prior written consent of the Representative), on not less than 30 days prior written notice to the holders of the Warrants, provided the average of the closing bid quotations of the Common Stock, during the period of 20 consecutive trading days ending on the third day prior to the date on which the Company gives notice of redemption, is at least 150% of the then current exercise price of the Warrants (initially, \$9.00 per share). The Warrants will be exercisable until the close of business on the day immediately preceding the date fixed for redemption. See "Description of Securities -- Warrants." The Common Stock and the Warrants have been approved for listing on The NASDAQ SmallCap Market under the trading symbols "RDOC" and "RDOCW," respectively. The Company's eligibility for listing the Common Stock and the Warrants on The Pacific Stock Exchange has been confirmed.

Prior to the Offering, there has been no public market for the Common Stock or the Warrants, and there can be no assurance that any such market for the Common Stock or the Warrants will develop after the closing of the Offering or that, if developed, it will be sustained. The offering prices of the Common Stock and the Warrants and the initial exercise price and other terms of the Warrants were established by negotiation between the Company and the Underwriters and do not necessarily bear any direct relationship to the Company's assets, earnings, book value per share or other generally accepted criteria of value.

THE SECURITIES OFFERED HEREBY ARE SPECULATIVE AND INVOLVE A HIGH DEGREE OF RISK. ONLY INVESTORS WHO CAN BEAR THE RISK OF LOSS OF THEIR ENTIRE INVESTMENT SHOULD INVEST. FOR A DESCRIPTION OF CERTAIN RISKS REGARDING AN INVESTMENT IN THE COMPANY AND IMMEDIATE SUBSTANTIAL DILUTION, SEE "RISK FACTORS" COMMENCING ON PAGE 10 AND "DILUTION" ON PAGE 24.

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION NOR HAS THE COMMISSION OR ANY STATE SECURITIES COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

	PRICE TO PUBLIC	UNDERWRITING DISCOUNTS AND COMMISSIONS(1)	PROCEEDS TO COMPANY(2)
Per Share	\$5.00	\$.475	\$4.525
Per Warrant	\$.10	\$.0095	\$.0905
Total(3)	\$7,650,000	\$726,750	\$6,923,250

AEGIS CAPITAL CORP. , 1996.

[TO BE LOCATED ON INSIDE OF FRONT COVER]

[LOGO]

[PHOTO]

Integrated Surgical System's first product, the ROBODOC(@) Surgical Assistant System (the "ROBODOC System"), has been used safely on over 425 patients worldwide for total hip replacement. (Actual operating room photo.) The robot included in the ROBODOC System is manufactured to the Company's specifications by an independent supplier and incorporated into the ROBODOC System. See "Business -- Manufacturing."

ROBODOC(@) and ORTHODOC(@) are registered trademarks of Integrated Surgical Systems, Inc. All other trademarks appearing in this Prospectus are the property of their respective holders.

- (1) Does not include additional compensation to the Underwriters consisting of (i) a non-accountable expense allowance payable to the Underwriters equal to 2.75% of the gross proceeds of the Offering, of which \$50,000 has been paid by the Company to date, (ii) warrants (the "Underwriters' Warrants") entitling the Underwriters to purchase up to 150,000 shares of Common Stock and 150,000 Warrants, and (iii) a financial consulting agreement with the Representative for 12 months from the closing of the Offering at an annual fee of \$24,000, all of which is payable at the closing of the Offering. The Company has agreed to pay the Representative, under certain circumstances, a warrant solicitation fee of 5% of the exercise price for each Warrant exercised. The Company has also agreed to indemnify the Underwriters against certain civil liabilities, including those arising under the Securities Act. See "Underwriting."
- (2) After deducting discounts and commissions payable to the Underwriters, but before payment of the Underwriters' non-accountable expense allowance (\$210,375, or \$241,931 if the Underwriters' Over-Allotment Option is exercised in full), the consulting fee (\$24,000) and the other expenses of the Offering (estimated at \$539,625) payable by the Company. See "Underwriting."
- (3) The Company has granted the Underwriters an option, exercisable for a period of 45 days after the closing of the Offering, to purchase up to an additional 15% of the Common Stock and/or Warrants, upon the same terms and conditions solely for the purpose of covering over-allotments, if any (the "Underwriters' Over-Allotment Option"). If the Underwriters' Over-Allotment Option is exercised in full, the Total Price to Public, Underwriting Discounts and \$7,961,737, respectively. See "Underwriting."

The Common Stock and Warrants are being offered by the Underwriters on a firm commitment basis, subject to prior sale, when, as and if delivered to the Underwriters and subject to certain conditions. Subject to the provisions of the underwriting agreement between the Underwriters and the Company, the Underwriters reserve the right to withdraw, cancel or modify the Offering and to reject any order in whole or in part. It is expected that delivery of certificates will be made against payment therefor at the office of the Representative, 875 Third Avenue, New York, New York 10022, on or about November , 1996.

IN CONNECTION WITH THIS OFFERING, THE UNDERWRITERS MAY OVER-ALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICE OF THE COMMON STOCK AND THE WARRANTS OFFERED HEREBY AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

NO DEALER, SALESMAN OR OTHER PERSON HAS BEEN AUTHORIZED TO GIVE ANY INFORMATION OR TO MAKE ANY REPRESENTATION IN CONNECTION WITH THIS OFFERING OTHER THAN THOSE CONTAINED IN THIS PROSPECTUS AND, IF GIVEN OR MADE, SUCH OTHER INFORMATION AND REPRESENTATIONS MUST NOT BE RELIED UPON AS HAVING BEEN AUTHORIZED BY THE COMPANY OR THE UNDERWRITERS. NEITHER THE DELIVERY OF THIS PROSPECTUS NOR ANY SALE MADE HEREUNDER SHALL UNDER ANY CIRCUMSTANCES CREATE ANY IMPLICATION THAT THERE HAD BEEN NO CHANGE IN THE AFFAIRS OF THE COMPANY SINCE THE DATE HEREOF. THIS PROSPECTUS DOES NOT CONSTITUTE AN OFFER TO SELL OR THE SOLICITATION OF AN OFFER TO BUY ANY SECURITIES OFFERED HEREBY BY ANYONE IN JURISDICTIONS IN WHICH SUCH OFFER OR SOLICITATION IS NOT AUTHORIZED OR IN WHICH THE PERSON MAKING SUCH OFFER OR SOLICITATION IS NOT QUALIFIED TO DO SO OR TO ANYONE TO WHOM IT IS UNLAWFUL TO MAKE SUCH OFFER OR SOLICITATION.

TABLE OF CONTENTS

PAGE

PAGE

Prospectus Summary	5
Risk Factors	10
Use of Proceeds	22
Capitalization	23
Dilution	24
Dividend Policy	24
Selected Financial Information	25
Management's Discussion and Analysis	
of Financial Condition and Results	
of Operations	26
Glossary	30
Business	31
Management	45
Certain Transactions	52
Security Ownership of Certain	
Beneficial Owners and Management	54
Description of Securities	56
Underwriting	61
Legal Matters	62
Experts	62
Additional Information	63
Index to Financial Statements	F-1

UNTIL , 1996 (25 DAYS AFTER THE DATE OF THIS PROSPECTUS), ALL DEALERS EFFECTING TRANSACTIONS IN THE REGISTERED SECURITIES, WHETHER OR NOT PARTICIPATING IN THIS DISTRIBUTION, MAY BE REQUIRED TO DELIVER A PROSPECTUS. THIS IS IN ADDITION TO THE OBLIGATION OF DEALERS TO DELIVER A PROSPECTUS WHEN ACTING AS UNDERWRITERS AND WITH RESPECT TO THEIR UNSOLD ALLOTMENTS OR SUBSCRIPTIONS.

TO INVEST IN THESE SECURITIES A CALIFORNIA RESIDENT MUST HAVE, AS A MINIMUM, EITHER (I) A NET WORTH OF \$250,000, EXCLUSIVE OF HOME, HOME FURNISHINGS AND AUTOMOBILES, AND \$65,000 OF GROSS INCOME DURING THE LAST TAX YEAR AND ESTIMATED GROSS INCOME OF \$65,000 FOR THE CURRENT TAX YEAR OR (II) A NET WORTH OF \$500,000, EXCLUSIVE OF HOME, HOME FURNISHINGS AND AUTOMOBILES.

On the Effective Date, the Company will become subject to the reporting requirements of the Securities Exchange Act of 1934 (the "Exchange Act"), and, in accordance therewith, will file reports, proxy and information statements and other information with the Securities and Exchange Commission (the "Commission"). Such reports, proxy and information statements and other information can be inspected and copied at the Public Reference Section of the Commission at Room 1024, Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549 and at the following regional offices: New York Regional Office, Suite 1300, 7 World Trade Center, New York, New York 10048, and Chicago Regional Office, 500 West Madison Street, Suite 1400, Chicago, Illinois 60661-2511, and copies of such material may also be obtained from the Public Reference Section of the Commission at prescribed rates. The Commission maintains a Web site (http://www.sec.gov) that contains reports, proxy and information statements and other information regarding registrants that file electronically. The Company intends to furnish its stockholders with annual reports containing audited financial statements and such other reports as the Company deems appropriate or as may be required by law.

PROSPECTUS SUMMARY

8

The following summary is qualified in its entirety by the more detailed information, financial statements and the notes thereto appearing elsewhere in this Prospectus. Unless otherwise indicated or the context otherwise requires, all share and per share data and information in this Prospectus relating to the number of shares of Common Stock outstanding give effect to a one-for-five reverse stock split with respect to the Company's capital stock effected on December 20, 1995, and a one-for-1.479586 reverse stock split with respect to the Common Stock effected on November 6, 1996, and assumes that the Underwriters' Over-Allotment Option is not exercised. See the "Glossary" appearing at page 30 of this Prospectus for the definitions of certain technical terms used herein.

THE COMPANY

Integrated Surgical Systems, Inc. (the "Company") develops, manufactures, markets and services image-directed, computer-controlled robotic products for surgical applications. The Company's principal product is the ROBODOC(R) Surgical Assistant System (the "ROBODOC System"), consisting of a computer-controlled surgical robot and the Company's ORTHODOC(R) Presurgical Planner (the "ORTHODOC"). The ROBODOC System has been used for primary total hip replacement ("THR") surgery on over 495 patients worldwide. The Company believes its "active" robotic system is the only available system that can accurately perform key segments of surgical procedures with precise tolerances generally not attainable by traditional manual surgical techniques. The ROBODOC System also allows the surgeon to prepare a preoperative plan specifically designed for the characteristics of the individual patient's anatomy. The technology for the ROBODOC System was initially developed at the University of California, Davis, in collaboration with International Business Machines Corporation ("IBM"). Upon completion of the Offering, IBM will retain rights to acquire approximately 27% of the Common Stock on a fully diluted basis.

The ORTHODOC is a computer workstation that utilizes the Company's proprietary software for preoperative surgical planning. The ORTHODOC is included as part of the ROBODOC System and may be marketed separately by the Company. The ORTHODOC converts computerized tomography ("CT") scan data of a patient's femur (i.e., thigh bone) into three-dimensional images, and through a graphical user interface allows the surgeon to examine the bone more thoroughly and to select the optimal implant for the patient using a built-in library of available implants. A tape of the planned surgical procedure, developed by the ORTHODOC, guides the surgical robot arm of the ROBODOC System to accurately mill a cavity in the bone, thus allowing the surgeon to properly orient and align the implant. Non-clinical scientific data published by scientists from the Company and IBM demonstrate that as a result of the precise milling of a cavity, the ROBODOC System achieves over 95% bone-to-implant contact, as compared to an average of 20% bone-to-implant contact when surgery is performed manually.

THR surgery involves the insertion of an implant or metal prosthesis into a cavity created in the patient's femur. Precise fit and correct alignment of the implant within the femoral cavity are generally considered key factors in the long-term success of THR surgery. In conventional THR surgery, a bone cavity is cut in the shape of the implant manually with metal tools, and the surgical plan, including the selection of the size and shape of the implant, is generally formulated based upon patient data obtained from two-dimensional x-ray images of the patient's femur. Based upon clinical experience with the ROBODOC System to date in Germany, patients have become weight-bearing in a shorter period than generally experienced by patients who have had this surgery performed manually. In addition, worldwide clinical data indicates that intraoperative fractures have been dramatically reduced in THR surgeries performed with the ROBODOC System (no intraoperative fractures have resulted from THR surgeries performed with the ROBODOC system to date). The Company also believes fewer hip revision surgeries (implant replacements) may be necessary for patients who have had primary THR surgery performed with the ROBODOC System, as compared to patients who have had this surgery performed manually.

The Company will seek to establish itself as a leading provider of innovative image-directed, computer-controlled robotic technologies worldwide, initially for orthopaedic applications and subsequently for non-orthopaedic surgical applications. The Company's business strategy is to concentrate its marketing and sales

efforts on selling the ROBODOC System throughout Europe and then Japan over the next three years. The Company will thereby attempt to establish an installed customer base in Europe, Japan and other foreign markets through the sale of its ROBODOC System, and offer its customers separate software packages for each new orthopaedic application if, as and when developed by the Company. Consequently, the Company's customers would be able to use the ROBODOC System as the platform for performing a variety of orthopaedic surgical procedures without incurring significant additional hardware costs. The Company also plans to further exploit its image-directed robotics technology by incorporating additional imaging modalities for presurgical planning, including ultrasound (which is less expensive than CT) and magnetic resonance imaging (which unlike CT does not involve the risk of radiation). The Company also intends to develop an active robotic system capable of performing non-orthopaedic surgical procedures.

The Company has commenced marketing the ROBODOC System in Western Europe, through direct marketing and arrangements with implant manufacturers. The ROBODOC System satisfies the appropriate international electromedical safety standards and complies with the requirements of the Electromagnetic Compatability Directive, thus allowing the Company to apply the European Conformity Mark (the "CE Mark") under the European Directives and to distribute the ROBODOC System throughout the European Union. During the nine months ended September 30, 1996, the Company realized revenues of approximately \$1,748,000 from the initial commercial sales of the ROBODOC System (including related consumables) in Europe, and at September 30, 1996, the Company had a signed purchase order for a ROBODOC System for approximately \$635,000.

The Company is developing a software package, in collaboration with IBM and Johns Hopkins University, for surgery to replace loose or otherwise failed hip implants (the "hip revision application") using the ROBODOC System. The Company plans to commence clinical trials of the hip revision application in Europe before the end of 1996. Upon completion of the clinical trials, the Company intends to offer software for the hip revision application to its customers. The development of the hip revision application is being funded in part by a grant from the National Institute for Standards and Technology (Advanced Technology Program) of the United States Department of Commerce.

Neither the ROBODOC System nor the ORTHODOC can be marketed in the United States until clearance or approval is obtained from the U.S. Food and Drug Administration ("FDA"). The Company intends to file a pre-market approval application ("PMA") with the FDA in mid to late 1997 for approval to market the ROBODOC System in the United States. The Company does not expect to commence marketing the ROBODOC System in the United States before 1999, subject to prior FDA approval. The Company filed a 510(k) pre-market notification for the ORTHODOC as a stand-alone device in February 1996 and, subject to prior FDA clearance, expects to commence marketing the ORTHODOC in the United States in early 1997. See "Risk Factors -- Available Clinical Data; Risk Versus Benefit Issues" and "Risk Factors -- Government Regulation."

The Company was incorporated under the laws of the State of Delaware on October 1, 1990. The Company's offices are located at 829 West Stadium Lane, Sacramento, California 95834, and its telephone number is (916) 646-3487.

Securities Offered	1,500,000 shares of Common Stock and 1,500,000 Warrants. Each Warrant entitles the holder thereof to purchase one share of Common Stock at an exercise price of \$6.00 per share, subject to adjustment in certain events. The Common Stock and the Warrants are separately tradeable and transferable. See "Description of Securities" and "Underwriting."
Offering Price	\$5.00 per share of Common Stock and \$.10 per Warrant
Common Stock Outstanding:	
Prior to the Offering(1) After the Offering(1)(2) Warrants Outstanding after	1,826,641 shares of Common Stock 3,326,641 shares of Common Stock
the Offering(3) Terms of Warrants:	1,500,000 Warrants
Exercise price	\$6.00 per share, subject to adjustment in certain events. See "Description of Securities Warrants."
Exercise period	Any time during the period commencing November , 1997 (or earlier upon notice of redemption as provided below) and ending November , 2001 (the "Exercise Period").
Redemption	Redeemable by the Company at a price of \$.10 per Warrant upon not less than 30 days prior written notice to the holders of the Warrants at any time during the Exercise Period (or earlier with the prior written consent of the Representative), provided that the average of the closing bid quotations of the Common Stock on The Nasdaq SmallCap Market (or if not quoted thereon, the average of the closing sale prices of the Common Stock on the principal securities exchange, including the Nasdaq National Market, on which the Common Stock is then traded), during the period of 20 consecutive trading days ending on the third day prior to the date on which the Company gives notice of redemption, has been at least 150% of the then current exercise price of the Warrants (initially, \$9.00 per share). See
Use of Proceeds	"Description of Securities Warrants." The net proceeds of this Offering, aggregating approximately \$6,173,250, will be used (i) for product development, (ii) for sales and marketing, and (iii) for working capital and general corporate purposes. See "Use of Proceeds."

The securities offered hereby involve a high

- -----

Risk Factors.....

- (1) Gives effect to the automatic conversion of the outstanding shares of Series D Preferred Stock into 1,039,792 shares upon consummation of the sale of the shares of Common Stock and Warrants offered hereby (the "Closing"). Does not include (i) 2,274,066 shares of Common Stock issuable upon exercise of outstanding warrants, including (A) shares issuable upon exercise of outstanding warrants to purchase Series D Preferred Stock (the "Series D Warrants"), at an exercise price of \$0.01 per share, which will become exercisable for 2,079,584 shares of Common Stock following the automatic conversion of the Series D Preferred Stock at the Closing, and (B) 194,482 shares issuable upon exercise of outstanding warrants, at exercise prices ranging from \$0.01 to \$0.07 per share, and (ii) 949,070 shares of Common Stock issuable upon exercise of outstanding options granted pursuant to the Company's stock option plans, at exercise prices ranging from \$0.07 to \$7.84 per share. See "Management -- Stock Option Plan," "Certain Transactions" and "Description of Securities -- Warrants."
- (2) Does not include (i) 1,500,000 shares reserved for issuance upon exercise of the Warrants, (ii) 450,000 shares of Common Stock reserved for issuance upon exercise of the Underwriters' Over-Allotment Option and the Warrants included therein, and (iii) 300,000 shares reserved for issuance upon exercise of the Underwriters' Warrants and the Warrants included therein. See "Description of Securities -- Warrants" and "Underwriting."
- (3) Does not include (i) 225,000 Warrants reserved for issuance upon exercise of the Underwriters' Over-Allotment Option, (ii) 150,000 Warrants reserved for issuance upon exercise of the Underwriters' Warrants, and (iii) outstanding warrants to purchase 2,274,066 shares of Common Stock, including the Series D Warrants which will become exercisable for Common Stock following the automatic conversion of the Series D Preferred Stock into Common Stock at the Closing. See "Underwriting."

SUMMARY OF CONSOLIDATED FINANCIAL INFORMATION

The summary financial information set forth below is derived from and should be read in conjunction with the Company's consolidated financial statements, including the notes thereto, appearing elsewhere in this Prospectus.

STATEMENT OF OPERATIONS DATA:

	YEAR ENDED DECEMBER 31,		NINE MONTHS ENDED SEPTEMBER 30,	
	1994	1995	1995	1996
Net sales Gross profit Operating loss Net loss Net loss applicable to common	\$289,047 85,191 (4,608,396) (4,840,385)	\$174,521 104,342 (3,925,730) (4,053,528)	\$112,613 70,329 (2,890,998) (2,960,445)	\$1,748,065 1,083,086 (2,168,228) (2,122,377)
stockholders Net loss per common and common share	(5,796,959)	(4,989,853)	(3,680,445)	(2,122,377)
equivalent Shares used in per share calculations(1)	(\$1.39) 4,172,052	(\$1.19) 4,178,877	(\$0.88) 4,172,897	(\$0.48) 4,377,679

BALANCE SHEET DATA:

	SEPTEMBER 30, 1996	
	ACTUAL	PRO FORMA AS ADJUSTED(2)
Working capital Total assets Accumulated deficit Stockholders' equity	\$1,125,998 2,618,521 (17,774,359) 1,447,521	\$7,299,248 8,791,771 (17,774,359) 7,620,771

- -----

- (1) See Note 2 of notes to consolidated financial statements for an explanation of the determination of the number of shares used in computing net loss per share.
- (2) Gives effect to (i) the automatic conversion of the outstanding shares of Series D Preferred Stock into 1,039,792 shares at the Closing, and (ii) the issuance and sale of 1,500,000 shares of Common Stock and 1,500,000 Warrants offered hereby and the application of the estimated net proceeds from the sale thereof. See "Use of Proceeds." Does not include (i) 2,274,066 shares of Common Stock issuable upon exercise of outstanding warrants, including (A) shares issuable upon exercise of the Series D Warrants, at an exercise price of \$0.01 per share, which will become exercisable for 2,079,584 shares of Common Stock following the automatic conversion of the Series D Preferred Stock at the Closing, and (B) 194,482 shares issuable upon exercise of outstanding warrants, at exercise prices ranging from \$0.01 to \$0.07 per share, (ii) 949,070 shares of Common Stock issuable upon exercise of outstanding options granted pursuant to the Company's stock option plans, at exercise prices ranging from \$0.07 to \$7.84 per share, (iii) the Underwriters' Over-Allotment Option, (iv) the Warrants and the Warrants included therein and (v) the Underwriters' Warrants and the Warrants included therein.

RISK FACTORS

The securities offered hereby are speculative and involve a high degree of risk, including, but not limited to, the risk factors described below. Each prospective investor should carefully consider the following risk factors before making an investment decision.

1. HISTORY OF LOSSES; ACCUMULATED DEFICIT; ANTICIPATED FUTURE LOSSES. Since its inception, the Company has incurred losses. The Company incurred a net loss of approximately \$4,054,000 (on net sales of approximately \$175,000) for its fiscal year ended December 31, 1995 and a net loss of approximately \$4,840,000 (on net sales of approximately \$289,000) for its fiscal year ended December 31, 1994. In addition, the Company incurred a net loss of approximately \$2,122,000 (on net sales of approximately \$1,748,000) for the nine months ended September 30, 1996, as compared to a net loss of approximately \$2,960,000 (on net sales of approximately \$113,000), for the nine months ended September 30, 1995. At September 30, 1996, the Company's accumulated deficit was approximately \$17,774,000 as a result of continuing losses. The Company expects to continue to incur operating losses until such time, if ever, as it derives significant revenues from the sale of its products. The Company's ability to operate profitably depends upon market acceptance of the ROBODOC System, the development of an effective sales and marketing organization, and the development of new products and improvements to existing products. There can be no assurance that the Company will obtain FDA approval to market the ROBODOC System in the United States or that the ROBODOC System will achieve market acceptance in the United States, Europe and other foreign markets to generate sufficient revenues to become profitable.

2. INDEPENDENT AUDITORS' "GOING CONCERN" EXPLANATORY PARAGRAPH. The Company's independent auditors have included an explanatory paragraph in their report on the Company's financial statements for the year ended December 31, 1995, which indicates there is substantial doubt about the Company's ability to continue as a going concern due to the Company's need to generate cash from operations and obtain additional financing. See "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Report of Independent Auditors" on the Company's consolidated financial statements appearing at page F-2 of this Prospectus.

LIMITED OPERATING HISTORY. Although the Company commenced operations in October 1990, its operations have consisted primarily of the development and clinical testing of the ORTHODOC and the ROBODOC System, the organization of its manufacturing facility, the hiring of key personnel and the formulation of a plan for marketing the ROBODOC System in Europe. Although the Company has commenced marketing the ROBODOC System in Europe, it has engaged only in clinical testing of the ROBODOC System in the United States, and the Company's ability to market its products in the United States is dependent upon FDA approval. See "Risk Factors -- Government Regulation." Accordingly, the Company must be evaluated in light of the uncertainties, delays, difficulties and expenses commonly experienced by companies in the early operating stage, which generally include unanticipated problems and additional costs relating to the development and testing of products, regulatory compliance, commencement of production, product introduction and marketing, and competition. Many of these factors may be beyond the Company's control, including but not limited to unanticipated results of product tests requiring modification in product design, changes in applicable government regulations or the interpretation thereof, market acceptance of the Company's products and development of competing products by others. In addition, the Company's future performance also will be subject to other factors beyond the Company's control, including general economic conditions and conditions in the healthcare industry or targeted commercial markets.

4. LENGTHY SALES CYCLE. Since the purchase of a ROBODOC System represents a significant capital expenditure for a customer, the placement of orders may be delayed due to customers' internal procedures to approve large capital expenditures. The Company anticipates that the period between initial contact of a customer for the ROBODOC System and submission of a purchase order by that customer could be as long as 9 to 12 months. Furthermore, the current lead time required by the supplier of the robot is four months after receipt of the order. Although the Company generally intends to require a deposit upon receipt of an order for the ROBODOC System, the Company may be required to expend significant cash resources to fund its operations until the balance of the purchase price is paid. Accordingly, a significant portion of the sales price of a ROBODOC System may not be recognized until a fiscal quarter subsequent to the fiscal quarter in which the Company incurred marketing and sales expenses associated with that order. See "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the Company's consolidated financial statements appearing elsewhere herein.

5. CHALLENGES OF GROWTH. The Company intends to use a portion of the net proceeds of this Offering to hire and retain sales and marketing, research and development and technical personnel to increase and support sales of ROBODOC Systems and to develop additional surgical applications for the ROBODOC System. See "Use of Proceeds." The anticipated growth of the Company will likely result in new and increased responsibilities for management personnel and place significant strain upon the Company's management, operating and financial systems and resources. To accommodate such growth and compete effectively, the Company must continue to implement and improve its operational, financial, management and information systems, procedures and controls, and to expand, train, motivate and manage its personnel. There can be no assurance that the Company's operational, financial, management and information, systems, and controls will be adequate to support the Company's operational, financial, management and information, financial, management and information, systems, procedures and controls will be adequate to support the Company's operational, financial, management and information systems, procedures or controls, or to expand, train, motivate or manage employees, could materially and adversely affect the Company's business, financial condition and results of operations. See "Risk Factors -- Dependence on Key Personnel," "Business -- Employees" and "Management -- Directors, Executive Officers and Key Employees."

6. AVAILABLE CLINICAL DATA; RISK VERSUS BENEFIT ISSUES. The Company has conducted a randomized clinical trial in the United States at three centers. Of the 117 patents enrolled in the U.S. clinical study, 70 hips received treatment with the ROBODOC System and 61 hips in a control group received conventional THR surgery. In addition, at least 425 patients have received treatment with the ROBODOC System in Germany, but without comparison to randomized control group patients.

In communications with the Company, the FDA has indicated a strong "preference" for two year post-operative data from patients participating in the U.S. clinical trial, although in a recent meeting the FDA indicated that it may accept a PMA application for filing with only two year post-operative data on some patients and permit the Company to submit the additional post-operative data while the PMA application is under review. However, there can be no assurance that the FDA will not require complete two year post-operative data on all patients participating in the U.S. clinical trial before accepting a PMA application for filing. The last patient receiving surgery in the U.S. clinical trial will reach the two year post-operative mark in February 1998.

No assurance can be given that the FDA will agree that the data indicates that the ROBODOC System achieves better implant fit and alignment and reduces intraoperative fractures compared to conventional THR surgery, nor can assurance be given that the FDA will agree that the greater surgery time and blood loss associated with the ROBODOC System does not pose a significant safety concern or create an unfavorable risk/benefit ratio. Further, no assurance can be given that the FDA would not require the Company to obtain additional clinical data to resolve any concern about the risk/benefit ratio offered by the ROBODOC System. If the Company were required to obtain such additional data, the FDA review process could be prolonged by as long as several years.

In February 1995, a law firm specializing in FDA regulatory matters examined an interim report of preliminary data and concluded that it was doubtful that the FDA would find that the device was safe and effective for its intended use, or provided a therapeutic benefit, sufficient to permit PMA approval, if the FDA were presented with the then existing preliminary data or future data qualitatively similar to the preliminary data. The Company believes that the currently available data, which have not been reviewed by an independent third party, address many of the concerns identified in the law firm's report. However, there can be no assurance that the FDA would agree that the Company's current clinical data show that the ROBODOC System is safe and effective for its intended use, provides a therapeutic benefit, or has an acceptable risk/benefit ratio in light of increased surgery time and intraoperative blood loss. In addition, the Company's Director of Regulatory Affairs and Quality Assurance resigned in September 1996 and subsequently has asserted that one of the reasons for his resignation was his concern about the adequacy of the Company's clinical data. See "Business -- Available Clinical Data; Risk Versus Benefit Issues."

7. GOVERNMENT REGULATION.

Summary. The Company's products are subject to continued and pervasive regulation by the FDA and foreign and state regulatory authorities. In the United States, the Company must comply with food and drug laws and with regulations promulgated by the FDA. These laws and regulations require the Company's products to obtain various authorizations prior to being marketed in the United States, and there is no assurance the Company's products will receive these authorizations. The Company's facilities and manufacturing practices will also be subject to FDA regulations. In each foreign market, the Company's products may be subject to substantially different regulations. Failure to comply with U.S. or applicable foreign regulations could have a material adverse effect on the Company. See "Business -- Government Regulation."

U.S. Regulation. Pursuant to the Federal Food, Drug, and Cosmetic Act, as amended, and regulations thereunder (collectively, the "FDC Act"), the FDA regulates the clinical testing, manufacture, labeling, sale, distribution and promotion of medical devices in the United States. Noncompliance with applicable requirements can result in, among other things, fines, injunctions, civil penalties, recall or seizure of products, total or partial suspension of production, failure of the government to grant pre-market clearance or premarket approval for devices, withdrawal of marketing clearances or approvals, and criminal prosecution. The FDA also has the authority to request recall, repair, replacement or refund of the cost of any device manufactured or distributed by the Company. Failure to comply with regulatory requirements, including any future changes to such requirements, could have a material adverse effect on the Company's business, financial condition and results of operation. See "Business -- Government Regulation."

Lengthy "Pre-Market" Approval Process for ROBODOC System. Before a new device can be introduced into the U.S. market, the manufacturer must obtain FDA permission to market through either the 510(k) pre-market notification process or the costlier, lengthier and less certain pre-market approval ("PMA") application process. The Company intends to file a PMA in mid to late 1997 for approval to market the ROBODOC System in the United States. The Company intends to make an informal pre-PMA submission of the clinical data to the FDA. Depending upon the FDA's review of this submission, the target date for submitting a PMA application could be extended. There can be no assurance that the PMA application, once submitted, will be accepted for filing, found approvable, or, if found approvable, will not take longer than expected to obtain approval, or will not include unfavorable post-approval restrictions (for example, limitations on the indicated patient population). See "Risk Factors -- Available Clinical Data; Risk Versus Benefit Issues."

New surgical applications for the ROBODOC System generally will require FDA approval of a PMA supplement or, possibly, a new PMA. The Company is also likely to require additional FDA approvals, supported by additional clinical data, before incorporating new imaging modalities such as ultrasound and MRI or other new technologies in the ROBODOC System. See "Business -- Government Regulation."

510(k) Notification for ORTHODOC. In February 1996, the Company filed a 510(k) notification for the ORTHODOC as a stand-alone device. In October 1996, the Company submitted a response to correspondence from the FDA in which the FDA stated that it could not determine the ORTHODOC's substantial equivalence to legally marketed predicate devices without certain additional information, primarily related to the documentation and testing of the software. There can be no assurance that the FDA will consider the Company's response adequate or that the ORTHODOC will receive 510(k) clearance in a timely fashion, or at all. See "Business -- Government Regulation."

No Assurance of Approvals; Subsequent Review of Approvals, Etc. There can be no assurance that any of the Company's current or future products will obtain required FDA approvals on a timely basis, or at all, or that the Company will have the necessary resources to obtain such approvals. If any of the Company's products are not approved for use in the United States, the Company will be limited to marketing them in foreign countries. Furthermore, approvals that have been or may be granted are subject to continual review, and later discovery if previously unknown problems result in product labeling restrictions or withdrawal of the product from the market. See "Business -- Government Regulation." Requirement to Follow Good Manufacturing Practices. Assuming the Company obtains the necessary FDA approvals and clearances for its products, in order to maintain such approvals and clearances the Company will be required, among other things, to register its establishment and list its devices with the FDA and with certain state agencies, maintain extensive records, report any adverse experiences on the use of its products and submit to periodic inspections by the FDA and certain state agencies. The FDC Act also requires devices to be manufactured in accordance with good manufacturing practices ("GMP") regulations, which impose certain procedural and documentation requirements upon the Company with respect to manufacturing and quality assurance activities. Recently adopted GMP requirements, including those pertaining to design control, are likely to increase the cost of GMP compliance. See "Business -- Government Regulation."

Foreign Regulation. The introduction of the Company's products in foreign markets will also subject the Company to foreign regulatory clearances, which may be unpredictable and uncertain, and which may impose substantial additional costs and burdens. The ROBODOC System satisfies the appropriate international electromedical safety standards and complies with the requirements of the Electromagnetic Compatability Directive, thus allowing the Company to apply the CE Mark under the European Directives and to distribute the ROBODOC System throughout the European Union; provided, however, that in order to continue to distribute the ROBODOC System after June 14, 1998, the ROBODOC System must attain a CE Mark under the essential requirements of the Medical Device Directive. Compliance with the Medical Device Directive requires a conformity assessment by a notified body (i.e., authorized independent testing body) based upon inspection of the ROBODOC System. The Company has commenced the certification process for compliance with the Medical Device Directive and believes that the ROBODOC System will be granted a CE Mark under the Medical Device Directive prior to June 14, 1998; however, there can be no assurance that such CE Mark will be granted by such date, or at all. Failure to obtain a CE Mark for the ROBODOC System under the Medical Device Directive prior to June 14, 1998 would have a material adverse effect on the Company's business, results of operations and financial condition. Outside the European Union, international sales of medical devices are subject to the regulatory requirements of each country. The regulatory review process varies from country to country. Many countries also impose product standards, packaging requirements, labeling requirements and import restrictions on devices. No assurance can be given that any additional necessary approvals or clearances for the Company's products will be granted on a timely basis, or at all. See "Business -- Government Regulation.

Adverse Effect of Delays or Loss of Approvals. Delays in the receipt of, or failure to receive, FDA approvals or clearances, or the loss of any previously received approvals or clearances, or limitations on intended use imposed as a condition of such approvals or clearances, would have a material adverse effect on the business, financial condition and results of operations of the Company. See "Business -- Government Regulation."

8. DEPENDENCE ON PRINCIPAL PRODUCT. The Company expects to derive most of its revenues from sales of the ROBODOC System. Accordingly, the Company's potential future success and financial performance will depend almost entirely on its ability to successfully market its ROBODOC System. If the Company is unable to obtain the requisite regulatory approvals or to achieve commercial acceptance of its ROBODOC System, the Company's business, financial condition and results of operations will be materially and adversely affected. See "Management's Discussion and Analysis of Financial Condition and Results of Operations."

9. UNCERTAINTY OF MARKET ACCEPTANCE. The Company's ability to successfully commercialize its ROBODOC System will require substantial marketing efforts and the expenditure of significant funds to inform potential customers, including hospitals and physicians, of its distinctive characteristics and the advantages of using the ROBODOC System instead of traditional orthopaedic surgical tools and procedures. Since the ROBODOC System employs innovative technology, rather than being an improvement of existing technology, and represents a substantial capital expenditure, the Company expects to encounter resistance to change, which it must overcome to successfully market its products. Failure of the ROBODOC System to achieve significant market acceptance would materially and adversely affect the Company's business, financial condition and results of operations.

10. COMPETITION. The principal competition for the ROBOCOC System is manual surgery performed by orthopaedic surgeons, using surgical power tools and manual devices. The providers of these instruments

are the major orthopaedic companies, which include Howmedica, Inc. (a subsidiary of Pfizer, Inc.), located in New York; Zimmer, Inc. (a subsidiary of Bristol-Myers Squibb Company), located in Indiana; Johnson & Johnson Orthopaedics, Inc. (a subsidiary of Johnson & Johnson), located in New Jersey; DePuy, Inc. (a subsidiary of Corange Limited), located in Indiana; Biomet, Inc., located in Indiana; and Osteonics, Inc. (a subsidiary of the Stryker Corporation), located in New Jersey. There are companies in the medical products industry, particularly the major orthopaedic companies, capable of developing and marketing computer-controlled robotic systems for surgical applications, many of whom have significantly greater financial, technical, manufacturing, marketing and distribution resources than the Company, and have established reputations in the medical device industry. Furthermore, there can be no assurance that IBM or the University of California, which developed the technology for the Company's active surgical robot and hold patents relating thereto, will not enter the market or license the technology to other companies. There can be no assurance that future competition will not have a material adverse effect on the Company's business. The cost of the ROBODOC System represents a significant capital expenditure for a customer and accordingly may discourage purchases by certain customers. See "Business -- Competition.

11. UNCERTAINTY REGARDING PATENTS AND PROTECTION OF PROPRIETARY TECHNOLOGY.

Summary. Certain technology underlying the Company's products is the subject of one United States patent issued to IBM, which IBM has agreed not to enforce against the manufacture and sale of the Company's products, and two patent applications by the Company, the outcome of which applications is uncertain. Third party claims to the technology used in the Company's products could, if valid, require the Company to obtain licenses to the technology; those licenses may not be available on acceptable terms. The technology used in the Company's products could be (a) disclosed by Company employees despite their confidentiality obligations to the Company or (b) independently developed or otherwise acquired by potential competitors. See "Business -- Patents and Proprietary Rights."

General. The Company's ability to compete successfully may depend, in part, on its ability to obtain and protect patents, protect trade secrets and operate without infringing the proprietary rights of others. The Company's policy is to seek to protect its proprietary position by, among other methods, filing U.S. and foreign patent applications relating to its technology, inventions and improvements that are important to the development of its business. The Company has filed four patent applications, and is preparing for filing additional patent applications covering various aspects of its technology. In addition, IBM has agreed not to assert infringement claims against the Company with respect to an IBM patent relating to robotic medical technology, to the extent such technology is used in the Company's products. Significant portions of the ROBODOC System and ORTHODOC software are protected by copyrights. IBM has granted the Company a royalty-free license for the underlying software code for the ROBODOC System. See "Business -- Patents and Proprietary Rights."

There can be no assurance that the Company's pending or future patent applications will mature into issued patents, or that the Company will continue to develop its own patentable technologies. Further, there can be no assurance that any patents that may be issued in the future will effectively protect the Company's technology or provide a competitive advantage for the Company's products or will not be challenged, invalidated, or circumvented in the future. In addition, there can be no assurance that competitors, many of which have substantially more resources than the Company and have made substantial investments in competing technologies, will not obtain patents that will prevent, limit or interfere with the Company's ability to make, use or sell its products either in the United States or internationally. See "Business -- Patents and Proprietary Rights."

Secrecy of Patent Applications Until Patents Issued. Patent applications in the United States are maintained in secrecy until patents issue, and patent applications in foreign countries are maintained in secrecy for a period after filing. Publication of discoveries in the scientific or patent literature tends to lag behind actual discoveries and the filing of related patent applications. Patents issued and patent applications filed relating to medical devices are numerous and there can be no assurance that current and potential competitors and other third parties have not filed or in the future will not file applications for, or have not

received or in the future will not receive, patents or obtain additional proprietary rights relating to products or processes used or proposed to be used by the Company. See "Business -- Patents and Proprietary Rights."

Lack of Infringement Study. The Company's patent counsel has not undertaken any infringement study to determine if the Company's products and pending patent applications infringe on other existing patents. The medical device industry has been characterized by substantial competition and litigation regarding patent and other proprietary rights. The Company intends to vigorously protect and defend its patents and other proprietary rights relating to its proprietary technology. Litigation alleging infringement claims against the Company (with or without merit), or instituted by the Company to enforce patents and to protect trade secrets or know-how owned by the Company or to determine the enforceability, scope and validity of the proprietary rights of others, is costly and time consuming. If any relevant claims of third-party patents are upheld as valid and enforceable in any litigation or administrative proceedings, the Company could be prevented from practicing the subject matter claimed in such patents, or could be required to obtain licenses from the patent owners of each patent, or to redesign its products or processes to avoid infringement. There can be no assurance that such licenses would be available or, if available, would be available on terms acceptable to the Company or that the Company would be successful in any attempt to redesign its products or processes to avoid infringement. Accordingly, an adverse determination in a judicial or administrative proceeding or failure to obtain necessary licenses could prevent the Company from manufacturing and selling its products, which would have a material adverse effect on the Company's business, financial condition and results of operations. See "Business -- Patents and Proprietary Rights."

Possibility of Disclosure or Discovery of Proprietary Information. Although the Company requires each of its employees, consultants, and advisors to execute confidentiality and assignment of inventions and proprietary information agreements in connection with their employment, consulting or advisory relationships with the Company, there can be no assurance that these agreements will provide effective protection for the Company's proprietary information in the event of unauthorized use or disclosure of such information. Furthermore, no assurance can be given that competitors will not independently develop substantially equivalent proprietary information and techniques or otherwise gain access to the Company's proprietary technology, or that the Company can meaningfully protect its rights in unpatented proprietary technology. See "Business -- Patents and Proprietary Rights."

PRODUCT LIABILITY. The manufacture and sale of medical products 12 exposes the Company to the risk of significant damages from product liability claims. The Company maintains product liability insurance in amounts that it believes are adequate to protect against foreseeable risks. In addition, in connection with the sale of ROBODOC Systems, the Company enters into indemnification agreements with its customers pursuant to which the customers indemnify the Company against any claims against it arising from improper use of the ROBODOC System. However, there can be no assurance that the coverage limits of the Company's insurance policies will be adequate, that the Company will continue to be able to procure and maintain such insurance coverage, that such insurance can be maintained at acceptable costs, or that customers will be able to satisfy indemnification claims. Although the Company has not experienced any product liability claims to date, a successful claim brought against the Company in excess of its insurance coverage could have a material adverse effect on the Company's business, financial condition and results of operations. See "Business -- Product Liability."

13. LIMITED MANUFACTURING EXPERIENCE. The Company's success will depend in part on its ability to manufacture its products in a timely, cost-effective manner and in compliance with GMP, and manufacturing requirements of other countries, including the International Standards Organization ("ISO") 9000 standards and other regulatory requirements. The manufacture of the Company's products is a complex operation involving a number of separate processes and components. The Company's manufacturing activities to date have consisted primarily of manufacturing limited quantities of systems for use in clinical trials and a limited number of systems for commercial sale. The Company does not have experience in manufacturing its products in the commercial quantities that might be required. Furthermore, as a condition to receipt of PMA approval, the Company's facilities, procedures and practices will be subject to pre-approval and ongoing GMP inspections by FDA. Manufacturers often encounter difficulties in scaling up manufacturing of new products, including problems involving product yields, quality control and assurance, component and service availability, adequacy of control policies and procedures, lack of qualified personnel, compliance with FDA regulations, and the need for further FDA approval of new manufacturing processes and facilities. There can be no assurance that manufacturing yields, costs or quality will not be adversely affected as the Company seeks to increase production, and any such adverse effect could have a material adverse effect on the Company's business, financial condition and results of operations. See "Business -- Manufacturing."

14. DEPENDENCE ON SUPPLIER FOR ROBOT. Although the Company has multiple sources for most of the components, parts and assemblies used in the ROBODOC System, the Company is dependent on Sankyo Seiki of Japan for the robot. The robot can be obtained from other suppliers with appropriate modifications and engineering effort. If the Company were no longer able to obtain the robot from its supplier, there can be no assurance that the delays resulting from the required modifications or engineering effort to adapt alternative components would not have a material adverse effect on the Company's business, financial condition and results of operations. See "Business -- Manufacturing."

15. RELIANCE ON FOREIGN SALES. From inception through September 30, 1996, substantially all of the Company's sales (other than clinical sales in the United States pursuant to an exemption in the rules and regulations of the FDA for investigational devices) have been to customers in Germany. The Company believes that until such time, if ever, as it receives approval from the FDA to market the ROBODOC System in the United States, substantially all of its sales will be derived from customers in foreign markets. Foreign sales are subject to certain risks, including economic or political instability, shipping delays, fluctuations in foreign currency exchange rates, changes in regulatory requirements, custom duties and export quotas and other trade restrictions, any of which could have a material adverse effect on the Company's business. To date, payment for all ROBODOC Systems in Europe has been fixed in U.S. Dollars, and the Company expects to continue this practice. However, there can be no assurance that in the future the customers will be willing to make payment to the Company for its products in fixed U.S. Dollars. If the U.S. Dollar strengthens substantially against the foreign currency of a country in which the Company sells its products, the cost of purchasing the Company's products in U.S. Dollars would increase and may inhibit purchases of the Company's products by customers in that country. The Company is unable to predict the nature of future changes in foreign markets or the effect, if any, they might have on the Company. See "Business -- Sales and Marketing."

16. UNCERTAINTY CONCERNING THIRD PARTY REIMBURSEMENT. The Company expects that its ability to successfully commercialize its products will depend significantly on the availability of reimbursement for surgical procedures using the Company's products from third-party payors such as governmental programs, private insurance and private health plans. Reimbursement is a significant factor considered by hospitals in determining whether to acquire new equipment. Notwithstanding FDA approval, if granted, third-party payors may deny reimbursement if the payor determines that a therapeutic medical device is unnecessary, inappropriate, not cost-effective or experimental or is used for a nonapproved indication. Cost control measures adopted by third-party payors in recent years have had and may continue to have a significant effect on surgeries performed with the ROBODOC System or as to the levels of reimbursement. There also can be no assurance that levels of reimbursement, if any, will not be decreased in the future, or that future legislation, regulation, or reimbursement policies of third-party payors will not otherwise adversely affect the demand for the Company's products or its ability to sell its products on a profitable basis. Fundamental reforms in the healthcare industry in the United States and Europe that could affect the availability of third-party reimbursement continue to be proposed, and the Company cannot predict the timing or effect of any such proposal. If third-party payor coverage or reimbursement is unavailable or inadequate, the Company's business, financial condition and results of operations could be materially and adversely affected.

17. DEPENDENCE ON KEY PERSONNEL. The Company's business and marketing plan was formulated by, and is to be implemented under the direction of, Dr. Ramesh C. Trivedi, the Chief Executive Officer and President of the Company. Dr. Trivedi is employed by the Company pursuant to an employment agreement terminable by the Company or Dr. Trivedi at any time. The Company will obtain key-man insurance on the life of Dr. Trivedi in the amount of \$1,000,000 on or before the date upon which the Registration Statement of which this Prospectus forms a part becomes or is declared effective by the Securities and Exchange Commission (the "Effective Date"). The Company's growth and future success also will depend in large part on the continued contributions of its key technical and senior management personnel, as well as its ability to attract, motivate and retain highly qualified personnel generally and, in particular, trained and experienced professionals capable of developing, selling and installing the ROBODOC System and training surgeons in its use. Competition for such personnel is intense, and there can be no assurance that the Company will be successful in hiring, motivating or retaining such qualified personnel. None of the Company's executive or key technical personnel, other than Dr. Trivedi, is employed by the Company pursuant to an employment agreement with the Company. The loss of the services of Dr. Trivedi or other senior management or key technical personnel, or the inability to hire or retain qualified personnel, could have a material adverse effect on the Company's business, financial condition and results of operations. "See Management."

18. CONTROL OF THE COMPANY; OWNERSHIP OF SHARES BY CURRENT MANAGEMENT AND PRINCIPAL SECURITY-HOLDERS. Upon completion of this Offering, the current executive officers, directors and other significant securityholders of the Company will continue to own or have rights to acquire 4,217,661 shares of Common Stock (or approximately 65% of the shares of Common Stock on a fully diluted basis). Although these securityholders may or may not agree on any particular matter that is the subject of a vote of the stockholders, these securityholders may be effectively able to control the outcome of any issues which may be subject to a vote of securityholders, including the election of directors, proposals to increase the authorized capital stock, or the approval of mergers, acquisitions, or the sale of all or substantially all of the Company's assets. See "Security Ownership of Certain Beneficial Owners and Management."

19. REPRESENTATIVE'S POTENTIAL INFLUENCE ON THE COMPANY. The Company has agreed that for three years from the Effective Date, the Representative may designate one person for election to the Company's Board of Directors and that the Company will reasonably cooperate with the Representative in respect of such designation. The election of such designee, if any, may enable the Representative to exert influence on the Company. As of the date of this Prospectus, the Representative has not designated any individual for election to the Company's Board of Directors. See "Underwriting."

20. NEED FOR ADDITIONAL FINANCING. Although the Company anticipates that the net proceeds of this Offering, together with cash flow from operations, will be sufficient to finance its operations for the 12 months following the date of this Prospectus, there can be no assurance that the Company will not require additional financing at an earlier date. This will depend upon the Company's ability to generate sufficient sales of ROBODOC Systems in Europe and other foreign markets, and the timing of required expenditures. If the Company is required to obtain financing in the future, there can be no assurance that such financing will be available on terms acceptable to the Company, if at all. See "Management's Discussion and Analysis of Financial Condition and Results of Operations -- Liquidity and Capital Resources."

21. LIMITATION ON DIRECTOR LIABILITY. The Company's certificate of incorporation provides that a director of the Company shall not be personally liable to the Company or its stockholders for monetary damages for breach of fiduciary duty as a director, with certain exceptions under Delaware law. This may discourage stockholders from bringing suit against a director for breach of fiduciary duty and may reduce the likelihood of derivative litigation brought by stockholders on behalf of the Company against a director. In addition, the Company's By-laws provide for mandatory indemnification of directors and officers. See "Management -- Indemnification of Officers and Directors and Limitation on Director Liability."

22. ABSENCE OF DIVIDENDS. Since inception, the Company has not paid any dividends on its Common Stock and it does not anticipate paying such dividends in the foreseeable future. The Company intends to retain earnings, if any, to finance its operations. See "Dividend Policy."

23. DILUTION. Purchasers of Common Stock in this Offering will suffer immediate dilution of \$2.74 per share (or approximately 55%) in the net tangible book value of their investment from the initial public offering price of \$5.00 per share of Common Stock. See "Dilution."

24. NO ASSURANCE OF PUBLIC MARKET; DETERMINATION OF PUBLIC OFFERING PRICE; POSSIBLE VOLATILITY OF MARKET PRICE FOR THE COMMON STOCK AND WARRANTS. Prior to the Offering, there has been no public trading market for the Common Stock or the Warrants. Consequently, the initial public offering prices of the Common Stock and the Warrants and the exercise price and other terms of the Warrants were determined through negotiations between the Company and the Underwriters and bear no relationship whatsoever to the Company's assets, book value per share, results of operations or other generally accepted criteria of value. The offering prices of the Common Stock and the Warrants, as well as the exercise price of the Warrants, should not be construed as indicative of their value. There can be no assurance that an active trading market for the Common Stock or Warrants will develop after the Offering or that, if developed, it will be sustained. As a result, purchasers of the Common Stock and Warrants will be exposed to a risk of a decline in the market prices of the Common Stock and Warrants after the Offering. The market prices of the Common Stock and Warrants following this Offering may be highly volatile as has been the case with the securities of many emerging companies. The Company's operating results and various factors affecting the medical device industry generally may significantly impact the market price of the Company's securities. In addition, the stock market generally, and the securities of technology companies in particular, have experienced a high level of price and volume volatility, and market prices for the securities of many companies have experienced wide price fluctuations not necessarily related to the operating performance of such companies. There can be no assurance that the market prices of the Common Stock and the Warrants will not experience significant fluctuations or decline below their initial public offering prices.

25. UNDERWRITERS' INFLUENCE ON THE MARKET; POSSIBLE LIMITATIONS ON MARKET MAKING ACTIVITIES. A significant number of the securities offered hereby may be sold to customers of the Underwriters. Such customers subsequently may engage in transactions for the sale or purchase of such securities through or with the Underwriters. The Underwriters have indicated that they intend to act as market-makers and otherwise effect transactions in the securities offered hereby. To the extent the Underwriters act as market-makers in the Common Stock or Warrants, they may exert a dominating influence in the markets for those securities. The prices and liquidity of the Common Stock and Warrants may be significantly affected to the extent, if any, that the Underwriters participate in such markets. Furthermore, the Underwriters may discontinue such activities at any time or from time to time. The Representative also has the right to act as the Company's exclusive agent, for a period of five years, in connection with any future solicitation of holders of Warrants to exercise the Warrants. Unless granted an exemption by the Commission from Rule 10b-6 under the Exchange Act, the Representative and any other soliciting broker-dealers will be prohibited from engaging in any market making activities or solicited brokerage activities with regard to the Company's securities for a period of up to nine business days prior to the solicitation of the exercise of any Warrants until the later of the termination of such solicitation activity or the termination of any right the Representative may have to receive a fee for the solicitation of the Warrants. As a result, the Representative and such soliciting broker-dealers may be unable to continue to make a market for the Company's securities during certain periods while the Warrants are exercisable. Such a limitation, while in effect, could impair the liquidity and market price of the Company's securities. See "Underwriting."

26. POSSIBLE DELISTING. The Common Stock and Warrants have been approved for quotation on The Nasdaq SmallCap Market. In addition, the Company's eligibility for listing the Common Stock and the Warrants on The Pacific Stock Exchange ("PSE") has been confirmed. There can be no assurance that following the Offering the Company will be able to satisfy specified financial tests and market related criteria required for continued quotation on The Nasdaq SmallCap Market or for continued listing on the PSE. If the Company is unable to satisfy The Nasdaq SmallCap Market and PSE maintenance criteria in the future, its Common Stock and Warrants may be delisted from trading on The Nasdaq SmallCap Market and PSE, and if delisted, trading, if any, would thereafter be conducted in the over-the-counter market in the so-called "pink sheets" or the "Electronic Bulletin Board" of the National Association of Securities Dealers, Inc. ("NASD"), and, consequently, an investor could find it more difficult to dispose of, or to obtain accurate quotations as to the price of, the Company's securities.

27. RISK OF LOW-PRICED SECURITIES. The regulations of the Securities and Exchange Commission promulgated under the Exchange Act require additional disclosure relating to the market for penny stocks in connection with trades in any stock defined as a penny stock. Commission regulations generally define a penny

stock to be an equity security that has a market price of less than \$5.00 per share, subject to certain exceptions. Unless an exception is available, those regulations require the delivery, prior to any transaction involving a penny stock, of a disclosure schedule explaining the penny stock market and the risks associated therewith and impose various sales practice requirements on broker-dealers who sell penny stocks to persons other than established customers and accredited investors (generally institutions). In addition, the brokerdealer must provide the customer with current bid and offer quotations for the penny stock, the compensation of the broker-dealer and its salesperson in the transaction, and monthly account statements showing the market value of each penny stock held in the customer's account. Moreover, broker-dealers who recommend such securities to persons other than established customers and accredited investors must make a special written suitability determination for the purchaser and receive the purchaser's written agreement to a transaction prior to sale. If the Company's securities become subject to the regulations applicable to penny stocks, the market liquidity for the Company's securities could be severely affected. In such an event, the regulations on penny stocks could limit the ability of broker-dealers to sell the Company's securities and thus the ability of purchasers of the Company's securities to sell their securities in the secondary market.

28. SHARES ELIGIBLE FOR FUTURE SALE. No assurance can be given as to the effect, if any, that future sales of Common Stock, or the availability of shares of Common Stock for future sales, will have on the market price of the Common Stock from time to time. Sales of substantial amounts of Common Stock (including shares issued upon the exercise of warrants or stock options), or the possibility of such sales, could adversely affect the market price of the Common Stock and also impair the Company's ability to raise capital through an offering of its equity securities in the future. Upon completion of this Offering, the Company will have 3,326,641 shares of Common Stock outstanding, of which only the 1,500,000 shares of Common Stock offered hereby will be transferable without restriction under the Securities Act of 1933 (the "Securities Act"). The remaining 1,826,641 shares, issued in private transactions, will be "restricted securities" (as that term is defined in Rule 144 promulgated under the Securities Act) which may be publicly sold only if registered under the Securities Act or if sold in accordance with an applicable exemption from registration, such as Rule 144. In general, under Rule 144 as currently in effect, subject to the satisfaction of certain other conditions, a person, including an affiliate of the Company, who has beneficially owned restricted securities for at least two years, is entitled to sell (together with any person with whom such individual is required to aggregate sales), within any three-month period, a number of shares that does not exceed the greater of 1% of the total number of outstanding shares of the same class or, if the Common Stock is quoted on Nasdaq or a national securities exchange, the average weekly trading volume during the four calendar weeks preceding the sale. A person who has not been an affiliate of the Company for at least three months and who has beneficially owned restricted securities for at least three years is entitled to sell such restricted securities under Rule 144 without regard to any of the limitations described above. Officers, directors and the other existing securityholders of the Company, owning or having rights to acquire in the aggregate 5,031,708 shares of Common Stock constituting restricted securities, have entered into agreements with the Underwriters not to sell or otherwise dispose of any shares of Common Stock for a period of 18 months following the Effective Date (the "Lock-Up Agreements"), without the prior written consent of the Representative. Following expiration of the term of the Lock-Up Agreements, 3,308,572 shares of Common Stock will become eligible for resale pursuant to Rule 144 commencing in the second quarter of 1998, subject to the volume limitations and compliance with the other provisions of Rule 144. An additional 2,465 shares and 15,604 shares constituting restricted securities not subject to Lock-Up Agreements will become eligible for resale pursuant to Rule 144 following the completion of this Offering and in the fourth quarter of 1997, respectively, subject to the volume limitations and compliance with the other provisions of Rule 144. In addition, securityholders of the Company owning or having rights to acquire in the aggregate 4,030,649 shares of Common Stock granted certain registration rights with respect to those shares have agreed that they will not exercise such registration rights for a period of 18 months following the Effective Date. Furthermore, the holders of the Underwriters' Warrants (including the securities issuable upon exercise thereof) have demand and piggyback registration rights with respect to the shares of Common Stock and Warrants issuable upon exercise of the Underwriters' Warrants. See "Description of Securities -- Shares Eligible for Future Sale," "Description of Securities -- Registration Rights," "Certain Transactions" and "Underwriting."

29. EFFECT OF ISSUANCE OF COMMON STOCK UPON EXERCISE OF WARRANTS AND OPTIONS; POSSIBLE ISSUANCE OF ADDITIONAL OPTIONS. Immediately after the Offering, assuming the Underwriters' Over-Allotment Option is not exercised, the Company will have an aggregate of 6,125,223 shares of Common Stock authorized but unissued and not reserved for specific purposes and an additional 5,548,136 shares of Common Stock unissued but reserved for issuance pursuant to (i) the Company's stock option plans, (ii) outstanding warrants, (iii) exercise of the Warrants and (iv) exercise of the Underwriters' Warrants and the Warrants included therein. All of such shares may be issued without any action or approval by the Company's stockholders. Although there are no present plans, agreements, commitments or undertakings with respect to the issuance of additional shares or securities convertible into any such shares by the Company, any shares issued would further dilute the percentage ownership of the Company held by the public stockholders. The Company has agreed with the Underwriters that, except for the issuances disclosed in or contemplated by this Prospectus, it will not issue any securities, including but not limited to any shares of Common Stock, for a period of 24 months following the Effective Date, without the prior written consent of the Representative. See "Underwriting."

The exercise of warrants or options and the sale of the underlying shares of Common Stock (or even the potential of such exercise or sale) may have a depressive effect on the market price of the Company's securities. Moreover, the terms upon which the Company will be able to obtain additional equity capital may be adversely affected since the holders of outstanding warrants and options can be expected to exercise them, to the extent they are able, at a time when the Company would, in all likelihood, be able to obtain any needed capital on terms more favorable to the Company than those provided in the warrants and options. See "Management -- Stock Option Plan," "Description of Securities" and "Underwriting."

30. POSSIBLE ADVERSE EFFECT OF ISSUANCE OF PREFERRED STOCK. The Company's certificate of incorporation authorizes the issuance of 1,000,000 shares of "blank check" preferred stock, with designations, rights and preferences determined from time to time by the Company's Board of Directors. Accordingly, the Company's Board of Directors is empowered, without further stockholder approval, to issue preferred stock with dividend, liquidation, conversion, voting or other rights that could adversely affect the voting power or other rights of the holders of the Common Stock. In the event of issuance, the preferred stock could be used, under certain circumstances, as a method of discouraging, delaying or preventing a charge in control of the Company, since the terms of the preferred stock that might be issued could effectively restrict the Company's ability to consummate a merger, reorganization, sale of all or substantially all of its assets, liquidation or other extraordinary corporate transaction without the approval of the holders of preferred stock. However, there can be no assurance that preferred stock will not be issued at some time in the future. The Company has agreed with the Underwriters that it will not issue any shares of preferred stock. However, there can be no assurance that preferred stock will not be issued at some time in the future. The Company has agreed with the Underwriters that it will not issue any shares of preferred stock. For a period of 24 months following the Effective Date, without the prior written consent of the Representative. See "Description of Securities -- Preferred Stock."

31. ANTITAKEOVER PROVISIONS OF DELAWARE BUSINESS COMBINATION STATUTE. The Company is subject to Section 203 of the Delaware General Corporation Law ("DGCL"), which limits transactions between a publicly held company and "interested stockholders" (generally, those stockholders who, together with their affiliates and associates, own 15% or more of a company's outstanding capital stock). This provision of the DGCL also may have the effect of deterring certain potential acquisitions of the Company. See "Description of Securities -- Statutory Provisions Affecting Stockholders."

32. ADVERSE EFFECT OF REDEMPTION OF WARRANTS. Under certain conditions, the Warrants may be redeemed by the Company, prior to their expiration, at a redemption price of \$0.10 per Warrant, upon not less than 30 days prior written notice to the holders of such Warrants. Redemption of the Warrants could force the holders to exercise the Warrants and pay the exercise price at a time when it may be disadvantageous for the holders to do so, to sell the Warrants at the then current market price when they might otherwise wish to hold the Warrants or to accept the redemption price, which is likely to be substantially less than the market value of the Warrants at the time of redemption. See "Description of Securities -- Warrants."

33. NEED FOR FUTURE REGISTRATION OF WARRANTS; STATE BLUE SKY REGISTRATION; EXERCISE OF WARRANTS. The Warrants will trade separately upon the completion of the Offering. Although the Warrants will not knowingly be sold to purchasers in jurisdictions in which the Warrants are not registered or otherwise qualified for sale, purchasers may buy Warrants in the after-market or may move to jurisdictions in which the Warrants and the Common Stock underlying the Warrants are not so registered or qualified. In this event, the Company would be unable to issue Common Stock to those persons desiring to exercise their Warrants unless and until the Warrants and the underlying Common Stock are qualified for sale in jurisdictions in which such purchasers reside, or an exemption from such qualification exists in such jurisdictions. There can be no assurance that the Company will be able to effect any required qualification.

The Warrants will not be exercisable unless the Company maintains a current Registration Statement on file with the Commission through post-effective amendments to the Registration Statement containing this Prospectus. Although the Company has agreed to file appropriate post-effective amendments to the Registration Statement containing this Prospectus and to maintain a current Prospectus with respect to the Warrants, there can be no assurance that the Company will file post-effective amendments necessary to maintain a current Prospectus or that the Warrants will continue to be so registered. See "Description of Securities -- Warrants."

USE OF PROCEEDS

The net proceeds to the Company from the sale of the shares of Common Stock and Warrants offered hereby, after deducting underwriting discounts and other expenses of the Offering, are estimated to be \$6,173,250 (\$7,180,181 if the Underwriters' Over-Allotment Option is exercised in full). The Company expects to use the net proceeds of the Offering as follows:

	APPROXIMATE AMOUNT	PERCENT
Product development(1) Sales and marketing(2) Working capital and general corporate purposes	2,900,000	49% 47% 4%
Total	\$6,173,250 =======	100% =====

(1) Includes development of software packages for revision and total knee replacement surgeries, as well as other orthopaedic surgical applications, expansion of the implant libraries for the Company's products and development of multiple imaging modalities for use with

the ROBODOC System.

(2) Represents costs associated with marketing and sales activities with respect to the Company's products, principally in Europe, including advertising and promotional activities, as well as participation in trade shows. Also includes costs associated with hiring, training and maintaining sales, marketing and service personnel.

Additional proceeds from the exercise of the Underwriters' Over-Allotment Option and the Warrants will be added to the Company's working capital and be available for general corporate purposes. Pending application, the Company will invest the net proceeds of this Offering in United States government securities and investment-grade commercial paper.

The Company has not determined the specific allocation of the net proceeds among the various uses described above. Specific allocations of such net proceeds will ultimately depend on the development of the Company's products and the related technology, the adaptation of its products to additional surgical applications and commercial acceptance of its products. The Company anticipates, based on currently proposed plans and assumptions relating to its operations, that the net proceeds of this Offering will be sufficient to satisfy the Company's anticipated cash requirements for at least 12 months following the date of this Prospectus.

CAPITALIZATION

The following table sets forth the capitalization of the Company (i) as of September 30, 1996, and (ii) such capitalization on a pro forma basis after giving effect to the automatic conversion of the outstanding Series D Preferred Stock at the Closing, and as adjusted to give effect to the sale of 1,500,000 shares of Common Stock and 1,500,000 Warrants offered hereby, and the application of the estimated net proceeds thereof. The information set forth below should be read in conjunction with the consolidated financial statements and notes thereto appearing elsewhere in this Prospectus, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Use of Proceeds."

	SEPTEMBER 30, 1996	
	ACTUAL(1)(2)	PRO FORMA AS ADJUSTED(1)(3)
<pre>Stockholders' equity: Preferred stock, \$0.01 par value, no shares authorized, issued or outstanding; 1,000,000 shares authorized, no shares issued or outstanding, pro forma as adjusted Convertible preferred stock, \$0.01 par value, 5,750,000 shares authorized; 1,039,792 shares issued and outstanding; no shares authorized, issued or outstanding, pro forma as adjusted; liquidation preference value of</pre>	\$	\$
<pre>\$1,000,000 Common stock, \$0.01 par value, 15,000,000 shares authorized; 737,072 shares issued and outstanding; 3,276,864 shares</pre>	10,398	
Additional paid-in capital Deferred stock compensation Accumulated translation adjustment Accumulated deficit	(473,507) (7,499)	32,768 25,843,368 (473,507) (7,499) (17,774,359)
Total stockholders' equity	1,447,521	7,620,771
Total capitalization	\$ 1,447,521 =======	\$ 7,620,771 =======

- -----

- (1) Does not include (i) 2,274,066 shares of Common Stock issuable upon exercise of outstanding warrants, including (A) shares issuable upon exercise of the Series D Warrants, at an exercise price of \$0.01 per share, which will become exercisable for 2,079,584 of Common Stock following the automatic conversion of the Series D Preferred Stock at the Closing, and (B) 194,482 shares issuable upon exercise of outstanding warrants at exercise prices ranging from \$0.01 to \$0.07 per share, and (ii) 949,070 shares of Common Stock issuable upon exercise of outstanding options granted pursuant to the Company's stock option plans, at exercise prices ranging from \$0.07 to \$7.84 per share. See "Certain Transactions."
- (2) Does not include 1,039,792 shares of Common Stock issuable upon conversion of the Series D Preferred Stock.
- (3) Gives effect to the automatic conversion of the outstanding shares of Series D Preferred Stock into 1,039,792 shares of Common Stock upon the consummation of the sale of the shares of Common Stock and Warrants offered hereby. Does not include (i) 1,500,000 shares of Common Stock reserved for issuance upon the exercise of the Warrants, (ii) 450,000 shares of Common Stock reserved for issuance upon exercise of the Underwriters' Over-Allotment Option, including the Warrants included therein, and (iii) 300,000 shares of Common Stock reserved for issuance upon the exercise of the Underwriters' Warrants and the Warrants included therein.

DILUTION

The net tangible book value of the Company as of September 30, 1996, was \$1,223,805 or approximately \$0.69 per share of Common Stock, assuming conversion of the outstanding shares of Series D Preferred Stock into Common Stock. The net tangible book value of the Company is the tangible assets (total assets less deferred financing and offering costs) less total liabilities. Dilution per share represents the difference between the amount paid per share of Common Stock by purchasers in the Offering, attributing no value to the Warrants, and the pro forma net tangible book value per share after the Offering.

After giving effect to the sale by the Company of the 1,500,000 shares of Common Stock and 1,500,000 Warrants offered hereby, the pro forma net tangible book value of the Company as of September 30, 1996, would have been \$7,397,055 or \$2.26 per share. This represents an increase in net tangible book value per share of \$1.57 to the Company's existing stockholders and an immediate dilution of \$2.74 per share (or approximately 55% of the offering price) to new stockholders purchasing shares of Common Stock in the Offering. The following table illustrates this dilution on a per share basis:

Public offering price per share Net tangible book value before Offering Increase attributable to new investors	\$0.69	\$5.00	
Pro forma net tangible book value after Offering		2.26	
Dilution to new investors		\$2.74	
		=====	

The above table assumes the conversion of the outstanding shares of the Series D Preferred Stock into Common Stock, but no exercise of outstanding stock options or warrants. As of September 30, 1996, there were outstanding options to purchase an aggregate of 949,070 shares of Common Stock having exercise prices from \$0.07 per share to \$7.84 per share and outstanding warrants to purchase an aggregate of 2,274,066 shares of Common Stock having exercise prices from \$0.01 per share to \$0.07 per share. To the extent that stock options or warrants are exercised at prices below the public offering price per share, there will be further dilution to new investors. See "Risk Factors," "Certain Transactions," "Description of Securities" and "Underwriting."

The information in the following table summarizes the number and percentages of shares of Common Stock, including Series D Preferred Stock which will convert into Common Stock, purchased from the Company through September 30, 1996, the amount and percentage of cash consideration paid and the average price per share paid to the Company by existing stockholders and by new investors pursuant to the Offering:

	SHARES PUR	CHASED	TOTAL CONSID PAID	DERATION	AVERAGE PRICE PER SHARE
Existing Stockholders New Investors	1,776,864 1,500,000	54.2% 45.8%	\$13,019,556 7,500,000	63.4% 36.6%	\$ 7.33 5.00
	3,276,864	100.0% ======	\$20,519,556	100.0% ======	

The information in the foregoing table gives effect to the conversion of the outstanding shares of Series D Preferred Stock, but it excludes 949,070 shares of Common Stock issuable upon the exercise of outstanding options, 2,274,066 shares of Common Stock issuable upon exercise of outstanding warrants, 1,500,000 shares of Common Stock reserved for issuance upon exercise of the Warrants, 450,000 shares of Common Stock reserved for issuance upon exercise of the Underwriters' Over-Allotment Option and the Warrants included therein, and 300,000 shares of Common Stock reserved for issuance pursuant to the Underwriters' Warrants and the Warrants included therein. See "Capitalization" and "Underwriting."

DIVIDEND POLICY

The payment of dividends by the Company is within the discretion of its Board of Directors and depends in part upon the Company's earnings, capital requirements and financial condition. Since its inception, the Company has not paid any dividends on its Common Stock and does not anticipate paying such dividends in the foreseeable future. The Company intends to retain earnings, if any, to finance its operations.

SELECTED FINANCIAL INFORMATION

The following table sets forth selected financial information regarding the results of operations and financial position of the Company for the periods and at the dates indicated. The financial statements of the Company as of December 31, 1995 and for the years ended December 31, 1994 and 1995 have been audited by Ernst & Young LLP, independent auditors, as set forth in their report included elsewhere in this Prospectus, which includes an explanatory paragraph which indicates there is substantial doubt about the Company's ability to continue as a going concern due to the Company's need to generate cash from operations and obtain additional financing. The selected financial information as of September 30, 1996 and for the nine months ended September 30, 1995 and 1996 are derived from the unaudited interim consolidated financial statements of the Company set forth elsewhere in this Prospectus and include, in the opinion of management, all adjustments (consisting only of normal recurring adjustments) necessary for the fair presentation of its results of operations for such period. The results of operations for the nine months ended September 30, 1996, are not necessarily indicative of the results to be expected for the full year. This data should be read in conjunction with the Company's consolidated financial statements (including the notes thereto) and the Company's unaudited interim consolidated financial statements appearing elsewhere in this Prospectus, and "Management's Discussion and Analysis of Financial Condition and Results of Operations."

STATEMENT OF OPERATIONS DATA:

	YEAR ENDED DECEMBER 31,		NINE MONTHS H YEAR ENDED DECEMBER 31, SEPTEMBER 3		
		1995	1995		
Net sales Cost of sales		70,179	\$ 112,613 42,284	\$1,748,065 664,979	
Operating expenses:			70,329		
Selling, general and administrative Research and development Stock compensation	1,973,816 2,719,771 	1,668,947 2,361,125 	1,648,208	1,572,076 310,159	
	4,693,587		2,961,327	3,251,314	
Other income (expense): Interest income Interest expense Other	74,956 (281,650) (14,508)		(221,426) 58,248	54,872 (3,754)	
Loss before provision for income taxes Provision for income taxes	(4,829,598) 10,787	(4,050,415) 3,113	(2,955,977) 4,468	(2,117,110) 5,267	
Net loss Preferred stock dividends				(2,122,377)	
Net loss applicable to common stockholders	\$(5,796,959) =======	\$(4,989,853)	\$(3,680,445) =========	\$(2,122,377) =========	
Net loss per common and common share equivalent	\$ (1.39) ======	• • •		\$ (0.48) =======	
Shares used in per share calculations (1)	4,172,052 =======	, ,	, ,	4,377,679 =======	

BALANCE SHEET DATA:

_ _____

	DECEMBER 31, 1995	SEPTEMBER 30, 1996
Working capital	\$ 1,827,408	\$ 1,125,998
Total assets	3,727,129	2,618,521
Accumulated deficit	(15,651,982)	(17,774,359)
Stockholders' equity	2,272,518	1,447,521

(1) See Note 2 of notes to consolidated financial statements for an explanation of the determination of the number of shares used in computing net loss per share.

GENERAL

The following discussion and analysis should be read in conjunction with the consolidated financial statements, including the notes thereto, appearing elsewhere in this Prospectus.

From its inception in October 1990, the Company has been primarily engaged in the development and clinical evaluation of the ROBODOC System. Net sales are derived from the sale of ROBODOC Systems and related consumables. Prior to 1996, sales of the ROBODOC System were limited to sales for clinical evaluation. In the first quarter of 1996, the ROBODOC System satisfied the appropriate international electromedical safety standards and complied with the requirements of the Electromagnetic Compatibility Directive, thus allowing the Company to apply the CE Mark and to distribute the ROBODOC System throughout the European Union. The Company sold its first commercial ROBODOC System to a clinic in Germany in March 1996. The Company intends to use a significant portion of the net proceeds of this Offering for marketing and sales in Europe. See "Use of Proceeds."

In the United States, the Company's products are subject to regulation by the FDA. The Company intends to file an application for pre-market approval with the FDA in mid to late 1997 for approval to market the ROBODOC System in the United States. See "Risk Factors -- Government Regulation" and "Business -- Government Regulation."

Until the commercial introduction of the ROBODOC System in the first quarter of 1996, the Company operated as a development stage enterprise, and incurred a net loss for each period since its inception. The Company intends to develop additional surgical applications for the ROBODOC System and to significantly increase its technical staff. The Company also plans to increase spending on sales and marketing. See "Use of Proceeds." The Company expects operating losses to continue until sales of its products increase significantly. See "Risk Factors -- History of Losses; Accumulated Deficit; Anticipated Future Losses."

RESULTS OF OPERATIONS

NINE MONTHS ENDED SEPTEMBER 30, 1996 COMPARED TO NINE MONTHS ENDED SEPTEMBER 30, 1995

Net Sales. Net sales for the nine months ended September 30, 1996 (the "1996 interim period"), increased by approximately \$1,635,000, as compared to the nine months ended September 30, 1995 (the "1995 interim period"), as a result of commercial sales of the ROBODOC System to customers in Germany. Prior to 1996, sales of the ROBODOC System were limited to heavily discounted clinical evaluation systems. No clinical evaluation systems were sold during the 1995 interim period. Sales of consumables during the 1996 interim period (approximately \$102,000, or 6% of net sales) decreased by approximately \$11,000, or 10%, as compared to the 1995 interim period when sales of consumables accounted for all net revenues, primarily due to the completion of U.S. clinical trials in February 1996.

Cost of Sales. Cost of sales for the 1996 interim period (approximately \$665,000), increased significantly as compared to the 1995 interim period (approximately \$42,000), as a result of the first commercial sales of the ROBODOC System. Cost of sales as a percentage of net sales was 38% for both the 1995 and 1996 interim periods.

Selling, General and Administrative. Selling, general and administrative expenses for the 1996 interim period (approximately \$1,369,000) increased by approximately \$56,000, or 4%, as compared to the 1995 interim period (approximately \$1,313,000), due primarily to the Company's participation in trade shows in Germany during the 1996 interim period.

Research and Development. Research and development expenses for the 1996 interim period (approximately \$1,572,000) decreased by approximately \$76,000, or approximately 5%, as compared to the 1995 interim period (approximately \$1,648,000), due to staff reductions in regulatory and quality control in February 1995. In addition, the completion of U.S. clinical trials in February 1996 resulted in a decrease in

costs associated with the sponsorship of the trials. These decreases were partially offset by an increase in consulting and outside service costs during the 1996 interim period.

Stock Compensation. During the 1996 interim period, the Company recorded deferred stock compensation of approximately \$784,000 relating to stock options granted during the interim period with exercise prices less than the estimated fair value of the Company's Common Stock, as determined by an independent valuation analysis, on the date of grant. The deferred stock compensation is being amortized into expense over the vesting period of the stock options, which generally ranges from 3 to 5 years. Deferred compensation relating to stock options which vested immediately was expensed on the date of grant. Compensation expense of approximately \$310,000 was recorded during the 1996 interim period relating to these stock options, and the remaining \$474,000 will be amortized into expense in future periods.

Interest Income. Interest income for the 1996 interim period (approximately \$55,000) decreased by approximately \$43,000, or 44%, as compared to the 1995 interim period, primarily due to higher average cash balances during the 1995 interim period.

Interest Expense. The Company had no interest expense for the 1996 interim period, as compared to the 1995 interim period (approximately \$221,000), primarily as a result of the conversion in December 1995 of a \$3,000,000 convertible note payable, bearing interest at 9.25% per annum, into a warrant to purchase Common Stock.

Other Income and Expense. Other expense for the 1996 interim period was approximately \$4,000, as compared to other income for the 1995 interim period of approximately \$58,000. The primary reason for the difference is the strengthening of the Dutch Guilder against the U.S. Dollar during the 1995 interim period, as compared to a weakening of the Dutch Guilder against the U.S. Dollar in the 1996 interim period. This resulted in currency transaction gains and losses on the U.S. currency obligations of the Company's wholly owned subsidiary in The Netherlands, Integrated Surgical Systems BV.

Net Loss. The net loss for the 1996 interim period (approximately \$2,122,000) decreased by approximately \$838,000, or approximately 28%, as compared to the net loss for the 1995 interim period (approximately \$2,960,000), primarily due to the gross margin realized on the increased net sales. This increase was partially offset by an increase in operating expenses, principally due to stock compensation expense.

Preferred Stock Dividends. The Company accumulated preferred stock dividends of approximately 8% on the outstanding shares of Series B and Series C Preferred Stock for the 1995 interim period. These cumulative dividends, together with the Series B and Series C Preferred Stock, were converted into Common Stock in December 1995. The Series D Preferred Stock outstanding at September 30, 1996 does not provide for cumulative dividends.

FISCAL YEAR ENDED DECEMBER 31, 1995 AND 1994

Net Sales. Net sales for the fiscal year ended December 31, 1995 ("Fiscal 1995") decreased by approximately \$114,000, as compared to the fiscal year ended December 31, 1994 ("Fiscal 1994"). During Fiscal 1995, all net sales were derived from consumables. During Fiscal 1994, the Company recognized the sale of one clinical evaluation system for approximately \$242,000 (or approximately 84% of net sales), to an affiliate of Keystone Financial Corporation, a stockholder of the Company, with the remaining net sales in Fiscal 1994 related to consumables. See "Certain Transactions." Sales of consumables increased significantly in Fiscal 1995 due to the operation of a clinical system at the Berufsgenossenschaftliche Unfallklinik in Germany for all of Fiscal 1995. Revenue was not recognized for the installation of the ROBODOC System in Germany in 1994 because the ROBODOC System was temporarily placed at the site for purposes of clinical evaluation until the ROBODOC System satisfied the appropriate international electromedical safety standards and complied with the requirements of the Electromagnetic Compatibility Directive, thus allowing the Company to apply the CE Mark and to distribute the ROBODOC System throughout the European Union.

Cost of Sales. Cost of sales for Fiscal 1995 (approximately \$70,000) decreased by approximately \$134,000, or 66%, as compared to Fiscal 1994 (approximately \$204,000). Cost of sales as a percentage of net sales decreased from 71% in Fiscal 1994 to 40% in Fiscal 1995 since net sales in Fiscal 1995 consisted entirely of consumables, which generate a higher gross margin percentage than sales of clinical evaluation systems.

Selling, General and Administrative. Selling, general and administrative expenses for Fiscal 1995 (approximately \$1,669,000), decreased by approximately \$305,000, or 15%, as compared to Fiscal 1994 (approximately \$1,974,000), primarily due to staff reductions in February 1995. This decrease was partially offset by increased consulting fees associated with a consultant involved with marketing and general business strategy.

Research and Development. Research and development expenses for Fiscal 1995 (approximately \$2,361,000) decreased by approximately \$359,000, or 13%, as compared to Fiscal 1994 (approximately \$2,720,000), primarily due to staff reductions in February 1995. This decrease was partially offset by the cost of a comparative histology study at Auburn University, which commenced in the fourth quarter of 1995.

Interest Income. Interest income for Fiscal 1995 (approximately \$107,000) increased by approximately \$32,000, or 43%, as compared to Fiscal 1994 (approximately \$75,000), due to an improvement in money market conditions resulting in an improved return on the Company's investments during Fiscal 1995. The Company had an investment in an intermediate term bond fund in Fiscal 1994 which had a negative return due to rising interest rates.

Interest Expense. Interest expense for Fiscal 1995 (approximately \$288,000) increased slightly as compared to Fiscal 1994 (approximately \$282,000). Interest expense for both periods was primarily associated with a \$3,000,000 convertible note, bearing interest at 9.25% per annum. The principal amount of this note, together with interest that had accrued from the date of issuance, was converted in December 1995 into a warrant to purchase Common Stock.

Other Income and Expense. Other income for Fiscal 1995 was approximately \$56,000, as compared to other expense for Fiscal 1994 of approximately \$15,000. The primary reason for the difference is the strengthening of the Dutch Guilder against the U.S. Dollar during Fiscal 1995, as compared to a weakening of the Dutch Guilder against the U.S. Dollar in Fiscal 1994. This resulted in currency transaction gains and losses on the U.S. currency obligations of the Company's wholly owned subsidiary in The Netherlands, Integrated Surgical Systems BV.

Provision for Income Taxes. As a result of the issuance of the Company's Series D Preferred Stock in connection with the recapitalization of the Company in December 1995, a change of ownership (as defined in Section 382 of the Internal Revenue Code of 1986, as amended) occurred. As a result of this change, the Company's federal and state net operating loss carryforwards generated through December 31, 1995 (approximately \$13,500,000 and \$4,500,000, respectively) will be subject to a total annual limitation in the amount of approximately \$400,000. Except for the amounts described below, the Company expects that the carryforward periods. As a consequence of the limitation, the Company had at December 31, 1995 a net operating loss carryover of approximately \$6,000,000 for federal income tax purposes which expires between 2005 and 2009, and a net operating loss carryforward of approximately \$2,000,000 for state income tax purposes which expires between 1997 and 1999. See Note 7 of notes to consolidated financial statements.

Net Loss. The net loss for Fiscal 1995 (approximately \$4,054,000) decreased by approximately \$786,000, or 16%, as compared to Fiscal 1994 (approximately \$4,840,000), primarily due to improved gross margins, reduced operating expenses, resulting principally from staff reductions, improved returns on invested cash and an increase in other income due to a strengthening of the Dutch Guilder against the U.S. Dollar.

Preferred Stock Dividends. The Company accumulated preferred stock dividends on the Series B and Series C Preferred Stock at 8% per annum throughout Fiscal 1994 and until December 1995, when these cumulative dividends, together with the Series B and Series C Preferred Stock, were converted into Common Stock. The Series D Preferred Stock outstanding at June 30, 1996 does not provide for cumulative dividends.

LIQUIDITY AND CAPITAL RESOURCES

Since inception, the Company's expenses have exceeded net sales. Operations have been funded primarily from the issuance of debt and the sale of equity securities aggregating approximately \$17.7 million.

In addition, the Company was the beneficiary of proceeds from a \$3 million key-man life insurance policy in 1993 upon the death of one of its executives.

The Company used cash from operating activities of approximately \$170,000, \$3,508,000, \$2,690,000 and \$1,970,000 in Fiscal 1994, Fiscal 1995 and the 1995 and 1996 interim periods, respectively. Net cash used for operations in each of these periods resulted primarily from the net loss. Cash used for operations in Fiscal 1994 reflected a transfer of cash from short term investments, a deposit received relating to the initial commercial system, decreases in accounts receivable and inventory and an increase in accrued retrofit costs for the systems used in the United States clinical trials. Cash used for operations in Fiscal 1995 reflected a decrease in inventory, an increase in other liabilities and payments made under a severance agreement with a former executive officer. Cash used for operations in the 1995 interim period reflected an increase in accrued interest and payments made to a former executive officer. Cash used for operations in the 1996 interim period reflected a payment made on a note payable held by a supplier, a decrease in a customer deposit relating to the delivery of a commercial system and prepaid costs related to the Offering. The Company is eligible to receive reimbursement for 49% of its qualified expenditures under the terms of a grant from the National Institute for Standards & Technology ("NIST"). The Company received reimbursements from this program of \$19,000 and \$93,000 for Fiscal 1995 and the 1996 interim period, respectively.

The Company's investing activities have consisted primarily of expenditures for property and equipment which totaled approximately \$476,000, \$121,000, \$101,000 and \$14,000 in Fiscal 1994, Fiscal 1995, and the 1995 and 1996 interim periods, respectively. Included in Fiscal 1994 and Fiscal 1995 is a ROBODOC System owned by the Company and placed in a clinic in Germany for clinical evaluation. This system was sold to the clinic during the 1996 interim period.

Cash provided by financing activities from inception through September 30, 1996 is comprised of the net cash proceeds from the sale of a convertible note in the principal amount of \$3,000,000, together with accrued interest thereon of \$1,224,373 which was converted into a warrant to purchase 126,895 shares of Common Stock at an exercise price of \$0.01 per share in December 1995, the sale of convertible preferred stock and warrants for \$14,676,000, and the sale of Common Stock for \$9,000. As part of the recapitalization of the Company in December 1995, the entire \$3,000,000 principal amount of the convertible note, together with accrued interest thereon of approximately \$1,224,000, was converted into a warrant to purchase Common Stock. A total of \$11,734,000 of preferred stock was converted into Common Stock in December 1995.

The Company expects to incur additional operating losses and cash requirements at least through 1997. These losses will be as a result of expenditures related to product development projects and the establishment of marketing, sales, service and training organizations. The timing and amounts of these expenditures will depend on many factors, some of which are beyond the Company's control, such as the requirements for and time required to obtain FDA authorization to market the ROBODOC System, the progress of the Company's product development projects and market acceptance of the Company's products. The Company expects that the net proceeds of this Offering, together with cash flow from operations, will be sufficient to finance its operations for the 12 months following the date of this Prospectus.

The Company's independent auditors have included an explanatory paragraph in their report on the Company's financial statements for the year ended December 31, 1995, which indicates there is substantial doubt about the Company's ability to continue as a going concern due to the Company's need to generate cash from operations and obtain additional financing. See "Report of Independent Auditors" on the Company's consolidated financial statements appearing at page F-2 of this Prospectus.

GLOSSARY

The following glossary is intended to provide the reader with an explanation of certain terms used in this Prospectus. 510(k) Pre-market notification application required in the United States to market medical devices that are "substantially equivalent" to medical devices previously approved by the FDA or were marketed in the United States prior to May 28, 1976 (the date of the Medical Device Amendment to the FDC Act) pursuant to the FDC Act. ACTIVE ROBOT A robot that is capable of moving by itself. In the context of robotic surgery, active robot refers to a robot that performs a segment of a surgical procedure under the supervision of a surgeon. CE MARK The European conformity mark. Disposable items consumed each time a surgery is CONSUMABLES performed including sterile drapes, bone screws, cutters and control pendants. Computerized tomography scan, which produces multiple x-ray "slices" taken close together, which CT SCAN when reconstructed by a computer provide an accurate three dimensional picture of a patient's anatomy. FDA U.S. Food and Drug Administration. FDC Act Federal Food, Drug and Cosmetic Act, as amended, and the regulations promulgated thereunder. FIXATOR Device which holds the leg bone still and attaches it to the robot base. TDF Investigational device exemption pursuant to the FDC Act. GMP Good manufacturing practices regulations promulgated by the FDA pursuant to the FDC Act. Usually inert metal "hardware" left in the body to IMPLANT repair injuries or replace joints. IMPLANT LIBRARY Visual three dimensional renderings of all the sizes and shapes of implants available for use on the system. IS0 Manufacturing standards established by the International Standards Organization. MRI Magnetic resonance imaging, a method of collecting images of the body using radio waves, but without radiation. NIST National Institute of Standards and Technology of the United States Department of Commerce. ORTHOPAEDICS The branch of surgery concerned with the skeletal system. OSTEOTOMY An angular cut in a bone usually removing a wedge. PASSIVE ROBOT A passive robot requires the application of external forces to cause motion. In the context of robotic surgery, a passive robot is used only as an aiming or holding device. Pre-market approved application required in the PMA United States to market new medical devices pursuant to the FDC Act. PROSTHESIS An artificial substitute for a body part, including joints. THR Primary total hip replacement. TKR Total knee replacement. 30

BUSINESS

The Company develops, manufactures, markets and services image-directed, computer-controlled robotic products for surgical applications. The Company's principal product is the ROBODOC(@) Surgical Assistant System, consisting of a computer-controlled surgical robot and the Company's ORTHODOC(@) Presurgical Planner. The ROBODOC System has been used for primary total hip replacement surgery on over 495 patients worldwide. The Company believes its "active" robotic system is the only available system that can accurately perform key segments of surgical procedures with precise tolerances generally not attainable by traditional manual surgical techniques. The ROBODOC System also allows the surgeron to prepare a preoperative plan specifically designed for the characteristics of the individual patient's anatomy. The technology for the ROBODOC System was initially developed at the University of California, Davis, in collaboration with IBM.

The ORTHODOC is a computer workstation that utilizes the Company's proprietary software for preoperative surgical planning. The ORTHODOC is included as part of the ROBODOC System and may be marketed separately by the Company. The ORTHODOC converts CT scan data of a patient's femur into three-dimensional images, and through a graphical user interface allows the surgeon to examine the bone more thoroughly and to select the optimal implant for the patient using a built-in library of available implants. A tape of the planned surgical procedure, developed by the ORTHODOC, guides the surgical robot arm of the ROBODOC System to accurately mill a cavity in the bone, thus allowing the surgeon to properly orient and align the implant. Prior to the primary surgery, three titanium locator pins are placed in the patient's femur in an out-patient procedure. These locator pins are used during the primary procedure to orient the ROBODOC System to the ORTHODOC preoperative plan. Non-clinical scientific data published by scientists from the Company and IBM demonstrate that as a result of the precise milling of a cavity, the ROBODOC System achieves over 95% bone-to-implant contact, as compared to an average of 20% bone-to-implant contact when surgery is performed manually.

THR surgery involves the insertion of an implant into a cavity created in the patient's femur. Precise fit and correct alignment of the implant within the femoral cavity are generally considered key factors in the long-term success of THR surgery. In conventional THR surgery, a bone cavity is cut in the shape of the implant manually with metal tools, and the surgical plan, including the selection of the size and shape of the implant, is generally formulated based upon patient data obtained from two-dimensional x-ray images of the patient's femur. Based upon clinical experience to date in Germany with the ROBODOC System, patients have become weight-bearing in a shorter period than generally experienced by patients who have had this surgery performed manually. In addition, worldwide clinical data indicates that intraoperative fractures have been dramatically reduced in the THR surgeries performed with the ROBODOC System (no intraoperative fractures have resulted from THR surgeries performed with the ROBODOC System to date). The Company also believes fewer hip revision surgeries (implant replacements) may be necessary for patients who have had primary THR surgery performed with the ROBODOC System, as compared to patients who have this surgery performed manually.

In the past, a majority of THR implants have been held in place with acrylic cement, which fills the spaces between the implant and the bone, thereby anchoring the implant to the femoral cavity ("cemented implants"). During the 1980s, implants that did not require cement ("cementless implants") were developed with materials designed to stimulate bone in-growth. The selection of a cemented or cementless implant generally is based upon a patient's bone condition and structure, age and activity level. Typically, cemented implants are used for older, less active patients. Furthermore, most implants require replacement within five to 20 years of the first operation. The software package developed by the Company in collaboration with IBM and Johns Hopkins University eliminates the distortion of the x-ray images of the patient's femur used in planning hip revision surgery caused by the metal in the existing implant. Consequently, the surgeon would have a clearer view of the remaining bone in planning hip revision surgery and thereby be better able to remove fragmented cement without removing any of the remaining thin thigh bone.

THE MARKET

According to an industry study, in 1995 the worldwide orthopaedic market (which includes power surgical instruments, prosthetic devices, fixation devices and bone growth stimulants) was approximately \$6.8 billion, including approximately \$3.9 billion in the United States (constituting approximately 57% of the worldwide market) and approximately \$1.6 billion in Europe (constituting approximately 23% of the worldwide market). In 1995, over 600,000 hip implants were sold worldwide, of which 280,000 were sold in the United States. Similarly in 1995, over 400,000 knee implants were sold worldwide, of which 289,000 were sold in the United States. The growth in hip and knee surgeries is expected to be in the range of 4% to 7% per annum over the next several years. This anticipated growth is based upon the growth in the number of people reaching an age (60 and over) where orthopaedic surgeries are more prevalent, and also on an increasingly active population. Finally, an earlier generation of implanted protheses have reached an age where replacement is increasingly necessary, thus resulting in an increased demand for hip and knee revision surgeries.

According to the American Academy of Orthopaedic Surgeons, in the United States there are approximately 15,000 orthopaedic surgeons and over 5,000 hospitals performing orthopaedic surgeries that have, or have access to, CT scanners. Of these, approximately 1,000 hospitals perform over 150 orthopaedic surgeries (hip and knee) per year. There are approximately 800 hospitals in Germany that have a CT scanner and perform the vast majority of the orthopaedic surgeries. Since the procedure for performing THR surgery using the ROBODOC System requires a CT scan of the patient prior to surgery, these are the primary centers that would consider purchasing the ROBODOC System. According to industry sources, there are an additional 1,000 hospitals in the rest of Europe that perform a significant number of orthopaedic and trauma surgeries. Thus, a total of 1,800 hospitals in Europe are likely to consider acquiring the ROBODOC

STRATEGY

The Company will seek to establish itself as a leading provider of innovative image-directed, computer-controlled robotic technologies worldwide, initially for orthopaedic applications and subsequently for non-orthopaedic surgical applications. The Company currently markets and sells ROBODOC Systems only in Europe. The Company's business strategy is to concentrate its marketing and sales efforts on selling the ROBODOC System throughout Europe and then Japan over the next three years. The Company will thereby attempt to establish an installed customer base in Europe, Japan and other foreign markets through the sale of its ROBODOC System, and offer its customers separate software packages for each new orthopaedic application if, as and when developed by the Company. Consequently, the Company's customers would be able to use the ROBODOC System as the platform for performing a variety of orthopaedic surgical procedures without incurring significant additional hardware costs. The Company also plans to further exploit its image-directed robotics technology by incorporating additional imaging modalities for presurgical planning, including ultrasound (which is less expensive than CT) and magnetic resonance imaging (which unlike CT does not involve the risk of radiation). The Company also intends to develop an active robotic system capable of performing non-orthopaedic surgical procedures.

PRODUCTS

The Company's products are:

-- ROBODOC SYSTEM

The ROBODOC System, whose principal components are a computer-controlled, five-axis surgical robot and the Company's ORTHODOC Presurgical Planner, is an active robotic system that can accurately perform key segments of surgical procedures with precise tolerances generally not attainable by traditional surgical techniques. The ROBODOC System allows the surgeon to prepare a preoperative plan customized to the characteristics of the individual patient's anatomy and generates a tape instructing the computer-controlled robot to implement the surgical plan. The ROBODOC System includes a display console for screen prompts and surgical plan simulation, a control cabinet for computers and other electronic components, and proprietary applications and robot control software. The surgeon communicates with the robot via a sterile controller. Attendant supplies include custom surgical drapes, specially designed cutters, a leg-holding device (fixator) and a bone motion-detecting apparatus.

The sales price of the ROBODOC System is currently \$635,000 and includes full warranty, service, installation, training and some consumables. The current list price for consumables averages approximately \$700 per surgery. The service contract is renewable annually for 10% of the original purchase price and entitles the customer to upgrades and limited consumables.

-- ORTHODOC

The ORTHODOC is a Pentium(@)-based computer workstation that utilizes the Company's proprietary software for preoperative surgical planning. The ORTHODOC 500, an integral part of the ROBODOC System, may be sold separately as a surgical planner. The ORTHODOC 500 converts CT scan data of a patient's femur into three dimensional models of the femur on a high-resolution monitor, and through a graphical user interface permits the surgeon to examine the bone more thoroughly, select the optimal implant for the patient using a built-in library of available implants and select the position of the implant in the femur prior to surgery. The ORTHODOC 100, which will be sold only on a stand-alone basis, converts digitized x-rays of a patient's femur into pseudo three-dimensional images for planning surgery.

The Company expects the price of the ORTHODOC to range from 33,000 to 95,000, depending on the features selected.

POTENTIAL ORTHOPAEDIC APPLICATIONS OF ROBODOC SYSTEM

The Company intends to offer ROBODOC System customers separate software packages for each new orthopaedic application if, as and when developed by the Company. Consequently, the Company's customers would be able to use the ROBODOC System as the platform to perform a variety of orthopaedic surgical procedures without incurring significant additional hardware costs. The Company plans to develop software packages for the following orthopaedic surgical procedures for use with the ROBODOC System:

Hip Revision. Hip revision surgery generally is required to replace loose or otherwise failed implants. Most implants require replacement in five to 20 years after the first operation. Hip revision surgery generally is difficult, time consuming and complex. The metal in the existing implant distorts x-ray images used for planning the surgery, obstructing the view of the remaining bone and, if a cemented implant is to be replaced, the location of the fragmented cement. The removal of the fragmented cement without removing any of the remaining thin bone structure is a major challenge for the surgeon.

The Company is developing a software package for hip revision surgery using the ROBODOC System, in collaboration with IBM and Johns Hopkins University. The development of the hip revision application is being funded in part by a grant from the National Institute for Standards and Technology (Advanced Technology Program) of the United States Department of Commerce. See "Business -- Research and Development." The first phase of the hip revision project relates to the development and implementation of software to create a clearer image of the remaining bone and fragmented cement in preparing the surgical plan. The second phase of the project involves its validation in a clinical setting. The Company believes that its hip revision software will improve surgical planning and enable the five-axis robot to remove cement more precisely than if the hip revision procedure were performed manually. The Company plans to conduct clinical trials of the hip revision application in Europe before the end of 1996. Upon completion of the clinical trials, the Company intends to offer software packages for the hip revision application to its customers.

Total Knee Replacement. The Company plans to develop a software package for total knee replacement ("TKR") surgery using the ROBODOC System. The proposed software package to be developed for TKR surgery is intended to enable the ROBODOC System to select the optimal implant for the patient and make accurate cuts in the bone, thus allowing the surgeon to properly orient and align the implant. The proposed software package to be developed by the Company for TKR surgery performed with the ROBODOC System, if and when developed, is intended to result in a precise and accurate fit for implants that are properly sized and placed, regardless of bone quality. Furthermore, the Company believes that if and when this software

package is developed, implant longevity and the prognosis for restored biomechanics will be significantly improved as a result of TKR surgery performed with the ROBODOC System.

Vertebral Pedicle Screws. Pedicle screws are used to fuse vertebrae in need of repair due to trauma or herniated disc disease. The procedure involves the placement of screws straight down the center of an irregular section of a fragile bone only twice the diameter of the screw itself. Precise placement of a screw affects the outcome of the surgery. Misplacement of a screw can result in failure of the repair, trauma to the adjacent spinal cord, or rupture of nearby blood sinuses which can hemorrhage severely. The Company believes that if and when the development of the proposed software package for this surgical procedure is completed, the ROBODOC System will be capable of performing this surgical procedure more safely and effectively than surgery performed manually since the computer-controlled robot is better able to precisely orient its tool in a manner compatible with what is required for screw placement.

Acetabulum Replacement and Revision. The Company plans to complement the THR femoral replacement application with acetabular cup planning and bone preparation for hip socket replacement surgery. Currently, surgeons estimate the size of the cup-shaped cavity in hip socket surgery using x-rays, which are subject to distortion. Working in a narrow space with a limited view, the surgeon ultimately selects the final cup size through trial and error. Due to the limitations of available surgical tools, the surgeon is obliged to use a hemispheric reamer and cup, although the human acetabulum (hip socket) is an irregular shape. The Company believes that the software for this application, if and when developed, would enable the computer-controlled robot to prepare an accurate bed for the implant, based on its specifications, and could prepare an irregularly shaped socket for a custom or anatomically-shaped acetabular component. The three-dimensional capability of the acetabulum and instruct the robot to prepare the proper socket. This procedure potentially could solve the problem of leg-length discrepancies which often originate at the acetabulum.

Osteotomies. Osteotomies are precise cuts in bone intended to reshape or realign abnormal or deformed structures. The Company's engineers have generated a detailed work plan to adapt the ROBODOC System for use in performing long-bone osteotomies on femurs and tibias (i.e., shin bones). The proposed software for this application, if and when developed, is intended to enable the surgeon using the views of the bone created by the ORTHODOC from CT scan data, to make trial cuts, remove bone and manipulate the remaining fragments, and experiment with the appropriate placement of plates and screws. The surgeon's final plan would be saved on a tape that would instruct the robot where to make saw cuts. The computer-controlled, five-axis robot would then orient itself in space by using topographical features of the operative bone. A fixator would secure the bone to the robot. The computer and make the actual cuts.

AVAILABLE CLINICAL DATA; RISK VERSUS BENEFIT ISSUES

The Company has conducted a randomized clinical trial in the United States at three centers. Of the 117 patients enrolled in the U.S. clinical study, 70 hips received treatment with the ROBODOC System and 61 hips in a control group received conventional THR surgery. In addition, at least 425 patients have received treatment with the ROBODOC System in Germany, but without comparison to randomized control group patients.

In communications with the Company, the FDA has indicated a strong "preference" for two year post-operative data from patients in the U.S. clinical trial, although in a recent meeting the FDA indicated that it may accept a PMA application for filing with only two year post-operative data on some patients and permit the Company to submit the additional post-operative data while the PMA application is under review. However, there can be no assurance that the FDA will not require complete two year post-operative data on all patients participating in the U.S. clinical trial before accepting a PMA application for filing. The last patient receiving surgery in the U.S. clinical trial will reach the two year post-operative mark in February 1998.

The number of patients enrolled in the U.S. clinical study is less than the 300 patients (150 ROBODOC System; 150 control group) initially requested to be studied by the Company in its Investigational Device Exemption ("IDE") application to the FDA. Nonetheless, there have been at least 495 primary THR

It is generally believed that achieving better implant fit and alignment in the femoral cavity are significant factors in the success of cementless THR surgery. Based upon a comparison in the U.S. clinical trial of radiographs for ROBODOC System surgeries versus conventional THR surgeries, the Company believes that the clinical data appear to indicate that the ROBODOC System achieves better implant fit and alignment.

The Company also believes that a reduced incidence of intraoperative fractures with the ROBODOC System compared to conventional THR surgery would offer an important benefit. The scientific and medical literature reports an intraoperative fracture rate ranging from approximately 6 to 24 percent with conventional THR surgery. The clinical data from the U.S. clinical trials reflect no such fractures for ROBODOC System patients versus three for the control group patients. The clinical data from the German study reflect no intraoperative fractures with ROBODOC System patients.

The clinical data reflect significantly greater surgery time and blood loss with the ROBODOC System, which could raise an issue with the FDA as to the risk versus benefit of the device. Based on the clinical data to date, the Company is not aware of clinically significant adverse effects or any increased risk to the patient attributable to the increased surgery time or blood loss. Also, the German data suggest that it is possible to reduce surgery time as surgeons gain experience with the device. The surgeons in Germany who have used the ROBODOC System have reduced surgery time to levels roughly comparable to those they have experienced with conventional methods of THR surgery. The more limited clinical data from the U.S. clinical trial, with fewer patients per center, do not show a decrease. Nonetheless, the Company believes that the reduction in surgery time shown in the German data can be replicated in the U.S. as surgeons receive more training and gain more experience with the ROBODOC System. However, there can be no assurance that the FDA will consider the German data adequate to extrapolate that surgery time can be reduced in the U.S.

In February 1995, a law firm specializing in FDA regulatory matters examined an interim report of preliminary data and concluded that it was doubtful that the FDA would find that the device was safe and effective for its intended use, or provided a therapeutic benefit, sufficient to permit PMA approval, if the FDA were presented with the then existing preliminary data or future data qualitatively similar to the preliminary data. One of the Company's principal investigators and a co-inventor of the ROBODOC System reviewed the law firm's report contemporaneously and disagreed with its conclusions. The interim report reflected available data from: (i) the U.S. clinical trial, which at the time consisted of reported data from 34 ROBODOC System hips and 18 control group hips (except for the intraoperative fracture rate data, which was reported for 51 ROBODOC System subjects and 42 control group subjects); and (ii) the German study, which consisted of reported data from 20 ROBODOC System patients. To date, there is reported data in the U.S. clinical trial from 70 ROBODOC System hips and 61 control group hips, and in the German study from at least 425 ROBODOC System patients. The Company's Director of Regulatory Affairs and Quality Assurance resigned in September 1996 and subsequently has asserted that one of the reasons for his resignation was his concern about the adequacy of the Company's clinical data.

The Company believes that the preliminary data at the time of the interim report were not sufficient to allow a meaningful evaluation. For example, the radiographic interpretations measuring the implant fit and alignment parameters were not yet completed and, therefore, were not included in the interim report upon which the law firm's analysis was based. Similarly, the law firm's analysis of the surgery time and blood loss safety concerns does not reflect additional clinical data collected subsequent to February 1995, which the Company believes continue to show a lack of clinically significant adverse effects and, in the German data, a reduction in surgery time as surgeons gain experience with the ROBODOC System. Also, the more complete data appear to show that the variety of other adverse events cited in the law firm's report are roughly comparable to those experienced by the control group subjects, with the exception of post-operative knee pain (lasting up to six weeks) resulting from the locator pins used to orient the ROBODOC System. Finally, the law firm's report cited reliability problems with the device, which at the time was in the prototype stage. The Company believes that subsequent refinements in the device and the development of a commercial model have improved the ROBODOC System's reliability. The Company has not engaged an independent third party to review the currently available data.

No assurance can be given that the FDA would agree that the Company's currently available clinical data show that the ROBODOC System is safe and effective for its intended use, provides a therapeutic benefit, or has an acceptable risk/benefit ratio in light of increased surgery time and intraoperative blood loss or other adverse events not generally associated with conventional THR surgery. Further, no assurance can be given that the FDA would not require the Company to obtain additional clinical data to resolve any concern about the risk/benefit ratio offered by the ROBODOC System. If the Company were required to obtain such additional data, the FDA review process could be prolonged by as long as several years.

SALES AND MARKETING

Neither the ROBODOC System nor the ORTHODOC can be marketed in the United States until clearance or approval is obtained from the FDA.

The Company has commenced marketing the ROBODOC System, and plans to market the ORTHODOC, to orthopaedic and trauma surgeons and hospitals in Western Europe, through direct sales and arrangements with implant manufacturers. Presentations to potential customers focus on the clinical benefits obtained by patients, and the potential financial and marketing benefits obtained by hospitals and surgeons. The Company promotes its products in Europe through presentations at trade shows and advertisements in professional journals and technical and clinical publications, as well as through direct mail campaigns. A significant portion of the net proceeds of this Offering will be used for marketing and sales activities with respect to Company's products, principally in Europe, and to establish a sales and marketing staff. See "Use of Proceeds." To date, the Company's direct sales efforts have been primarily in Germany. Over 315 THR surgeries have been performed with the ROBODOC System at the Berufsgenossenschaftliche Unfallklinik ("BGU") clinic in Frankfurt, Germany since August 1994. As result of a significant increase in the number of THR surgeries performed at the clinic with the ROBODOC System, the BGU clinic purchased a second ROBODOC System in the second quarter 1996.

To accelerate sales and reduce the lengthy sales cycle, the Company has entered into informal leasing arrangements with two major multinational leasing companies. Based upon lease financing proposals offered to customers in Germany by these leasing companies, the monthly lease payment for a five-year lease for the ROBODOC System would be equivalent to the average price of one THR surgery.

The Company intends to commence marketing the ORTHODOC to hospitals, orthopaedic surgeons and implant manufacturers in the United States, upon receipt of clearance from the FDA. See "Business -- Government Regulation."

MANUFACTURING

The Company's manufacturing process consists primarily of final assembly of purchased components, testing of the products and packaging, and is conducted at its facility in Sacramento, California, which currently can support the construction of two ROBODOC Systems per month. The Company purchases substantially all components for its ROBODOC System from outside vendors, then assembles these parts and installs its proprietary software. The ROBODOC System consists of the robot base and the control cabinet, which are connected through four interface cables, and the ORTHODOC. The robot is supplied by a sole source vendor, Sankyo Seiki of Japan, which customizes the robot to the Company's specifications for use with the ROBODOC System. Upon delivery of a robot, the Company performs a series of tests to verify proper functioning. The customization and supply process for the robot currently requires four months lead time. While the robot can be obtained from other suppliers with appropriate modifications and engineering effort, there can be no assurance that delays resulting from the required modifications or engineering effort to adopt alternative components would not adversely affect the Company. See "Risk Factors -- Dependence on Supplier for Robot." Ancillary items required to perform a robotic THR, including devices for fixing the hip and attaching it to the robot, numerous probes and cutter bearing sleeves, are assembled and tested separately.

Consumables, including sterile drapes, bone screws, cutters and pendants, are also manufactured by outside vendors according to the Company's specification and are inspected upon receipt to ensure that these specifications are consistently met. The Company purchases these items in quantity and distributes them on a

per order basis. The Company also coordinates the packaging and sterilization of certain items. The Company's policy is to procure its consumables from vendors that it approves after ensuring that the goods comply with the Company's sterilization requirements.

The ORTHODOC consists of a pentium-based computer workstation and associated peripherals, and includes the Company's proprietary software. The Company purchases and then tests the computer as a complete package. A computer board is added to interface to CT/x-ray scanner input modules and, if required, the ROBODOC System's tape output drive. The hard drive is reformatted to accept the operating system, and appropriate ORTHODOC software is installed. The unit is built configured for 110 or 220 AC volt operation.

The Company's manufacturing facilities are subject to periodic inspection by the FDA for compliance with Good Manufacturing Practices ("GMP"). In addition, the Company's products will be required to satisfy European manufacturing standards for sale in Europe. The Company believes that it is in compliance with GMP and expects to obtain ISO-9000 certification, which will be required for sales of its products in Europe after June 14, 1998, by the end of 1996. See "Business -- Government Regulation."

RESEARCH AND DEVELOPMENT

Since its inception, the Company's research and development activities have focused on the development of innovative image-directed computer-controlled robotic products for surgical applications and operating software for these products. The Company incurred research and development expenses of approximately \$2,361,000 and \$2,720,000 in connection with the development of the ROBODOC System and the ORTHODOC for the years ended December 31, 1995 and December 31, 1994, respectively.

The Company is developing a software package for hip revision surgery, in collaboration with IBM and Johns Hopkins University, funded in part by a grant from the National Institute for Standards and Technology (Advanced Technology Program) of the United States Department of Commerce ("NIST"). Hip revision surgery generally is difficult, time consuming and complex. The metal in the existing implant distorts x-ray images used for planning the surgery, obstructing the remaining bone and, if a cemented implant is to be replaced, the location of the fragmented cement. The removal of the fragmented cement without removing any of the remaining thin bone structure is a major challenge for the surgeon. The first phase of the hip revision project relates to the development and implementation of software to create a clearer image of the remaining bone and fragmented cement in preparing the surgical plan. The Second phase of the project involves its validation in a clinical setting. The Company believes that its hip revision software will improve surgical planning for hip revision surgery and would enable the five-axis robot to remove cement more precisely than if the hip revision procedure was performed manually.

Under the terms of the NIST grant, the Company, IBM and Johns Hopkins University are entitled to reimbursement for 49% of the expenses incurred in connection with the project for a period of three years. The maximum amount of expenses subject to reimbursement under the grant is approximately \$4,000,000, so that not more than approximately \$1,960,000 in expenses may be reimbursed in the aggregate to the Company, IBM and Johns Hopkins University under the grant. The Company has incurred research and development expenses of approximately \$414,000 in connection with the hip revision project through September 30, 1996. As of September 30, 1996, the Company had received \$112,508 and IBM had received \$107,340 of a total of \$219,848 distributed under the grant. A portion of the net proceeds of this Offering will be used for the development of the hip revision application. See "Use of Proceeds" and "Business--Potential Orthopaedic Applications of ROBODOC System." The Company expects to commence clinical trials for the hip revision application in Europe before the end of 1996.

The Company is expanding the library of implants used at clinical sites to include multiple implant lines, revision stems, and custom-made prostheses. The Company has also commenced preliminary work with respect to the application of the base technology for total knee replacement surgery.

As of November 1, 1996, the Company's engineering staff was comprised of 15 engineers (including three Ph.D.s) in a variety of specialities.

SCIENTIFIC ADVISORY BOARD

The Company has established relationships with the outside scientific advisors listed below. These scientific and medical experts provide strategic advice to the Company regarding its research and development programs, new technological advances and medical requirements. It is anticipated that meetings of the Company's scientific advisors will be held quarterly.

RUSSELL TAYLOR, PH.D., has been a professor of Computer Science at Johns Hopkins University since 1995. From 1976 through 1995, Dr. Taylor was a staff member or manager of various departments at the Research Division of IBM. Dr. Taylor is a member of the editorial board of the International Journal of Robotics Research and the Journal of Image Guided Surgery and Medical Image Analysis. Dr. Taylor received a Ph.D. in Computer Science from Stanford University in 1976.

RONALD KIKINIS, M.D. has been the Director of the Surgical Planning Laboratory of the Department of Radiology, Brigham & Women's Hospital and Harvard Medical School since 1990 and has been a Research Assistant Professor of Biomedical Engineering at Boston University since 1992. From 1986 to 1988, Dr. Kikinis was a research fellow at the University Hospital in Zurich, Switzerland. He received his M.D. from the University of Zurich in 1982.

KENNETH ALAN KRACKOW, M.D., an orthopaedic surgeon specializing in total knee replacement, has been a professor of Orthopaedics at the State University of New York at Buffalo and head of the Department of Orthopaedic Surgery at Buffalo General Hospital since 1992. From 1978 through 1992, he was a Professor of Orthopaedic Surgery at Johns Hopkins University. Dr. Krackow received an M.D. from Duke University in 1971.

RAINER KOTZ, M.D., an orthopaedic surgeon specializing in total hip replacement and limb salvage, has been the Head of the Department of Orthopaedics, University of Vienna, Austria since 1984. He is President-elect of the German Association for Orthopaedics and Traumatology. Dr. Kotz received an M.D. from the University of Vienna in 1967.

COMPETITION

The principal competition for the ROBODOC System is manual surgery performed by orthopaedic surgeons, using surgical power tools and manual devices. The providers of these instruments are the major orthopaedic companies, which include Howmedica, Inc. (a subsidiary of Pfizer, Inc.), located in New York; Zimmer, Inc. (a subsidiary of Bristol-Myers Squibb Company), located in Indiana; Johnson & Johnson Orthopaedics, Inc. (a subsidiary of Johnson & Johnson), located in New Jersey; DePuy, Inc. (a subsidiary of Corange Limited), located in Indiana; Biomet, Inc. located in Indiana; and Osteonics, Inc. (a subsidiary of the Stryker Corporation), located in New Jersey. There are companies in the medical products industry, particularly the major orthopaedic companies, capable of developing and marketing computer-controlled robotic systems for surgical applications, many of whom have significantly greater financial, technical, manufacturing, marketing and distribution resources than the Company, and have established reputations in the medical device industry. However, the Company believes that it enjoys a significant competitive advantage over such companies in view of the time required to develop an image-directed, computer controlled robotic system and to obtain the necessary regulatory approvals, including the sponsorship of clinical trials. There can be no assurance that future competition will not have a material adverse effect on the Company's business.

The Company's ROBODOC System represents a significant technological advancement with respect to the manner in which THR surgery is performed. The Company's image-directed, computer-controlled robotic technology is intended to complement, rather than replace, surgeons in performing THR and other orthopaedic surgeries. Although there are companies which market technologically advanced surgical tools used by surgeons in performing orthopaedic surgeries, including passive robot systems that direct the surgeon in planning and performing surgical procedures (e.g., aiming and holding devices), the Company believes that the ROBODOC System is the only active robotic system that performs a key segment of THR surgery (i.e., milling a bone cavity) under the supervision of a surgeon. The cost of the ROBODOC System represents a significant capital expenditure for a customer, and accordingly may discourage purchases by certain customers. The Company intends to offer its customers separate software packages for each new orthopaedic application that may be developed by the Company. Consequently, the Company's customers would be able to use the ROBODOC System as the platform to perform a variety of orthopaedic surgical procedures without incurring significant additional hardware costs.

WARRANTY AND SERVICE

The Company offers a full warranty, covering parts and labor, for the first year following the purchase of its products, which warranty coverage can be extended on an annual basis by purchasing a maintenance agreement at a price of 10% of the original purchase price of the product.

Generally, minor problems have been diagnosed through modem and fixed on-site by users. The Company has developed a service program using a high volume clinical site as a model. The Company plans to provide 24-hour turnaround time for any site. The Company has contracted with a third party in Europe to service the Company's customer base.

The Company plans to continue training its customers with its in-house technical staff. Following the completion of this Offering, the Company anticipates hiring a staff of technicians to train customers.

PATENTS AND PROPRIETARY RIGHTS

The Company relies on a combination of patent, trade secret, copyright and trademark laws and contractual restrictions to establish and protect proprietary rights in its products and to maintain its competitive position.

The Company has filed two patent applications, and is preparing for filing additional patent applications covering various aspects of its technology. In addition, IBM has agreed not to assert infringement claims against the Company with respect to an IBM patent relating to robotic medical technology, to the extent such technology is used in the Company's products. Furthermore, significant portions of the ORTHODOC and ROBODOC System software are protected by copyrights. IBM has granted the Company a royalty-free license for the underlying software code for the ROBODOC System. In addition, the Company has registered the marks ROBODOC and ORTHODOC.

The Company's ability to compete successfully may depend, in part, on its ability to obtain and protect patents, protect trade secrets and operate without infringing the proprietary rights of others. However, there can be no assurance that pending or future patent applications will mature into issued patents, or that the Company will continue to develop its own patentable technologies. Further, there can be no assurance that any patents that may be issued in the future will effectively protect the Company's technology or provide a competitive advantage for the Company's products or will not be challenged, invalidated, or circumvented in the future. In addition, there can be no assurance that competing technologies, will not obtain patents that will prevent, limit or interfere with the Company's ability to make, use or sell its products either in the United States or internationally.

Patent applications in the United States are maintained in secrecy until patents issue, and patent applications in foreign countries are maintained in secrecy for a period after filing. Publication of discoveries in the scientific or patent literature tends to lag behind actual discoveries and the filing of related patent applications. Patents issued and patent applications filed relating to medical devices are numerous and there can be no assurance that current and potential competitors and other third parties have not filed or in the future will not file applications for, or have not received or in the future will not receive, patents or obtain additional proprietary rights relating to products or processes used or proposed to be used by the Company.

The Company's patent counsel has not undertaken any infringement study to determine if the Company's products and pending patent applications infringe on other existing patents. The medical device industry has been characterized by substantial competition and litigation regarding patent and other proprietary rights. The Company intends to vigorously protect and defend its patents and other proprietary rights relating to its proprietary technology. Litigation alleging infringement claims against the Company (with or without merit), or instituted by the Company to enforce patents issued to the Company or to protect trade secrets or know-how owned by the Company or to determine the enforceability, scope and validity of the proprietary rights of others, is costly and time consuming. If any relevant claims of third-party patents are upheld as valid and enforceable in any litigation or administrative proceedings, the Company could be prevented from practicing

the subject matter claimed in such patents, or could be required to obtain licenses from the patent owners of each patent, or to redesign its products or processes to avoid infringement. There can be no assurance that such licenses would be available or, if available, would be available on terms acceptable to the Company or that the Company would be successful in any attempt to redesign its products or processes to avoid infringement. Accordingly, an adverse determination in a judicial or administrative proceeding or failure to obtain necessary licenses could prevent the Company from manufacturing and selling its products, which would have a material adverse effect on the Company's business, financial condition and results of operations.

The Company requires each of its employees, consultants, and advisors to execute confidentiality and assignment of inventions and proprietary information agreements in connection with their employment, consulting or advisory relationships with the Company. These agreements generally provide that all inventions, ideas and improvements made or conceived by the individual arising out of his relationship with the Company will be the exclusive property of the Company. This information is required to be kept confidential and not disclosed to third parties, except with the consent of the Company or under certain circumstances. However, there can be no assurance that these agreements will provide effective protection for the Company's proprietary information in the event of unauthorized use or disclosure of such information, or that the Company will have adequate remedies in the event of such breach. Furthermore, no assurance can be given that competitors will not independently develop substantially equivalent proprietary information and techniques or otherwise gain access to the Company's proprietary technology, or that the Company can meaningfully protect its rights in unpatented proprietary technology.

GOVERNMENT REGULATION

The medical devices to be marketed and manufactured by the Company are subject to extensive regulation by the FDA and, in some instances, by foreign and state governments. Pursuant to the Federal Food, Drug, and Cosmetic Act of 1976, as amended, and the regulations promulgated thereunder (the "FDC Act"), the FDA regulates the clinical testing, manufacture, labeling, distribution, and promotion of medical devices. Noncompliance with applicable requirements can result in, among other things, fines, injunctions, civil penalties, recall or seizure of products, total or partial suspension of production, failure of the government to grant pre-market clearance or pre-market approval for devices, withdrawal of marketing clearances or approvals, and criminal prosecution. The FDA also has the authority to request repair, replacement or refund of the cost of any device manufactured or distributed by the Company.

In the United States, medical devices are classified into one of three classes (Class I, II or III), on the basis of the controls deemed necessary by the FDA to reasonably assure their safety and effectiveness. Under FDA regulations, Class I devices are subject to general controls (e.g., labeling, pre-market notification and adherence to good manufacturing practices ("GMP")) and Class II devices are subject to general and special controls (e.g., performance standards, postmarket surveillance, patient registries, and FDA guidelines). Generally, Class III devices are those which must receive pre-market approval by the FDA to ensure their safety and effectiveness (e.g., life-sustaining, life-supporting and implantable devices, or new devices which are not substantially equivalent to legally marketed devices).

Before a new device can be introduced into the market, the manufacturer must generally obtain FDA permission to market through either a 510(k) notification or a pre-market approval ("PMA") application. A 510(k) clearance will be granted if the submitted information establishes that the proposed device is "substantially equivalent" to a legally marketed Class I or II medical device, or to a Class III medical device for which the FDA has not called for PMAs. The FDA has recently been requiring a more vigorous demonstration of substantial equivalence than in the past, including in some cases requiring clinical data. It generally takes from four to 12 months from the date of submission to obtain a 510(k) clearance, but it may take longer. The FDA may determine that a proposed device is not substantially equivalent to a legally marketed device, or that additional information is needed before a substantial equivalence determination can be made. A "not substantially equivalent" determination, or a request for additional information, could delay the market introduction of a new product that falls into this category and could have a material adverse effect on the Company's business, financial condition and results of operations. For any of the Company's products that are cleared through the 510(k) process, modifications or enhancements that could significantly affect the

safety or efficacy of the device or that constitute a major change to the intended use of the device will require new 510(k) submissions.

A PMA application must be filed if a proposed device is not substantially equivalent to a legally marketed Class I or Class II device, or if it is a pre-amendment Class III device for which FDA has called for PMAs. A PMA application must be supported by valid scientific evidence, which typically includes extensive data, including human clinical trial data to demonstrate the safety and effectiveness of the device. The PMA application must also contain the results of all relevant bench tests, laboratory and animal studies, a complete description of the device and its components, and a detailed description of the methods, facilities and controls used to manufacture the device. In addition, the submission must include the proposed labeling, advertising literature and any required training materials.

Upon receipt of a PMA application, the FDA makes a threshold determination as to whether the application is sufficiently complete to permit a substantive review. If the FDA determines that the PMA application is sufficiently complete to permit a substantive review, the FDA will accept the application for filing. Once the submission is accepted for filing, the FDA begins an in-depth review of the PMA. An FDA review of a PMA application generally takes one to two years from the date the PMA application is accepted for filing, but may take significantly longer. The review time is often significantly extended by the FDA asking for more information or clarification of information already provided in the submission. During the review period, an advisory committee, typically a panel of clinicians, will likely be convened to review and evaluate the application and provide recommendations as to whether the device should be approved. The FDA is not bound by the recommendations of the advisory panel. Toward the end of the PMA review process, the FDA generally will conduct an inspection of the manufacturer's facilities to ensure that the facilities are in compliance with applicable GMP requirements.

If the FDA's evaluations of both the PMA application and the manufacturing facilities are favorable, FDA will either issue an approval letter or an approvable letter, which usually contains a number of conditions which must be met in order to secure final approval of the PMA. When and if those conditions have been fulfilled to the satisfaction of FDA, the agency will issue a PMA approval letter, authorizing commercial marketing of the device for certain indications. If the FDA's evaluation of the PMA application or manufacturing facilities are not favorable, the FDA will deny approval of the PMA application or issue a "non-approvable letter." The FDA may also determine that additional clinical trials are necessary, in which case PMA approval may be delayed for years while additional clinical trials are conducted and submitted in an amendment to the PMA. The PMA process can be expensive, uncertain and lengthy and a number of devices for which FDA approval has been sought by other companies have never been approved for marketing.

Modifications to a device that is the subject of an approved PMA, its labeling, or manufacturing process may require approval by the FDA of PMA supplements or new PMAs. Supplements to a PMA often require the submission of the same type of information required for an initial PMA, except that the supplement is generally limited to that information needed to support the proposed change from the product covered by the original PMA.

There can be no assurance that the Company will be able to obtain necessary regulatory approvals for current products or products under development on a timely basis, or at all, or that the Company will have the necessary resources to obtain such approval. Delays in receipt of or failure to receive such approvals, the loss of previously received approvals, or failure to comply with existing or future regulatory requirements would have a material adverse effect on the Company's business, financial condition and results of operation.

If human clinical trials of a device are required in connection with either a 510(k) notification or a PMA application, and the device presents a "significant risk," the sponsor of the trial (usually the manufacturer or the distributor of the device) is required to file an investigational device ("IDE") application prior to commencing human clinical trials. The IDE application must be supported by data, typically including the results of animal and laboratory testing. If the IDE application is reviewed and approved by the FDA and one or more appropriate Institutional Review Boards ("IRBs"), human clinical trials may begin at a specific number of investigational sites with a specific number of patients, as approved by the FDA. If the device presents a "nonsignificant risk" to the patient, a sponsor may begin the clinical trial after obtaining approval

for the study by one or more appropriate IRBs, without the need for FDA approval. Sponsors of clinical trials are permitted to sell those devices distributed in the course of the study provided such compensation does not exceed recovery of the costs of manufacture, research, development and handling. An IDE supplement must be submitted to and approved by the FDA before a sponsor or an investigator may make a change to the investigational plan that may affect its scientific soundness or the rights, safety or welfare of human subjects.

Any products manufactured or distributed by the Company pursuant to the FDA clearances or approvals are subject to pervasive and continuing regulation by the FDA, including recordkeeping requirements and reporting of adverse experiences with the use of the device. Device manufacturers are required to register their establishments and list their devices with the FDA and with certain state agencies and are subject to periodic inspections by the FDA and certain state agencies. The FDC Act requires devices to be manufactured in accordance with GMP regulations, which impose certain procedural and documentation requirements upon the Company with respect to manufacturing and quality assurance activities. Recently adopted GMP requirements, including those pertaining to design controls, are likely to increase the cost of GMP compliance.

The Company intends to file a pre-market approval application ("PMA") with the FDA in mid to late 1997 for approval to market the ROBODOC System in the United States. The Company intends to make an informal pre-PMA submission of the clinical data to the FDA. Depending upon the FDA's review of this submission, the target date for submitting a PMA application could be extended. There can be no assurance that the PMA application, once submitted, will be accepted for filing, found approvable, or, if found approvable, will not take longer than expected to obtain approval, or will not include unfavorable post-approval restrictions (for example, limitations on the indicated patient population). See "Risk Factors -- Available Clinical Data; Risk Versus Benefit Issues."

After receipt of PMA approval, if any, the Company expects that the FDA would consider new surgical applications for the ROBODOC System to be new indications for use, which generally would require FDA approval of a PMA supplement or, possibly, a new PMA. The FDA is also likely to require additional approvals before the agency will permit the Company to incorporate new imaging modalities (such as ultrasound and MRI) or other new technologies in the ROBODOC System. The FDA likely will require that such additional approvals be supported by new clinical data.

In February 1996, the Company filed a 510(k) submission for the ORTHODOC as a stand-alone device. Such 510(k) submission is the first product clearance or approval filing made by the Company with the FDA. In October 1996, the Company submitted a response to correspondence in May and July 1996 from the FDA in which the agency stated that it could not determine the ORTHODOC's substantial equivalence to legally marketed predicate devices without certain additional information, primarily related to the documentation and testing of the software. There can be no assurance that the FDA will consider the Company's response adequate or that the ORTHODOC will receive 510(k) clearance in a timely fashion, or at all.

Labeling and promotion activities are subject to scrutiny by the FDA and, in certain instances, by the Federal Trade Commission. Current FDA enforcement policy prohibits marketing approved medical devices for unapproved uses. The Company and its products are also subject to a variety of state laws and regulations in those states or localities where its products are or will be marketed. Any applicable state or local regulations may hinder the Company's ability to market its products in those states or localities. Manufacturers are also subject to numerous federal, state and local laws relating to such matters as safe working conditions, manufacturing practices, environmental protection, fire hazard control and disposal of hazardous or potentially hazardous substances. There can be no assurance that the Company will not be required to incur significant costs to comply with such laws and regulations now or in the future or that such laws or regulations will not have a material adverse effect upon the Company's business, financial condition or results of operations.

Exports of products subject to the 510(k) notification requirements, but not yet cleared to market, are permitted without FDA export approval provided certain requirements are met. Unapproved products subject to the PMA requirements must receive prior FDA export approval unless they are approved for use by any member country of the European Union and certain other countries, including Australia, Canada, Israel, Japan, New Zealand, Switzerland and South Africa, in which case they can be exported to any country without prior FDA approval. To obtain FDA export approval, when it is required, certain requirements must be met and information must be provided to the FDA, including documentation demonstrating that the product is approved for import into the country to which it is to be exported and, in some instances, safety data from animal or human studies. There can be no assurance that the Company will receive FDA export approval when such approval is necessary, or that countries to which the devices are to be exported will approve the devices for import. Failure of the Company to obtain CPEs, meet FDA's export requirements, or obtain FDA export approval when required to do so, could have a material adverse effect on the Company's business, financial condition and results of operations.

The introduction of the Company's products in foreign markets will also subject the Company to foreign regulatory clearances which may impose additional substantive costs and burdens. International sales of medical devices are subject to the regulatory requirements of each country. The regulatory review process varies from country to country. Many countries also impose product standards, packaging requirements, labeling requirements and import restrictions on devices. In addition, each country has its own tariff regulations, duties and tax requirements. Approval by the FDA and foreign government authorities is unpredictable and uncertain, and no assurance can be given that the necessary approvals or clearances for the Company's products will be granted on a timely basis or at all. Delays in receipt of, or a failure to receive, such approvals or clearances, or the loss of any previously received approvals or clearances, could have a material adverse effect on the Company's business, financial condition and results of operations.

The ROBODOC System satisfies international electromedical standard IEC 601-1 and the protection requirements of the Electromagnetic Compatability Directive (89/336/EEC), thus allowing the Company to apply the CE Mark. This conformity is evidenced by the grant of a GS-Mark by Technische Ubermachtungs Verein Rheinland ("TUV"), a testing body in Germany, under current German regulations.

The Company's products are subject to continued and pervasive regulation by the FDA and foreign and state regulatory authorities. Changes in existing requirements or adoption of new requirements or policies could adversely affect the ability of the Company to comply with regulatory requirements. Failure to comply with regulatory requirements could have a material adverse effect on the Company's business, financial condition and results of operations. There can be no assurance that the Company will not be required to incur significant costs to comply with laws and regulations in the future or that the failure to comply with such laws or regulations will not have a material adverse effect upon the Company's business, financial condition or results of operations.

PRODUCT LIABILITY

The manufacture and sale of medical products exposes the Company to the risk of significant damages from product liability claims. The Company maintains product liability insurance against product liability claims in the amount of \$5 million per occurrence and \$5 million in the aggregate. In addition, in connection with the sale of ROBODOC Systems, the Company enters into indemnification agreements with its customers pursuant to which the customers indemnify the Company against any claims against it arising from improper use of the ROBODOC System. There can be no assurance, however, that the coverage limits of the Company's insurance policies will be adequate, that the Company will continue to be able to procure and maintain such insurance coverage, that such insurance can be maintained at acceptable costs, or that customers will be able to satisfy indemnification claims. Although the Company has not experienced any product liability claims to date, a successful claim brought against the Company in excess of its insurance coverage could have a materially adverse effect on the Company's business, financial condition, and results of operations.

FACILITIES

The Company's executive offices and production facility, comprising a total of approximately 15,000 square feet of space, are located in Sacramento, California. The Company occupies its manufacturing facility premises pursuant to a lease that expires in 1998 and occupies its office facilities on a month-to-month tenancy. The total rent expense for these premises is approximately \$12,300 per month. The lease for the Company's manufacturing facility provides for escalation of rent at the rate of 5% per annum. See Note 8 of notes to consolidated financial statements. The Company is considering alternative lease arrangements, and believes that alternative space is available on reasonable terms. While the Company believes that its existing facilities are adequate for its present operations, it anticipates that within the next two years it will be required

to relocate to a larger facility of from 20,000 to 25,000 square feet to accommodate future growth in manufacturing and research and development.

EMPLOYEES

As of November 1, 1996, the Company had 28 full time employees, including 15 in research and development, three in manufacturing, four in regulatory affairs and quality assurance, one in sales and marketing and five in administration. The Company also has three part-time employees. None of the Company's employees is covered by a collective bargaining agreement. The Company believes its relationship with its employees is satisfactory.

LITIGATION

The Company is not a party to any legal proceedings.

MANAGEMENT

DIRECTORS, EXECUTIVE OFFICERS AND KEY EMPLOYEES

The directors, executive officers and key employees of the Company are as follows:

NAME	AGE	POSITION
Ramesh C. Trivedi(1) James C. McGroddy(1)(2) Wendy Shelton-Paul Michael J. Tomczak Peter Kazanzides Brent D. Mittelstadt Stu Heald John N. Kapoor(1)(2) Paul A.H. Pankow	57 59 44 41 35 37 59 52	President, Chief Executive Officer and a Director Chairman of the Board Vice President of Medical Affairs and a Director Vice President, Chief Financial Officer and Secretary Director of Robotics and Software Director of Biomedical Applications Manager of Manufacturing Director Director

- ----

(1) Member of Compensation Committee of the Board of Directors.

(2) Member of Audit Committee of the Board of Directors.

RAMESH C. TRIVEDI, PH.D., has been President, Chief Executive Officer and a Director of the Company since November 1995, and served as a consultant to the Company from February 1995 until November 1995. Dr. Trivedi has over 25 years experience in the healthcare field. Dr. Trivedi founded California Biomedical Consultants in 1987, an international consulting firm. From 1985 to 1986, Dr. Trivedi was the President and Chief Executive Officer of DigiRad Corporation, a medical imaging company. From 1978 to 1984, he was the director of business development of Syva Company and the General Manager of Synaco, Inc., divisions of Syntex Corporation, a pharmaceutical company. From 1972 to 1978, Dr. Trivedi was the head of the product management group at the Worthington division of Millipore Corporation, a membrane filtration company, and the head of the chemistry group of the Diagnostic Division of Pfizer, Inc. from 1971 to 1972. Dr. Trivedi received a Ph.D. in Chemical Engineering from Lehigh University in 1970 and an MBA from Pepperdine University in 1981.

JAMES C. MCGRODDY, PH.D., has been Chairman of the Board of Directors of the Company since November 1995. He has been employed by IBM since 1965, and since January 1, 1996 has served as Senior Vice President and Special Advisor to the Chairman of IBM. From May 1989 to December 31, 1995, Dr. McGroddy was Senior Vice President of Research of IBM with responsibility for approximately 2,500 technical professionals in IBM's seven research laboratories around the world. He is a member of IBM's Worldwide Management Council. The Company has been advised by IBM that Dr. McGroddy is retiring from IBM effective December 31, 1996 and that his service as a member of the Company's Board of Directors thereafter will be in his personal capacity and not as a designee of IBM. Dr. McGroddy has been involved in the development of the Company since its inception in October 1990, initially as an advisor and since November 1995 as a Director. Dr. McGroddy received a Ph.D. in physics from the University of Maryland in 1965. Dr. McGroddy was appointed to the Board of Directors as the designee of IBM pursuant to a Stockholders' Agreement. See "Certain Transactions -- Initial Transactions with IBM."

WENDY SHELTON-PAUL, DVM, has been a Director of the Company since February 1993. Dr. Shelton-Paul served as a consultant to the Company from June 1993 to January 1994, when she joined the Company as its Vice President of Science and Technology. From February 1995 through November 1995, she served as Acting Chief Executive Officer of the Company. Since November 1995, she has served as Vice President of Medical Affairs. Until 1993, Dr. Shelton-Paul owned and operated a private veterinary practice. Dr. Shelton-Paul received a DVM from the University of California School of Veterinary Medicine in 1981.

MICHAEL J. TOMCZAK has been Vice President and Chief Financial Officer of the Company since October 1991 and Secretary since September 1996. From September 1988 to October 1991, Mr. Tomczak served as a Senior Manager of Ernst & Young LLP, directing its Entrepreneurial Services Group in the Sacramento office. From September 1985 to September 1988, Mr. Tomczak served as Vice President of Finance for Valley Industries, a manufacturer of automotive products. Mr. Tomczak became a certified public accountant in Michigan in 1981 and in California in 1989. He received a B.A. from Western Michigan University in 1979. PETER KAZANZIDES, PH.D., a co-founder of the Company, has been an employee of the Company since November 1990 and Director of Robotics and Software of the Company since December 1995. He received Sc.B., Sc.M., and Ph.D. degrees in electrical engineering from Brown University in 1983, 1985, and 1988, respectively. His dissertation focused on force control and multiprocessor systems for robotics. He performed post-doctoral research in surgical robotics from March 1989 to March 1990 at the IBM T.J. Watson Research Center.

BRENT D. MITTELSTADT, a co-founder of the Company, has been an employee of the Company since November 1990 and Director of Surgical Applications of the Company since December 1995. He began research in surgical robotics in 1986 as a visiting research scientist at the IBM T.J. Watson Research Center and is responsible for much of the early development of CT guided robotic systems for total hip replacement surgery. Mr. Mittelstadt received a B.S. in Biology from the University of Arizona in 1984.

STU HEALD has been Manager of Manufacturing of the Company since June 1996. Mr. Heald has over 30 years experience in manufacturing products. From September 1993 to June 1996, Mr. Heald served as Operations Manager at Advanced Power Solutions, a division of M&L Enterprises, Inc., a manufacturer of power supplies. From October 1986 to August 1993, Mr. Heald served as Shop Operation Manager at Resonex Inc., a manufacturer of magnetic resonance imaging systems. Mr. Heald received a B.S. in Industrial Management from California State University San Francisco in 1962.

JOHN N. KAPOOR, PH.D., has been a Director of the Company since December 1995. Dr. Kapoor founded EJ Financial Enterprises, Inc., a healthcare consulting and investment company, in March 1990, of which he is currently President. Since October 1990, Dr. Kapoor has been Chairman of Option Care, Inc., a franchisor of home infusion therapy businesses. Dr. Kapoor has been the Chairman of Unimed Pharmaceuticals, Inc., a specialty pharmaceutical company since 1990. Since May 1996, Dr. Kapoor has been Chief Executive Officer of Akorn, Inc., a manufacturer and distributor of ophthalmic products, of which Dr. Kapoor has also served as Chairman since May 1996. In addition, Dr. Kapoor has served as chairman of NeoPharm, Inc., a cancer drug research and development company. Dr. Kapoor also served as Chairman of Lyphomed, Inc., a pharmaceutical company, from 1983 to 1990, and was a Director of Lunar Corp., a manufacturer and marketer of x-ray and ultrasound systems, from May 1990 to April 1996. Dr. Kapoor received a Ph.D. in medicinal chemistry from State University of New York in 1970.

PAUL A.H. PANKOW has been a Director of the Company since May 1995. Since March 1995, Mr. Pankow has been President of PAP Consulting, a business and technical consulting firm. From September 1959 to February 1995, Mr. Pankow held various positions with 3M Corporation, most recently as a Vice President, and as Chief Executive Officer of its Imaging Systems Division. He currently serves as chairman of the Optoelectronic Industry Development Association and is a member of several other industry boards. Mr. Pankow received a B.S. in mechanical engineering and business administration from the University of Minnesota in 1956.

On August 16, 1992, a lawsuit was filed against Dr. Kapoor in the United States District Court for the Northern District of Illinois by Fujisawa Pharmaceutical Co., Ltd. and Fujisawa USA, Inc. ("Fujisawa"). The complaint alleged that Dr. Kapoor, while President and Chief Executive Officer of Lyphomed, Inc., a company acquired by Fujisawa, violated provisions of the Federal securities laws and the Racketeer Influenced and Corrupt Organizations Act (RICO), and also asserted certain state law claims. On July 25, 1996, the complaint was dismissed in part, and Dr. Kapoor was granted summary judgment on the remaining claims. On August 22, 1996, Fujisawa filed a notice of appeal of the dismissal and summary judgment decision. Dr. Kapoor vigorously denies the allegations and filed a complaint against Fujisawa in Illinois state court on August 27, 1996 claiming breach of contract, defamation of character and other state law claims.

All directors hold office until the annual meeting of stockholders of the Company following their election or until their successors are duly elected and qualified. Officers are appointed by the Board of Directors and serve at its discretion.

Directors do not receive any cash compensation from the Company for service as members of the Board of Directors; however, the Company reserves the right to adopt a policy providing for compensation of independent directors. On July 26, 1996, Mr. Pankow was granted an option to purchase 2,704 shares of Common Stock at an exercise price of \$2.07 per share.

SUMMARY COMPENSATION TABLE

The following table sets forth the compensation awarded to, earned by or paid to the Company's Chief Executive Officer and each other executive officer of the Company whose salary and bonus for the year ended December 31, 1995 exceeded \$100,000 (collectively, the "Named Executive Officers").

	-	ANNUAL COMPENS	LONG-TERM COMPENSATION	
NAME AND PRINCIPAL POSITION	YEAR	SALARY	OTHER ANNUAL COMPENSATION	SECURITIES UNDERLYING OPTIONS
Ramesh C. Trivedi Chief Executive Officer and President	1995	\$ 34,014(1)		0(2)
Wendy Shelton-Paul	1995	\$120,000(3)		13,517(4)
Michael J. Tomczak Vice President and Chief Financial	1995	\$104,000(5)		8,786(4)

- **Officer**
- (1) Includes compensation awarded to, earned by or paid to Dr. Trivedi as Chief Executive Officer and President of the Company from November 15, 1995, when he assumed these offices, through the end of the year. Does not include fees of \$256,175 for consulting services rendered to the Company from February 1995 until November 15, 1995 pertaining to the formulation and implementation of the Company's business and marketing plan.
- (2) Although Dr. Trivedi received no options during fiscal 1995, he was granted options to purchase 316,907 shares of Common Stock, at an exercise price of \$0.07 per share, on February 16, 1996.
- (3) Dr. Shelton-Paul served as acting Chief Executive Officer of the Company from February 1995 through November 15, 1995, and has been Vice President of Medical Affairs of the Company since January 1994. Dr. Shelton-Paul receives a salary of \$120,000 per annum.
- (4) The options covering these shares of Common Stock were repriced on February 16, 1996. See the table captioned "Repricing of Options" under "Management -- Stock Options."
- (5) Mr. Tomczak receives a salary of \$112,000 per annum.

EMPLOYMENT AGREEMENTS

On December 8, 1995, the Company entered into an employment agreement with Dr. Ramesh C. Trivedi, the Company's Chief Executive Officer and President. The agreement is for no specified term and provides for the at-will employment of Dr. Trivedi. Pursuant to the employment agreement, Dr. Trivedi is to receive an annual salary of \$264,000 (\$22,000 per month), plus out-of-pocket expenses. Dr. Trivedi's employment agreement provides for the grant of options to purchase 316,907 shares of the Company's Common Stock, at an exercise price of \$0.07 per share, which were granted in February 1996. Upon termination by the Company, other than for cause (as defined in the employment agreement), Dr. Trivedi is entitled to receive his monthly salary for a period of nine months following the date of termination and consulting fees (at his then prevailing consulting rate) for three months of consulting services to be rendered during the 12 months following such termination.

None of the other Named Executive Officers has an employment agreement with the Company.

STOCK OPTIONS

The following table contains information concerning the grant of stock options under the Company's 1991 Stock Option Plan (which was terminated in December 1995) to Dr. Shelton-Paul and Mr. Tomczak during the fiscal year ended December 31, 1995. See "Management -- Stock Option Plan" and Note 6 to notes to consolidated financial statements appearing elsewhere in this Prospectus.

NAME	NUMBER OF SHARES UNDERLYING OPTIONS GRANTED(1)	PERCENT OF TOTAL OPTIONS GRANTED TO EMPLOYEES IN FISCAL YEAR	EXERCISE PRICE PER SHARE(2)	EXPIRATION DATE
Ramesh C. Trivedi Wendy Shelton-Paul Michael J. Tomczak	. 13,517(4)	 41.3% 26.9%	\$ 4.88 \$ 4.88	4/30/05 4/30/05

- -----

- (1) Stock options are granted at the discretion of the Compensation Committee of the Company's Board of Directors. Stock options have a 10-year term and vest periodically over a period not to exceed five years.
- (2) The Compensation Committee of the Company's Board of Directors may elect to reduce the exercise price of any option to the current fair market value of the Common Stock if the value of the Common Stock has declined from the date of grant.
- (3) Although Dr. Trivedi received no options during fiscal 1995, he was granted options to purchase 316,907 shares of Common Stock, at an exercise price of \$0.07 per share, on February 16, 1996 pursuant to the Company's 1995 Stock Option Plan.
- (4) The options covering these shares of Common Stock were repriced on February 16, 1996. See the table captioned "Repricing of Options" below.

The following table summarizes for each of the Named Executive Officers the total number of unexercised options, if any, held at December 31, 1995, and the aggregate dollar value of in-the-money, unexercised options, held at December 31, 1995, in each case after giving effect to the replacement in February 1996 of previously held options. The value of the unexercised, in-the-money options at December 31, 1995, is the difference between their exercise or base price and the value of the underlying Common Stock on December 31, 1995, at an assumed price of \$5.00 per share.

AGGREGATED OPTION EXERCISES -- JANUARY 1, 1995 -

DECEMBER 31, 1995 AND DECEMBER 31, 1995 OPTION VALUES

	SHARES ACC UPON EXERC OPTIO	ÌSE OF	NUMBER OF S UNDERLYING U OPTION	JNEXERCISED	VALUE OF UNE IN-THE-MO OPTIONS	DNEY
	DURING FISCA	L 1995(1)	DECEMBER 31	1, 1995(1)	DECEMBER 31,	1995(1)
		VALUE				
NAME	NUMBER	REALIZED	EXERCISABLE	UNEXERCISABLE	EXERCISABLE	UNEXERCISABLE
Ramesh C. Trivedi						
Wendy Shelton-Paul			5,407	8,110		
Michael J. Tomczak			10,202	3,409		

- ----

(1) Gives effect to the cancellation of options granted pursuant to the Company's 1991 Stock Option Plan and the granting of replacement options in February 1996 pursuant to the Company's 1995 Stock Option Plan. See "Management -- Stock Option Plan" and "Certain Transactions."

REPRICING OF OPTIONS

NAME	REPRICE/ REGRANT DATE	NUMBER OF SECURITIES UNDERLYING OPTIONS REPRICED OR AMENDED	MARKET PRICE OF STOCK AT TIME OF REPRICING OR AMENDMENT	EXERCISE PRICE OF STOCK AT TIME OF REPRICING OR AMENDMENT	NEW EXERCISE PRICE	LENGTH OF ORIGINAL OPTION TERM REMAINING AT DATE OF REPRICING OR AMENDMENT
Wendy Shelton-Paul Michael J. Tomczak Michael J. Tomczak Michael J. Tomczak Michael J. Tomczak	2/16/96 2/16/96 2/16/96	67,587 43,932 6,759 13,308 4,056	\$.888 \$.888 \$.888 \$.888 \$.888 \$.888	\$4.88 \$4.88 \$7.84 \$7.84 \$3.33	\$.07 \$.07 \$.07 \$.07 \$.07 \$.07	9.25 years 9.25 years 8 years 6.5 years 6 years

The Compensation Committee of the Board of Directors approved the replacement of these options to Dr. Shelton-Paul and Mr. Tomczak, and options to other employees of the Company, at an exercise price of \$.07 per share, having concluded that the principal purpose of the Company's stock option program (i.e., to provide an equity incentive to employees to remain in the employment of the Company and to work diligently in its best interests) would not be achieved for those employees holding options exercisable above the market price of the Common Stock. In connection with the granting of these replacement options, participating option holders agreed not to exercise any option for a period of six months from the date of such regrant.

STOCK OPTION PLAN

On December 13, 1995, the Board of Directors adopted, and stockholders approved, the 1995 Stock Option Plan (the "Plan"). The Plan is to be administered by the Board of Directors or a committee thereof. The Plan is currently administered by the Compensation Committee of the Board of Directors. The Plan, as initially adopted, authorized the Company to grant stock purchase rights and/or options to acquire an aggregate of 1,108,949 shares of Common Stock to directors, employees (including officers) and consultants of the Company ("Plan participants"). On September 16, 1996, the Board of Directors of the Company adopted an amendment to the Plan, increasing the number of shares of Common Stock covered by the Plan to 1,249,070 shares, subject to stockholder approval.

As of November 1, 1996, there were outstanding options to purchase an aggregate of 927,745 shares granted pursuant to the Plan and options to purchase an aggregate of 21,325 shares granted pursuant to the Company's 1991 Stock Option Plan, which was terminated in December 1995. At November 1, 1996, options to purchase an aggregate 300,000 shares of Common Stock were available for grant under the Plan. No stock

purchase rights have been granted pursuant to the Plan. See Note 6 to notes to consolidated financial statements appearing elsewhere in this Prospectus.

The Plan authorizes the issuance of incentive stock options ("ISOs"), as defined in Section 422A of the Internal Revenue Code of 1986, non-qualified stock options ("NQSOs", and together with ISOs, "Options") and stock purchase rights ("SPRs"). Consultants and directors who are not also employees of the Company are eligible for grants of only NQSOs and/or SPRs. The exercise price of each ISO may not be less than 100% of the fair market value of the Common Stock at the time of grant, except that in the case of a grant to an employee who owns 10% or more of the outstanding stock of the Company or a subsidiary or parent of the Company (a "10% Stockholder"), the exercise price may not be less than 110% of the fair market value on the date of grant. The aggregate fair market value of the shares covered by ISOs granted under the Plan that become exercisable by a Plan participant for the first time in any calendar year is subject to a \$100,000 limitation. The exercise price of each NQSO is determined by the Board, or committee thereof, in its discretion, provided that the exercise price of a NQSO is not less than 85% of the fair market value of the Common Stock on the date of grant. The Board, or Committee thereof, shall determine the term of the Options and SPRs; provided, however, that in no event may an Option have a term of more than ten (10) years (no more than five (5) years with respect to ISOs granted to a 10% Stockholder). Any Option which is granted shall be vested and exercisable at such time as determined by the Board, or committee thereof, but in no event at a rate less than 20% per year. A recipient of an SPR must exercise such right within the period, not to exceed thirty (30) days from the date of grant, determined by the Board, or committee thereof. The Board, or committee thereof, may reserve to the Company upon the grant of an SPR, an option to repurchase upon a Plan participant's termination of employment, any stock acquired upon his exercise of the SPR at the SPR exercise price. Any such repurchase option shall lapse at a rate of not less than 20% per year commencing on the date of the Plan participant's purchase. Options and SPRs granted under the Plan are not transferable, other than by will or by the laws of descent and distribution. No stock options or SPRs may be granted under the Plan after December 12, 2005.

Subject to the provisions of the Plan, the Board, or a committee thereof, has the authority to determine the individuals to whom the stock options or SPRs are to be granted, the number of shares to be covered by each option or SPR, the exercise price, the type of option, the exercise period, the restrictions, if any, on the exercise of the option or SPR, the terms for the payment of the exercise price and other terms and conditions. Payments by holders of options or SPRs upon exercise of an option may be made (as determined by the Board or a committee thereof) in cash or such other form of payment as may be permitted under the Plan, including without limitation, by promissory note or by delivery of shares of Common Stock.

In February 1996, the Compensation Committee of the Board of Directors authorized the grant of options to purchase an aggregate of 242,746 shares of Common Stock, at an exercise price of \$0.07 per share, to certain officers, directors and employees of the Company pursuant to the Company's 1995 Stock Option Plan, including options to purchase 67,587 shares granted to Dr. Wendy Shelton-Paul, Vice President of Medical Affairs of the Company, and options to purchase 68,055 shares granted to Michael J. Tomczak, Vice President and Chief Financial Officer of the Company. These options were issued in replacement of options previously granted pursuant to the Company's 1991 Stock Option Plan, with exercise prices ranging from \$3.33 to \$7.84 per share, surrendered for cancellation.

INDEMNIFICATION OF OFFICERS AND DIRECTORS AND LIMITATION ON DIRECTOR LIABILITY

Article VI of the Company's by-laws provides that a director or officer shall be indemnified against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement (provided such settlement is approved in advance by the Company) in connection with certain actions, suits or proceedings, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation--a "derivative action") if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful. A similar standard of care is applicable in the case of derivative actions, except that indemnification only extends to expenses (including attorneys' fees) incurred in connection with the defense or settlement of such an action, except that no person who has been

adjudged to be liable to the Company shall be entitled to indemnification unless a court determines that despite such adjudication of liability, but in view of all of the circumstances of the case, the person seeking indemnification is fairly and reasonably entitled to be indemnified for such expenses as the court deems proper.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Company pursuant to the foregoing provisions or otherwise, the Company has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Article 11 of the Company's certificate of incorporation eliminates the personal liability of the Company's directors to the Company or its stockholders for monetary damages for breach of their fiduciary duties as a director to the fullest extent provided by Delaware law. Section 102(b)(7) of the Delaware General Corporation Law ("DGCL") provides for the elimination of such personal liability, except for liability (i) for any breach of the director's duty of loyalty to the Company or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL or (iv) for any transaction from which the director derived any improper personal benefit.

CERTAIN TRANSACTIONS TRANSACTIONS WITH FOUNDERS

In connection with the formation of the Company, the Company sold 38,880 shares, 20,935 shares, 5,441 shares and 2,332 shares of Common Stock to Howard A. Paul, William Bargar, Brent Mittelstadt and Peter Kazanzides (collectively the "Founders"), respectively, for a purchase price of \$0.07 per share. Dr. Paul served as the Chief Executive Officer and President of the Company from inception until his death in February 1993. Dr. Kazanzides and Mr. Mittelstadt are key employees of the Company, and Dr. Bargar serves as a consultant to the Company. See "Management."

INITIAL TRANSACTIONS WITH IBM

In connection with the formation of the Company and pursuant to a Loan and Warrant Purchase Agreement dated as of February 6, 1991 (the "IBM Loan Agreement"), the Company granted IBM a warrant to purchase 67,587 shares of Common Stock, at an exercise price of \$0.07 per share, originally exercisable until February 6, 1998. The expiration date of the warrant was extended until December 31, 2000 in connection with the recapitalization of the Company in December 1995, described below. In addition, pursuant to the IBM Loan Agreement, during 1991 the Company borrowed an aggregate of \$3,000,000 from IBM in consideration for the Company's 9.25% Convertible Subordinated Loan Note in the principal amount of \$3,000,000 (the "IBM Note"). The IBM Note was convertible into shares of Series A Preferred Stock at a conversion price of \$33.29 per share.

In connection with the IBM loan transaction, the Company entered into a Stockholders' Agreement with the Founders and IBM dated February 6, 1991 (the "Stockholders' Agreement"). Pursuant to the Stockholders' Agreement, IBM has the right to nominate a member of the Board of Directors of the Company (and the stockholders agreed to vote their shares for such nominee) and to have a non-voting observer attend meetings of the Board of Directors. In addition, the Stockholders' Agreement grants IBM a right of first refusal with respect to proposed transfers of Founder's shares to a "Competitor" (as defined). The Stockholders' Agreement also restricts transfers of Founder's shares other than to the Company, IBM or to a third party approved by IBM in writing. The foregoing restriction will terminate on February 6, 1998, or earlier upon consummation of (i) an initial underwritten firm commitment public offering of the Common Stock resulting in gross proceeds of at least \$15 million, or (ii) the acquisition of the Company, whether by merger, acquisition of all or substantially all of its assets, or acquisition of substantially all of its voting securities.

Pursuant to a License Agreement, dated February 6, 1991, IBM granted the Company a non-exclusive, worldwide royalty-free license to the underlying software code for the ROBODOC System.

SERIES B PREFERRED STOCK FINANCING

Pursuant to a Stock Purchase Agreement dated as of April 10, 1992, Sutter Health and The John N. Kapoor Trust (the "Kapoor Trust") each purchased 30,482 shares of the Company's Series B Preferred Stock, or a total of 60,964 shares, for a purchase price of \$4,000,370 (\$65.62 per share). The Series B Preferred Stock was convertible into shares of Common Stock at a conversion price of \$65.62 per share.

SERIES C PREFERRED STOCK FINANCING

Pursuant to a Stock Purchase Agreement dated as of November 13, 1992, Sutter Health and Keystone Financial Corporation ("Keystone") purchased 89,604 and 12,801 shares, respectively, for a total of 102,405 shares, of the Company's Series C Preferred Stock, for a purchase price of \$7,000,002 and \$1,000,000, respectively (\$78.12 per share). The Series C Preferred Stock was convertible into shares of Common Stock at a conversion price of \$78.12 per share.

DECEMBER 1995 RECAPITALIZATION

Pursuant to a Series D Preferred Stock and Warrant Purchase Agreement (the "1995 Stock Purchase Agreement") dated as of December 21, 1995, the Company effected the recapitalization described below.

The Company effected a one-for-five reverse stock split of its capital stock, and all outstanding shares of Series B and Series C Preferred Stock were converted into shares of Common Stock. Upon conversion of the Series B Preferred Stock, the Company issued 30,482 shares of Common Stock to each of Sutter Health and the Kapoor Trust, or a total of 60,964 shares. In addition, the Company issued 8,955 shares of Common Stock to each of Sutter Health and the Kapoor Trust, or a total of 17,910 shares, in exchange for the cancellation of

all accumulated dividends on the Series B Preferred Stock. Upon conversion of the Series C Preferred Stock, the Company issued 89,604 shares of Common Stock to Sutter Health and 12,801 shares of Common Stock to Keystone, or a total of 102,405 shares. In addition, the Company issued 19,512 shares of Common Stock to Sutter Health and 3,169 shares of Common Stock to Keystone, or a total of 22,681 shares, in exchange for the cancellation of all accumulated dividends on the Series C Preferred Stock.

As part of the recapitalization, IBM received a warrant to purchase 126,895 shares of Common Stock, at an exercise price of \$0.01 per share, which expires on December 31, 2005, in exchange for the cancellation of the IBM Note in the principal amount of \$3,000,000 and accrued interest thereon of \$1,224,373. In addition, the expiration date of the warrant issued to IBM in connection with the formation of the Company was extended until December 31, 2000.

Pursuant to the 1995 Stock Purchase Agreement, EJ Financial Investments V, L.P. ("EJ Financial") purchased 693,195 shares of Series D Preferred Stock for an aggregate purchase price of \$666,667 (\$0.96 per share), and IBM purchased a warrant to purchase 1,386,390 shares of Series D Preferred Stock, exercisable at any time prior to December 31, 2005, at an exercise price of \$0.01 per share, for an aggregate purchase price of \$1,333,333 (\$0.96 per warrant). In addition, EJ Financial received an option to purchase an additional 346,597 shares of Series D Preferred Stock, on the same terms it purchased the Series D Preferred Stock and IBM received an option to purchase warrants to purchase an additional 693,194 shares of Series D Preferred Stock, on the same terms it purchased the Series D Warrants (the options granted to EJ Financial and IBM being hereinafter referred to collectively as the "Standby Options"). On February 19, 1996, each of EJ Financial and IBM exercised its Standby Option, as required by the terms thereof, since the Company was unable to obtain alternative financing on substantially the same terms as the Standby Options prior to the expiration thereof.

As part of the recapitalization of the Company, Sutter Health, Sutter Health Venture Partners and Keystone received warrants to purchase 390,888 shares, 11,899 shares and 43,300 shares, of Common Stock, respectively, at an exercise price of \$0.74 per share, in consideration for their consent to the terms of the recapitalization, including the sale of the Series D Preferred Stock. Sutter Health, Sutter Health Venture Partners and Keystone received additional warrants to purchase 121,686 shares, 3,705 shares and 13,481 shares, respectively, of Common Stock, at an exercise price of \$0.74 per share, in connection with the exercise by EJ Financial and IBM of the Standby Options. Subsequently, Sutter Health, Sutter Health Venture Partners and Keystone agreed to amend these warrants to permit payment of the exercise price by surrender of a portion of the warrants in lieu of payment of the cash exercise price. Accordingly, on August 25, 1996, Sutter Health and Sutter Health Venture Partners received 449,374 shares and 13,680 shares of Common Stock, respectively (or 63,200 fewer shares and 1,924 fewer shares, respectively, than they would have received if the exercise price had been paid in cash) and on October 29, 1996, Keystone received 49,777 shares of Common Stock (or 7,002 fewer shares than it would have received if the exercise price had been paid in cash.)

In connection with the recapitalization of the Company, the Company granted stockholders who did not purchase Series D Preferred Stock or warrants to purchase Series D Preferred Stock rights to purchase Series D Preferred Stock on the same terms and conditions as those shares purchased under the 1995 Stock Purchase Agreement, which rights expired unexercised on March 5, 1996.

REGRANT OF LOWER-EXERCISE PRICE OPTIONS TO REPLACE PRIOR GRANTS

In February 1996, the Compensation Committee of the Board of Directors authorized the grant of options to purchase an aggregate of 242,736 shares of Common Stock, at an exercise price of \$0.07 per share, to certain officers, directors, and employees of the Company pursuant to the Company's 1995 Stock Option Plan, including options to purchase 67,587 shares granted to Dr. Wendy Shelton-Paul, Vice President of Medical Affairs of the Company, and options to purchase 68,055 shares granted to Michael J. Tomczak, Vice President and Chief Financial Officer of the Company. These options were issued in replacement of options previously granted pursuant to the Company's 1991 Stock Option Plan, with exercise prices ranging from \$3.33 to \$7.84 per share, surrendered for cancellation. See the table captioned "Repricing of Options" under "Management -- Stock Options."

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information concerning the beneficial ownership of the Company's Common Stock immediately prior to and after the Offering by (i) each stockholder known by the Company to be a beneficial owner of more than five percent of the outstanding Common Stock, (ii) each director of the Company and each executive officer listed in the Compensation Table under the caption "Management -- Summary Compensation Table" and (iii) all directors and officers as a group. The information set forth in the table gives effect to the automatic conversion of the outstanding shares of Series D Preferred Stock into 1,039,792 shares of Common Stock upon consummation of the sale of 1,500,000 shares of Common Stock and 1,500,000 Warrants in the Offering.

	AMOUNT AND NATURE OF	PERCENT/ COMMON S BENEFICIALL	STOCK (OWNED(1)
NAME	BENEFICIAL OWNERSHIP(1)	BEFORE	AFTER
International Business Machines Corporation Old Orchard Road Armonk, NY 10504	2,274,066(5)	55.46%(6)	40.60%
EJ Financial Investments V, L.P 225 East Deer Path Road Suite 250 Lake Forest, IL 60045	1,039,792(7)	56.92%	31.26%
Sutter Health and Sutter Health Venture Partners, L.P One Capitol Mall Sacramento, CA 95814	611,607(8)	33.48%	18.39%
Ramesh C. Trivedi(4)	151,763(9)	7.67%(10)	4.36%
John N. Kapoor	1,039,792(11)	56.92%	31.26%
James J. McGroddy			
Paul A.H. Pankow	902(12)	• •	
Wendy Shelton-Paul(4)	77,179(14)	• •	
Mike Tomczak(4) All directors and officers as a group (6	62,352(16)		1.84%
persons)	1,331,988(18)	64.04%(19)	37.21%

- -----

- (1) Unless otherwise indicated, each person has sole investment and voting power with respect to the shares indicated, subject to community property laws, where applicable. For purposes of computing the percentage of outstanding shares held by each person or group of persons named above on November 1, 1996, any security which such person or group of persons has the right to acquire within 60 days after such date is deemed to be outstanding for the purpose of computing the percentage ownership for such person or persons, but is not deemed to be outstanding for the purpose of computing the percentage ownership of any other person.
- (2) Except as otherwise stated, calculated on the basis of 1,826,641 shares of Common Stock issued and outstanding.
- (3) Gives effect to the issuance of 1,500,000 shares of Common Stock in the Offering.
- (4) Address is c/o the Company, 829 West Stadium Lane, Sacramento, California 95834.
- (5) Includes warrants to purchase 2,079,584 shares of Common Stock at an exercise price of \$0.01 per share exercisable until December 31, 2005, warrants to purchase 67,587 shares of Common Stock at an exercise price of \$0.07 per share exercisable until December 31, 2000, and warrants to purchase 126,895 shares of Common Stock at an exercise price of \$0.01 per share exercisable until December 31, 2005, all of which warrants are presently exercisable.

(6) Calculated on the basis of 4,100,707 shares of Common Stock issued and outstanding.

- (7) Represents shares of Common Stock issuable upon the automatic conversion of the Series D Preferred Stock at the closing of this Offering.
- (8) Includes 593,538 shares of Common Stock owned by Sutter Health and 18,069 shares of Common Stock beneficially owned by Sutter Health Venture Partners I, L.P. ("Sutter Partners"), an affiliate of Sutter Health.
- (9) Represents shares issuable upon the exercise of stock options exercisable within 60 days, at an exercise price of \$0.07 per share.

(10) Calculated on the basis of 1,978,404 shares of Common Stock issued and outstanding.

- (11) Represents shares of Common Stock owned by EJ Financial Investments V, L.P., a limited partnership of which Mr. Kapoor is the managing general partner. Mr. Kapoor disclaims beneficial ownership of such shares.
- (12) Represents shares issuable upon exercise of stock options exercisable within 60 days, at an exercise price of \$2.07.
- (13) Calculated on the basis of 1,827,543 shares of Common Stock issued and outstanding.
- (14) Includes 38,299 shares issuable upon exercise of stock options exercisable within 60 days, at an exercise price of \$0.07 per share.
- (15) Calculated based upon 1,864,940 shares of Common Stock issued and outstanding.
- (16) Represents shares issuable upon exercise of stock options exercisable within 60 days, at an exercise price of \$0.07 per share.
- (17) Calculated based upon 1,888,993 shares of Common Stock issued and outstanding.
- (18) Includes 253,316 shares of Common Stock issuable upon exercise of options exercisable within 60 days, at exercise prices ranging from \$0.07 to \$2.07 per share.
- (19) Calculated based upon 2,079,957 shares of Common Stock issued and outstanding.

DESCRIPTION OF SECURITIES

On the Effective Date, the authorized capital stock of the Company will consist of 15,000,000 shares of Common Stock, \$0.01 par value per share, 5,750,000 shares of Series D Preferred Stock, \$0.01 par value per share, and 1,000,000 shares of "blank check" preferred stock, par value \$0.01 per share. On the Effective Date, 786,849 shares of Common Stock will be issued and outstanding and 1,039,792 shares of Series D Preferred Stock will be issued and outstanding. All of the issued outstanding shares of Series D Preferred Stock will be automatically converted into shares of Common Stock at the Closing of this Offering.

The following are brief descriptions of the securities offered hereby and other securities of the Company. The rights of the holders of shares of the Company's capital stock are established by the Company's certificate of incorporation, as amended, the Company's by-laws and Delaware law. The following statements do not purport to be complete or give full effect to statutory or common law, and are subject in all respects to the applicable provisions of the certificate of incorporation, by-laws and state law.

COMMON STOCK

Holders of the Common Stock are entitled to one vote per share, and subject to the rights of holders of preferred stock, to receive dividends when, as and if declared by the Board of Directors and to share ratably in the assets of the Company legally available for distribution to holders of Common Stock in the event of the liquidation, dissolution or winding up of the Company. Holders of the Common Stock do not have subscription, redemption, conversion or preemptive rights.

Each share of Common Stock is entitled to one vote on any matter submitted to the holders, except that holders are entitled to cumulate their votes in the election of Directors. In other words, a stockholder may give one nominee a number of votes equal to the number of Directors to be elected, multiplied by the number of votes to which the stockholder's shares are normally entitled, or he may distribute his votes among as many candidates as he sees fit. The candidates receiving the highest number of votes shall be elected. If a stockholder gives notice at the meeting prior to the voting, of such stockholder's intention to cumulate his votes, all stockholders may cumulate their votes for candidates in nomination. On all other matters which may properly come before the meeting, each share has one vote. The Board is empowered to fill any vacancies on the Board created by the resignation of Directors. Except as otherwise required by the DGCL, all stockholder action (other than the election of the Directors, who are elected by a plurality vote) is subject to approval by a majority of the shares of Common Stock present at a stockholders' meeting at which a quorum (a majority of the issued and outstanding shares of the Common Stock) is present in person or by proxy, or by written consent pursuant to Delaware law.

All shares of Common Stock outstanding are fully paid and non-assessable, and the shares of Common Stock offered hereby and shares of Common Stock issuable upon exercise of the Warrants, when issued upon payment of the purchase price set forth on the cover page of this Prospectus or payment of the exercise price specified in the Warrants, as the case may be, will be fully paid and non-assessable.

The Board of Directors is authorized to issue additional shares of Common Stock within the limits authorized by the Company's certificate of incorporation, as amended, without further stockholder action. The Company has agreed with the Underwriters, that it will not issue any securities, including but not limited to shares of Common Stock, for a period of 24 months following the Effective Date, except as disclosed in or contemplated by this Prospectus, without the prior written consent of the Representative.

WARRANTS

The Warrants offered hereby will be issued in registered form under a Warrant Agreement (the "Warrant Agreement") between the Company and American Stock Transfer and Trust Company, as Warrant Agent (the "Warrant Agent"). The following summary of the provisions of the Warrants is qualified in its entirety by reference to the Warrant Agreement, a copy of which is filed as an exhibit to the Registration Statement of which this Prospectus forms a part.

Each Warrant will be separately transferable and will entitle the registered holder thereof to purchase one share of Common Stock at \$6.00 per share (subject to adjustment as described below) for a period of four years , 1997 (or earlier upon notice of redemption as provided vember , 2001 (the "Exercise Period"). The exercise price commencing November below) and ending November and the number of shares of Common Stock issuable upon the exercise of each Warrant are subject to adjustment in the event of a stock split, stock dividend, recapitalization, merger, consolidation or certain other events. A holder of Warrants may exercise such Warrants by surrendering the certificate evidencing such Warrants to the Warrant Agent, together with the form of election to purchase on the reverse side of such certificate attached thereto properly completed and executed and the payment of the exercise price and any transfer tax. If less than all of the Warrants evidenced by a Warrant certificate are exercised, a new certificate will be issued for the remaining number of Warrants.

The Company has authorized and reserved for issuance a number of shares of Common Stock sufficient to provide for the exercise of the Warrants. When issued, each share of Common Stock will be fully paid and nonassessable. Holders of Warrants will not have any voting or other rights as stockholders of the Company unless and until Warrants are exercised and shares issued pursuant thereto.

The Warrants may be redeemed by the Company, at a price of \$.10 per Warrant, upon not less than 30 days prior written notice at any time during the Exercise Period (or earlier with the prior written consent of the Representative), provided the average of the closing bid quotations of the Common Stock, during the period of twenty (20) consecutive trading days ending on the third day prior to the date upon which the notice of redemption is given, as reported on The Nasdaq SmallCap Market (or if the Common Stock is not quoted thereon, the closing sale price of the Common Stock on the Nasdaq National Market or other principal securities exchange upon which the Common Stock is then quoted or listed, or such other reporting system that provides closing sale prices for the Common Stock), has been at least 150% of the then exercise price of the Warrants (initially, \$9.00 per share). The Warrants will be exercisable until the close of business on the day immediately preceding the date fixed for the redemption of the Warrants in the notice of redemption.

Commencing one year after the Effective Date and until the expiration of the exercise period of the Warrants, the Company will pay the Representative a fee of 5% of the exercise price of each Warrant exercised, provided (i) the market price of the Common Stock on the date the Warrant was exercised was equal to or greater than the Warrant exercise price on that date, (ii) the exercise price of the Warrant was solicited by a member of the NASD, (iii) the Warrant was not held in a discretionary account, (iv) the disclosure of compensation arrangements was made in documents provided to the holders of the Warrants, (v) the solicitation of the exercise of the Warrant was not a violation of Rule 10b-6 under the Exchange Act and (vi) the Representative is designated in writing as the soliciting NASD member. Unless granted an exemption from Rule 10b-6 under the Exchange Act by the Commission, the Representative and any other soliciting broker/dealers will be prohibited from engaging in any market making activities or solicited brokerage activities with regard to the Company's securities during the periods prescribed by exemption (xi) to Rule 10b-6 before the solicitation of the exercise of any Warrant until the later of the termination of such solicitation activity or the termination of any right the Representative and any other soliciting broker/dealer may have to receive a fee for the solicitation of the exercise of the Warrants.

For a holder of a Warrant to exercise the Warrant, there must be a current registration statement on file with the Securities and Exchange Commission and various state securities commissions. The Company will be required to file post-effective amendments to the registration statement when events require such amendments and to take appropriate action under state securities laws. While it is the Company's intention to file post-effective amendments when necessary and to take appropriate action under state securities laws, there can be no assurance that the Company will file all post-effective amendments required to maintain the effectiveness of the registration statement or that the Company will take all appropriate action under state securities laws. If the registration statement is not kept current for any reason, the Warrants will not be exercisable, and holders thereof may be deprived of value.

OPTIONS AND WARRANTS

Options. On the Effective Date, there will be outstanding options to purchase an aggregate of 949,070 shares of Common Stock, at exercise prices ranging from \$0.07 to \$7.84, which expire at various dates from February 4, 2002 to July 8, 2006. See "Management -- Stock Option Plan."

Warrants. On the Effective Date, there will be outstanding warrants to purchase an aggregate of 2,274,066 shares of Common Stock, including the Series D Warrants, at exercise prices ranging from \$0.01 to \$0.07, which expire at various dates through December 31, 2005.

PREFERRED STOCK

At the Closing of this Offering, all of the Company's outstanding Series D Preferred Stock will be automatically converted into 1,039,792 shares of Common Stock.

On the Effective Date, the Company will be authorized to issue up to 1,000,000 shares of preferred stock (in addition to the Series D Preferred Stock) with such designations, rights and preferences as may be determined from time to time by the Board of Directors. Accordingly, the Board of Directors is empowered, without further stockholder approval, to issue preferred stock with dividend, liquidation, conversion, voting or other rights that could decrease the amount of earnings and assets available for distribution to holders of Common Stock or adversely affect the voting power or other rights of the holders of the Company's Common Stock. In the event of issuance, the preferred stock could be utilized, under certain circumstances, as a method of discouraging, delaying or preventing a change in control of the Company. The Company has no present intention to issue any shares of preferred stock, and following the Closing, no shares of preferred stock will be outstanding. The Company has agreed with the Underwriters that it will not issue any shares of preferred stock, or any options, warrants or rights to purchase preferred stock, for a period of 24 months after the Effective Date, without the prior written consent of the Representative.

STATUTORY PROVISIONS AFFECTING STOCKHOLDERS

Following the consummation of this Offering, the Company will be subject to Section 203 of the Delaware General Corporation Law, the State of Delaware's "business combination" statute. In general, such statute prohibits a publicly held Delaware corporation from engaging in various "business combination" transactions with any "interested stockholder" for a period of three years after the date of the transaction in which the person became an "interested" stockholder," unless (i) the transaction in which the interested stockholder obtained such status or the "business combination" is approved by the Board of Directors prior to the date the interested stockholder obtained such status; (ii) upon consummation of the transaction which resulted in the stockholder becoming an "interested stockholder," the "interested stockholder" owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding those shares owned by (a) persons who are directors and officers and (b) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or (iii) on or subsequent to such date the "business combination" is approved by the Board of Directors and authorized at an annual or special meeting of stockholders by the affirmative vote of at least 66 2/3% of the outstanding voting stock which is not owned by the "interested stockholder." A "business combination" includes mergers, asset sales and other transactions resulting in financial benefit to a stockholder. An "interested stockholder" is a person who, together with affiliates and associates, owns (or within three years, did own) 15% or more of a corporation's voting stock. The statute could prohibit or delay mergers or other takeover or change in control attempts with respect to the Company and, accordingly, may discourage attempts to acquire the Company.

REGISTRATION RIGHTS

Pursuant to a Registration Rights Agreement dated as of December 21, 1995 entered into in connection with the 1995 Stock Purchase Agreement and the recapitalization of the Company effected thereby, the Company granted certain registration rights to IBM, the Kapoor Trust, EJ Financial, Sutter Health Venture Partners I, L.P., and Keystone (collectively, the "Rights Holders"), with respect to shares of Common Stock issued or issuable to the Rights Holders in certain financing transactions, including shares issuable upon exercise of warrants or the conversion of the Series D Preferred Stock (collectively, "Registrable Shares").

If the Company proposes to register any of its securities under the Securities Act (other than in connection with an employee benefit plan or pursuant to a merger, exchange offer or other acquisition transaction requiring registration under the Securities Act), whether for its own account or for the account of another holder of Company securities, the Rights Holders are entitled to include Registrable Shares owned by them in any such registration. If any such registration is an underwritten registration, the Company is required to include that portion of the Registrable Shares that each Rights Holder proposes to sell representing an aggregate of 25% of the offering (or in the case of an initial public offering, an aggregate of 15% of such offering) before inclusion of other shares. If, after taking into account shares offered by the Company and other holders of registration rights, the Underwriters determine that additional Registrable Shares can be sold, the balance of the Registrable Shares will be included pro rata in the registration.

At any time after the earlier of (i) December 31, 1996 or (ii) six months after the effective date of the first registration statement for a public offering of securities of the Company, Rights Holders holding at least 35% of the aggregate Registrable Shares and securities convertible into Registrable Shares also have the right to require the Company to prepare and file on two occasions a registration statement with respect to the Registrable Shares. However, the Company is not required to effect a registration (x) with respect to less than 35% of the aggregate Registrable Shares and shares convertible into Registrable Shares, unless the aggregate offering price (net of underwriting discounts and commissions), would exceed \$7,500,000 or (y) if the Company delivers an opinion reasonably acceptable to counsel for the Rights Holders that the Registrable Shares may be sold without registration under Rule 144 under the Securities Act without any limitation with respect to offerees or the size of the transaction. The Registered Holders have agreed not to exercise their registration rights for a period of 18 months following the Effective Date.

In addition, the Company has granted the holders of the Underwriters' Warrants (including the securities issuable upon exercise thereof) certain registration rights with respect to the shares of Common Stock and Warrants issuable upon the exercise thereof. The Underwriters have agreed not to exercise such registration rights for a period of 18 months following the Effective Date, or until such earlier date as the Company gives holders of the Warrants written notice of the redemption of the Warrants. See "Underwriting."

SHARES ELIGIBLE FOR FUTURE SALE

Upon completion of this Offering, the Company will have 3,326,641 shares of Common Stock outstanding, of which only the 1,500,000 shares of Common Stock offered hereby will be transferable without restriction under the Securities Act. The remaining 1,826,641 shares, issued in private transactions, will be "restricted securities" (as that term is defined in Rule 144 promulgated under the Securities Act) which may be publicly sold only if registered under the Securities Act or if sold in accordance with an applicable exemption from registration, such as Rule 144. In general, under Rule 144 as currently in effect, subject to the satisfaction of certain other conditions, a person, including an affiliate of the Company, who has beneficially owned restricted securities for at least two years, is entitled to sell (together with any person with whom such individual is required to aggregate sales), within any three-month period, a number of shares that does not exceed the greater of 1% of the total number of outstanding shares of the same class, or, if the Common Stock is quoted on Nasdaq or a national securities exchange, the average weekly trading volume during the four calendar weeks preceding the sale. A person who has not been an affiliate of the Company for at least three months, and who has beneficially owned restricted securities for at least three years is entitled to sell such restricted securities under Rule 144 without regard to any of the limitations described above. Officers, directors and the other existing securityholders of the Company owning or having rights to acquire in the aggregate 5,031,708 shares of Common Stock constituting restricted securities, have entered into agreements with the Underwriters not to sell or otherwise dispose of any shares of Common Stock (other than shares purchased in open market transactions) for a period of 18 months following the Effective Date, without the prior written consent of the Representative. Following expiration of the term of the Lock-Up Agreements, 3,308,572 shares of Common Stock will become eligible for resale pursuant to Rule 144 commencing in the

second quarter of 1998, subject to the volume limitations and compliance with the other provisions of Rule 144. An additional 2,465 shares and 15,604 shares constituting restricted securities not subject to Lock-Up Agreements will become eligible for resale pursuant to Rule 144 following the completion of this Offering and in the fourth quarter of 1997, respectively, subject to the volume limitations and compliance with the other provisions of Rule 144. In addition, securityholders of the Company owning or having rights to acquire in the aggregate 4,030,649 shares of Common Stock granted certain registration rights with respect to those shares have agreed that they will not exercise such registration rights for a period of 18 months following the Effective Date. See "Description of Securities -- Registration Rights" and "Certain Transactions."

As a result of this Offering, an additional 1,500,000 shares of Common Stock (1,725,000 if the Underwriter's Over-Allotment Option is fully exercised) will be subject to issuance pursuant to the exercise of the Warrants offered hereby.

As of November 1, 1996, there were 22 record holders of the Common Stock.

DIVIDEND POLICY

Since its inception, the Company has not paid any dividends on its Common Stock and it does not anticipate paying such dividends in the foreseeable future. The Company intends to retain earnings, if any, to finance its operations.

REPORTS TO STOCKHOLDERS

The Company intends to furnish its stockholders with annual reports containing financial statements audited and reported upon by its independent certified public accountants after the end of each fiscal year, and will make available such other periodic reports as the Company may deem to be appropriate or as may be required by law. The Company's fiscal year end is December 31. The Company has filed a Registration Statement on Form 8-A with the Commission to register under, and be subject to the reporting requirements of, the Exchange Act.

TRANSFER AGENT AND WARRANT AGENT

The Company has engaged American Stock Transfer and Trust Company to act as Transfer Agent for the Company's Common Stock and Warrant Agent for the Warrants.

UNDERWRITING

64

Subject to the terms and conditions of the underwriting agreement between the Company and the Underwriters (the "Underwriting Agreement"), the Company has agreed to sell to the Underwriters named below, for whom Rickel & Associates, Inc. is acting as representative (in such capacity, the "Representative"), and the Underwriters have severally, and not jointly, agreed to purchase, the number of securities set forth opposite their respective names below.

UNDERWRITERS	NUMBER
Rickel & Associates, Inc Aegis Capital Corp	1,000,000 500,000

The Underwriting Agreement provides that the obligations of the Underwriters are subject to certain conditions precedent. The Underwriters are committed to purchase all of the above securities if any are purchased.

The Representative has advised the Company that the Underwriters propose initially to offer the 1,500,000 shares of Common Stock and 1,500,000 Warrants to the public at the initial public offering prices set forth on the cover page of this Prospectus and that it may allow to selected dealers who are members of the NASD concessions not in excess of \$ per share of Common Stock and \$ per Warrant, of which not more than \$ per share of Common Stock and \$ per Warrant may be re-allowed to certain other dealers. After the Offering, the offering price and other selling terms may be changed by the Representative.

The Underwriting Agreement provides further that the Underwriters will receive a non-accountable expense allowance of 2.75% of the gross proceeds of the Offering, of which \$50,000 has been paid by the Company to date. The Company also has agreed to pay all expenses in connection with qualifying the shares of Common Stock and the Warrants offered hereby for sale under the laws of such states as the Representative may designate, including expenses of counsel retained for such purpose by the Underwriters.

Pursuant to the Underwriters' Over-Allotment Option, which is exercisable for a period of 45 days after the closing of the Offering, the Underwriters may purchase up to 15% of the total number of shares of Common Stock and Warrants offered hereby, solely to cover over-allotments.

The Company has agreed to sell to the Underwriters, for nominal consideration, the Underwriters' Warrants to purchase 150,000 shares of Common Stock and 150,000 Warrants. The Underwriters' Warrants will not be exercisable for a period of one year after the date of this Prospectus. Thereafter, for a period of four years, the Underwriters' Warrants will be exercisable at an amount equal to 165% above the offering price of the Common Stock and Warrants sold in this offering. The Underwriters' Warrants are not transferable for a period of one year after the date of this Prospectus, except to officers of the Underwriters, members of the selling group and their officers and partners. The Company also has granted certain demand and "piggyback" registration rights to the holders of the Underwriters' Warrants.

For the life of the Underwriters' Warrants, the holders thereof are given, at nominal cost, the opportunity to profit from a rise in the market price of the Common Stock with a resulting dilution in the interest of other stockholders. Further, such holders may be expected to exercise the Underwriters' Warrants at a time when the Company would in all likelihood be able to obtain equity capital on terms more favorable than those provided in the Underwriters' Warrants.

The Company has agreed, for a period of 24 months after the Effective Date, not to issue any shares of Common Stock, preferred stock or any warrants, options or other rights to purchase Common Stock or preferred stock without the prior written consent of the Representative. Notwithstanding the foregoing, the Company may issue shares of Common Stock upon exercise of any warrants or convertible securities outstanding on the date hereof or to be outstanding upon closing of the Offering as described herein. Subject to certain exceptions, all of the Company's existing securityholders have agreed not to sell or otherwise dispose of any shares of Common Stock for a period of up to 18 months following the Effective Date, without the prior written consent of the Representative. See "Description of Securities -- Shares Eligible for Future Sale." The Underwriting Agreement provides for reciprocal indemnification between the Company and the Underwriters against liabilities in connection with the Offering, including liabilities under the Securities Act.

The Company has agreed that upon closing of the Offering it will, for a period of not less than three years, engage a designee of the Representative as advisor to the Board. In addition and in lieu of the Representative's right to designate an advisor, the Company has agreed, if requested by the Representative, during such three-year period, to nominate and use its best efforts to cause the election of a designee of the Representative as a director of the Company. The Representative has not yet designated any such person.

The Underwriters intend to act as market makers for the Common Stock and the Warrants after the closing of the Offering.

Commencing one year after the date of this Prospectus and until the expiration of the exercise period of the Warrants, the Company will pay the Representative a fee of 5% of the exercise price of each Warrant exercised, provided (i) the market price of the Common Stock on the date the Warrant was exercised was equal to or greater than the Warrant exercise price on that date, (ii) the exercise price of the Warrant was solicited by a member of the NASD, (iii) the Warrant was not held in a discretionary account, (iv) the disclosure of compensation arrangements was made in documents provided to the holders of the Warrants, (v) the solicitation of the exercise of the Warrant was not a violation of Rule 10b-6 under the Exchange Act and (vi) the Representative is designated in writing as the soliciting NASD member. Unless granted an exemption from Rule 10b-6 under the Exchange Act by the Commission, the Representative and any other soliciting broker/dealers will be prohibited from engaging in any market making activities or solicited brokerage activities with regard to the Company's securities during the periods prescribed by exemption (xi) to Rule 10b-6 before the solicitation of the exercise of any Warrant until the later of the termination of such solicitation activity or the termination of any right the Representative and any other soliciting broker/dealer may have to receive a fee for the solicitation of the exercise of the Warrants.

The Company has agreed to retain the Representative as a consultant at an annual fee of \$24,000 for a 12-month period commencing on the closing of the Offering. The entire fee (\$24,000) is payable at the closing of the Offering. Pursuant to this agreement, the Representative will be obligated to provide general financial advisory services to the Company on an as-needed basis with respect to possible future financing or acquisitions by the Company and related matters. The agreement does not require the Representative to provide any minimum number of hours of consulting services to the Company.

The initial public offering prices of the shares of Common Stock and the Warrants offered hereby and the initial exercise price and the other terms of the Warrants have been determined by negotiation between the Company and the Underwriters and do not necessarily bear any direct relationship to the Company's assets, earnings, book value per share or other generally accepted criteria of value. Factors considered in determining the offering prices of the shares of Common Stock and Warrants and the exercise price of the Warrants included the business in which the Company's management, the general condition of the securities markets and the demand for similar securities of comparable companies.

LEGAL MATTERS

The validity of the securities offered hereby will be passed upon for the Company by Snow Becker Krauss P.C., 605 Third Avenue, New York, New York 10158-0125. Parker Chapin Flattau & Klimpl, LLP, 1211 Avenue of the Americas, New York, New York 10036 has acted as counsel to the Underwriters in connection with this Offering.

EXPERTS

The consolidated financial statements of the Company at December 31, 1995 and for each of the two years in the period ended December 31, 1995, appearing in this Prospectus and Registration Statement, have been audited by Ernst & Young LLP, independent auditors, as set forth in their report thereon appearing elsewhere herein, and are included in reliance upon such report given upon the authority of said firm as experts in accounting and auditing.

ADDITIONAL INFORMATION

The Company has filed with the Securities and Exchange Commission a Registration Statement on Form SB-2 under the Securities Act with respect to the securities offered hereby. This Prospectus does not contain all the information set forth in the Registration Statement and the exhibits thereto as permitted by the Rules and Regulations of the Commission. For further information with respect to the Company and such securities, reference is made to the Registration Statement and to the exhibits filed therewith. Statements contained in this Prospectus as to the contents of any contracts or other documents referred to herein are not necessarily complete and where such contract or other document is an exhibit to the Registration Statement, each such statement is qualified in all respects by the provisions of such exhibit to which reference is made for a full statement of the provisions thereof. The Registration Statement, including exhibits filed therewith, may be inspected, without charge, at the principal office of the Commission located at 450 Fifth Street, N.W., Room 1024, Washington, D.C. 20549 and at the Commission's regional offices located at Seven World Trade Center, Suite 1300, New York, New York 10048, and at 500 West Madison Street, Suite 1400 Chicago, Illinois 60661-2511. Copies of all or any part of the Registration Statement (including the exhibits thereto) also may be obtained from the Public Reference Section of the Commission at the Commission's principal office in Washington, D.C., at the Commission the Commission's web site at http://www.sec.gov.

INTEGRATED SURGICAL SYSTEMS, INC.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Auditors	F-2
Consolidated Balance Sheets at December 31, 1995 (audited)	
and September 30, 1996 (unaudited)	F-3
Consolidated Statements of Operations for the years ended	
December 31, 1994 and 1995 (audited) and the nine months ended	
September 30, 1995 and 1996 (unaudited)	F-4
Consolidated Statements of Stockholders' Equity for the years ended	
December 31, 1994 and 1995 (audited) and the nine months ended	
September 30, 1996 (unaudited)	F-5
Consolidated Statements of Cash Flows for the years ended	
December 31, 1994 and 1995 (audited) and the nine months ended	
September 30, 1995 and 1996 (unaudited)	F-6
Notes to Consolidated Financial Statements	F-7

The Board of Directors Integrated Surgical Systems, Inc.

We have audited the accompanying consolidated balance sheet of Integrated Surgical Systems, Inc. as of December 31, 1995, and the related consolidated statements of operations, stockholders' equity, and cash flows for the years ended December 31, 1994 and 1995. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Integrated Surgical Systems, Inc. at December 31, 1995, and the consolidated results of its operations and its cash flows for the years ended December 31, 1994 and 1995 in conformity with generally accepted accounting principles.

The accompanying financial statements have been prepared assuming that Integrated Surgical Systems, Inc. will continue as a going concern. As more fully described in Note 1, the Company has incurred recurring operating losses. This condition raises substantial doubt about the Company's ability to continue as a going concern. Management's plans in regard to this matter are also described in Note 1. The financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classification of liabilities that may result from the outcome of this uncertainty.

ERNST & YOUNG LLP

Sacramento, California January 29, 1996

CONSOLIDATED BALANCE SHEETS

	DECEMBER 31, 1995	SEPTEMBER 30, 1996 	PRO FORMA STOCKHOLDERS' EQUITY SEPTEMBER 30, 1996 AUDITED)
ASSETS Current assets: Cash and cash equivalents Accounts receivable Inventory Deferred offering costs Other current assets	\$ 2,339,823 50,807 746,972 144,417	\$ 1,132,503 12,721 868,695 223,716 59,363	
Total current assets Net property and equipment Other assets	3,282,019 430,851 14,259 \$ 3,727,129	2,296,998 307,589 13,934 \$ 2,618,521	
LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Note payable Accounts payable Accrued payroll and related expenses Customer deposits Accrued product retrofit costs Other current liabilities	\$ 274,498 209,405 39,600 469,991 160,000 301,117	\$ 67,037 401,963 63,062 156,324 482,614	
Total current liabilities Commitments and contingencies (Notes 1 and 8) Stockholders' equity: Convertible preferred stock, \$0.01 par value, 5,750,000 shares authorized; 693,195 and 1,039,792 shares issued and outstanding at December 31, 1995 and September 30, 1996, respectively (no shares pro forma); liquidation preference value of \$666,667 at December 31, 1995 (\$1,000,000 at September		1,171,000	
30, 1996) Common stock, \$0.01 par value, 15,000,000 shares authorized; 273,946 and 737,072 shares issued and outstanding at December 31, 1995 and September 30, 1996, respectively (1,776,864	6,932	10,398	\$
Additional paid-in capital Deferred stock compensation Accumulated translation adjustment	2,739 17,909,532 5,297 (15,651,982)	7,370 19,685,118 (473,507) (7,499) (17,774,359)	17,768 19,685,118 (473,507) (7,499) (17,774,359)
Total stockholders' equity	2,272,518	1,447,521	\$ 1,447,521 ========
	\$ 3,727,129	\$ 2,618,521	

See accompanying notes.

CONSOLIDATED STATEMENTS OF OPERATIONS

	YEARS ENDED [NINE MONTHS EN 30	
	1994	1995	1995	
			UNAUD)	ITED)
Net sales Cost of sales	203,856	\$ 174,521 70,179	\$ 112,613 42,284	664,979
		104,342	70,329	1,083,086
Operating expenses: Selling, general and		,	,	, ,
administrative Research and development Stock compensation	1,973,816 2,719,771 	1,668,947 2,361,125	1,313,119 1,648,208	1,369,079 1,572,076 310,159
	4,693,587	4,030,072	2,961,327	3,251,314
Other income (expense): Interest income Interest expense Other	74,956 (281,650) (14,508)	107,306 (287,792) 55,801	98,199 (221,426) 58,248	54,872 (3,754)
Loss before provision for income taxes Provision for income taxes	(4,829,598) 10,787	(4,050,415) 3,113	(2,955,977) 4,468	(2,117,110) 5,267
Net loss Preferred stock dividends	(4,840,385) (956,574)	(4,053,528) (936,325)	(2,960,445) (720,000)	(2,122,377)
Net loss applicable to common stockholders		\$(4,989,853) =========	\$(3,680,445) ==========	\$(2,122,377) ==========
Net loss per common and common share equivalent		\$ (1.19)	\$ (0.88)	\$ (0.48)
Shares used in per share calculations	4,172,052	4,178,877	4,172,897	

See accompanying notes.

71

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

	CONVERTIBLE PREFERRED STOCK		COMMON STOCK		ADDITIONAL PAID-IN	DEFERRED STOCK	ACCUMULATED TRANSLATION	
	SHARES	AMOUNT	SHARES	AMOUNT	CAPITAL	COMPENSATION		
Balance at December 31, 1993	163,369	\$ 1,634	67,652	\$ 676	\$11,736,912	\$	\$	
Sale of common stock		+ 1,00	1,553	15	11,349	÷	÷	
Net loss			_,		, =			
Translation adjustment							1,754	
Balance at December 31, 1994	163,369	1,634	69,205	691	11,748,261		1,754	
Sale of common stock Conversion of note payable into a warrant			781	8	2,585			
to purchase common stock Conversion of Series B and Series C					4,224,373			
preferred stock into common stock Conversion of accumulated dividends	(163,369)	(1,634)	163,369	1,634				
preferred stock into common stock Sale of Series D convertible preferred stock and a warrant to purchase Series D			40,591	406	(406)			
preferred stock	693,195	6,932			1,934,719			
Net loss		·						
Translation adjustment							3,543	
Balance at December 31, 1995	693,195	6,932	273,946	2,739	17,909,532		5,297	
Sale of common stock (unaudited) Sale of Series D convertible preferred			72	1	16			
stock and a warrant to purchase Series D								
preferred stock (unaudited)	346,597	3,466			996,534			
Exercise of warrants			463,054	4,630	(4,630)			
Deferred stock compensation (unaudited)					783,666	(783,666)		
Stock compensation expense (unaudited)						310,159		
Net loss (unaudited)								
Translation adjustment (unaudited)							(12,796)	
Balance at September 30, 1996 (unaudited)		\$10,398	737,072	\$7,370	\$19,685,118	\$ (473,507)	\$ (7,499)	
	======	======	======	======	=========	========	=======	

	ACCUMULATED DEFICIT	TOTAL STOCKHOLDERS' EQUITY
Balance at December 31, 1993 Sale of common stock Net loss Translation adjustment	\$ (6,758,069) (4,840,385) 	\$ 4,981,153 11,364 (4,840,385) 1,754
Balance at December 31, 1994 Sale of common stock Conversion of note payable into a warrant	(11,598,454)	153,886 2,593
to purchase common stock Conversion of Series B and Series C		4,224,373
preferred stock into common stock Conversion of accumulated dividends		
preferred stock into common stock Sale of Series D convertible preferred stock and a warrant to purchase Series D		
preferred stock Net loss Translation adjustment	 (4,053,528) 	1,941,651 (4,053,528) 3,543
Balance at December 31, 1995 Sale of common stock (unaudited) Sale of Series D convertible preferred stock and a warrant to purchase Series D	(15,651,982)	2,272,518 17
preferred stock (unaudited) Exercise of warrants		1,000,000
Deferred stock compensation (unaudited)		
Stock compensation expense (unaudited) Net loss (unaudited) Translation adjustment (unaudited)	(2,122,377)	310,159 (2,122,377) (12,796)
Balance at September 30, 1996 (unaudited)	\$(17,774,359)	\$ 1,447,521

See accompanying notes.

CONSOLIDATED STATEMENTS OF CASH FLOWS INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS

	YEARS ENDED DECEMBER 31,		NINE MONTHS ENDED SEPTEMBI 30,	
	1994	1995	1995	1996
			UNAUD)	ITED)
CASH FLOWS FROM OPERATING ACTIVITIES Net loss Adjustments to reconcile net loss to net cash used in operating activities:	\$(4,840,385)	\$(4,053,528)	\$(2,960,445)	\$(2,122,377)
Loss on short-term investments Issuance of common stock for non-cash	37,402			
items Depreciation Stock compensation	9,540 261,056	288,344	214,358 	 137,457 310,159
Changes in operating assets and liabilities: Short-term investments	2,985,437			
Accounts receivable Inventory Other current assets	202,641 184,277 (96,747)	(30,326) 137,625 850	20,014 (12,244) 4,405	38,086 (121,723) 85,054
Note payable Accounts payable Accrued payroll and related expenses	15,717 113,296	20,701 (42,058) (222,896)	32,853 45,502 (184,986)	(207,461) 192,558 23,462
Customer deposits Accrued product retrofit costs	471,874 274,680	(1,883) (114,680)	(1,880) (109,854)	(469,991) (3,676)
Accrued interest Other current liabilities Translation adjustment	277,500 (68,460) 1,754	286,645 219,344 3,543	208,126 51,174 2,918	 181,497 (12,796)
Net cash used in operating activities CASH FLOWS FROM INVESTING ACTIVITIES			(2,690,059)	(1,969,751)
Purchase of property and equipment Decrease (increase) in other assets		(121,008) 1,035	(100,701) 926	(14,195) 325
Net cash used in investing activities CASH FLOWS FROM FINANCING ACTIVITIES	(480,305)	(119,973)	(99,775)	(13,870)
Increase in deferred offering costs Proceeds from convertible preferred stock Proceeds from common stock	 1,824	1,941,651 2,593	 2,593	(223,716) 1,000,000 17
Net cash provided by financing activities	1,824	1,944,244	2,593	776,301
Net decrease in cash and cash equivalents Cash and cash equivalents at beginning of	(648,899)	(1,684,048)	(2,787,241)	(1,207,320)
period	4,672,770	4,023,871	4,023,871	2,339,823
Cash and cash equivalents at end of period	\$ 4,023,871 ======	\$ 2,339,823 =======	\$ 1,236,630 =======	\$ 1,132,503 =======

See accompanying notes.

INTEGRATED SURGICAL SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS DECEMBER 31, 1995 (INFORMATION WITH RESPECT TO SEPTEMBER 30, 1996 AND THE NINE MONTHS ENDED SEPTEMBER 30, 1995 AND 1996 IS UNAUDITED)

1. DESCRIPTION OF BUSINESS AND FINANCING REQUIREMENTS

Integrated Surgical Systems, Inc. was incorporated on October 1, 1990 as a Delaware corporation and was a development stage enterprise through the year ended December 31, 1995. The Company develops, manufactures, markets and services image-directed, robotic products for surgical applications. The Company's principal product is the ROBODOC(R) Surgical Assistant System ("ROBODOC System"), a computer-controlled surgical robot, and the Company's ORTHODOC(R) Presurgical Planner, consisting of a computer workstation that utilizes the Company's proprietary software for pre-operative surgical planning. The first application for the ROBODOC System has been directed at cementless primary total hip replacement surgery.

On June 1, 1994, the Company acquired all shares of Gasfabriek Thijssen Holding BV (later renamed Integrated Surgical Systems BV), a non-operating Netherlands corporation, for approximately \$4,000. The acquisition was accounted for as a purchase. Integrated Surgical Systems BV purchases and licenses products and technology from Integrated Surgical Systems, Inc. for distribution in Europe and other markets.

The Company has not yet generated significant revenue and has funded its operations primarily through the issuance of debt and sale of equity. Accordingly, the Company's ability to accomplish its business strategy and to ultimately achieve profitable operations is dependent upon its ability to raise additional financing. The Company's management is exploring several funding options and expects to raise additional capital during 1996 (Note 10). Ultimately, however, the Company will need to achieve profitable operations in order to continue as a going concern. The Company incurred a net loss of \$4,053,528 for the year ended December 31, 1995 and a net loss of \$2,122,377 for the nine months ended September 30, 1996. The Company has an accumulated deficit of \$15,651,982 and \$17,774,359 as of December 31, 1995 and September 30, 1996, respectively.

These conditions raise substantial doubt about the Company's ability to continue as a going concern. The financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classification of liabilities that may result from the outcome of this uncertainty.

2. SIGNIFICANT ACCOUNTING POLICIES

CONSOLIDATION

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiary. All significant intercompany balances and transactions have been eliminated in consolidation.

FOREIGN CURRENCY TRANSLATION

The financial position and results of operations of Integrated Surgical Systems BV are measured using the subsidiary's local currency (Guilders). The subsidiary's balance sheet accounts are translated at the current year-end exchange rate and statement of operations amounts are translated at the average exchange rate for the period. Translation adjustments are recorded as a separate component of stockholders' equity. Foreign currency transaction gains and losses were not material during the years ended December 31, 1994 and 1995 and the nine months ended September 30, 1995 and 1996.

2. SIGNIFICANT ACCOUNTING POLICIES -- (CONTINUED) REVENUE RECOGNITION

Revenues from sales without significant Company obligations beyond delivery are recognized upon delivery of the products. Revenues pursuant to agreements which include significant Company obligations beyond delivery are deferred until the Company's remaining obligations are insignificant. Revenues are recognized net of any deferrals for estimated future liabilities under contractual product warranty provisions. Estimated future product retrofit costs for ROBODOC Systems sold for clinical trials have been accrued in the accompanying financial statements. Future retrofit costs are those expected to be required to update ROBODOC Systems to the equivalent level of performance expected to be approved by the Food and Drug Administration ("FDA").

RESEARCH AND DEVELOPMENT

Software development costs incurred subsequent to the determination of the product's technological feasibility and prior to the product's general release to customers are not material to the Company's financial position or results of operations, and have been charged to research and development expense in the accompanying consolidated statements of operations. Grants received from third parties for research and development activities are recorded as revenue over the term of the agreement as the related activities are conducted. Research and development costs are expensed as incurred.

CONCENTRATION OF CREDIT RISK

The Company sells its products to companies in the healthcare industry and performs periodic credit evaluations of its customers and generally does not require collateral. The Company believes that adequate provision for uncollectible accounts receivable has been made in the accompanying financial statements. The Company maintains substantially all of its cash at four financial institutions.

FINANCIAL STATEMENT ESTIMATES

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

CASH EQUIVALENTS

The Company considers all highly liquid investments with original maturities of three months or less to be cash equivalents. Cash equivalents consist primarily of certificates of deposits, banker's acceptances and U.S. Government securities.

PROPERTY AND EQUIPMENT

Property and equipment are stated at cost. Depreciation is calculated using the straight-line method over estimated useful lives of 3 to 5 years, or the lease term, whichever is shorter.

FAIR VALUES OF FINANCIAL INSTRUMENTS

Effective January 1, 1995, the Company adopted Statement of Financial Accounting Standards No. 107, "Disclosures about Fair Value of Financial Instruments" ("SFAS No. 107"). The carrying amounts reported in the balance sheet for cash and cash equivalents approximate those assets' fair values. Active markets for the

INTEGRATED SURGICAL SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED)

2. SIGNIFICANT ACCOUNTING POLICIES -- (CONTINUED) FAIR VALUES OF FINANCIAL INSTRUMENTS -- (CONTINUED) Company's other financial instruments that are subject to the fair value disclosure requirements of SFAS No. 107, which consist of privately-issued notes payable, do not exist and there are no quoted market prices for these notes. Accordingly, it is not practicable to estimate the fair values of such financial instruments because of the limited information available to the Company and because of the significance of the cost to obtain independent appraisals for this purpose.

INVENTORY

Inventory is recorded at the lower of cost (first-in, first-out method) or market and consists of materials and supplies used in the manufacture of the ROBODOC System.

Inventory consists of the following:

		SEPTEMBER 30, 1996
	DECEMBER 31, 1995	
		(UNAUDITED)
Raw materials	\$381,756	\$ 448,189
Work-in process	306,828	322,533
Finished goods	58,388	97,973
	\$746,972	\$ 868,695
	=======	=======

INCOME TAXES

The liability method is used to account for income taxes. Under this method, deferred income tax assets and liabilities are determined based on differences between the financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that are scheduled to be in effect when the differences are expected to reverse.

NET LOSS PER SHARE

Except as noted below, net loss per share is based on the weighted average number of shares of common stock outstanding during the period. Common stock issuable upon the conversion of convertible preferred stock and note payable and upon the exercise of common stock warrants and stock options have been excluded from the computation because their inclusion would be anti-dilutive. Pursuant to the Securities and Exchange Commission Staff Accounting Bulletins, common and common equivalent shares issued by the Company at prices below the initial public offering price during the 12 month period prior to the offering have been included in the calculation as if they were outstanding for all periods presented (using the treasury stock method at an assumed initial public offering price of \$5.00 per share). As described in Note 6, common stock was issued on December 20, 1995 in connection with the conversion of preferred stock and accumulated dividends. Net loss per share for the year ended December 31, 1995 would have been (\$0.93) per share had the conversion occurred on January 1, 1995.

SIGNIFICANT CUSTOMERS AND FOREIGN SALES

During the year ended December 31, 1994, the Company recognized 87% of its revenues from one customer. During the year ended December 31, 1995, the Company recognized 95% of its revenues from one customer. Foreign sales were approximately \$27,000 and \$165,000 for the years ended December 31, 1994 and December 31, 1995, respectively. During the nine months ended September 30, 1995 and 1996, the Company

INTEGRATED SURGICAL SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED)

2. SIGNIFICANT ACCOUNTING POLICIES -- (CONTINUED) SIGNIFICANT CUSTOMERS AND FOREIGN SALES -- (CONTINUED) recognized 92% and 36%, 36% and 28% of its revenues from one and three customers, respectively. Foreign sales for the nine months ended September 30, 1995 and 1996 were \$103,613 and \$1,747,925, respectively.

RECLASSIFICATIONS

Certain amounts reported in prior years financial statements have been reclassified to conform with the 1995 and 1996 presentation.

3. PROPERTY AND EQUIPMENT

Property and equipment consists of the following:

	DECEMBER 31, 1995	SEPTEMBER 30, 1996 (UNAUDITED)
ROBODOC System equipment Other equipment Furniture and fixtures Leasehold improvements	\$552,660 738,215 40,040 80,866	\$ 386,504 809,204 41,258 86,816
Less accumulated depreciation	1,411,781 (980,930) \$ 430,851	1,323,782 (1,016,193) \$ 307,589

4. REVERSE STOCK SPLIT

On December 20, 1995, as part of a recapitalization and preferred stock sale described in Note 6, the stockholders authorized a one-for-five reverse split of all capital stock. All references in the accompanying financial statements to the number of capital shares and per-share amounts have been retroactively restated to reflect the reverse stock split (Note 10).

5. NOTES PAYABLE

During 1994, the Company issued a \$237,184 short-term note payable to a vendor in exchange for inventory. Additional inventory purchases of \$20,701 were added to the outstanding balance during 1995. Simple interest on the note payable accrues at 7% per annum. As partial payment for the interest obligation, the Company issued 676 shares of its common stock to the vendor during the year ended December 31, 1994, with an estimated fair value of \$7.84 per share. The outstanding principal balance of the note and the remaining interest obligation which was due on September 30, 1995 was not paid due to the Company's limited cash flow at that time and, as a result, the note payable is in default. The Company is currently negotiating with the vendor to extend the terms of the note payable; however, there is no assurance that such negotiations will be successful or that the vendor will not pursue legal action against the Company. The Company does not believe the outcome of the matter will have a material adverse impact on its financial position or results of operations. Subsequent to December 31, 1996, the unpaid balance of the note payable was \$67,037. The Company intends to pay the remaining balance in November 1996.

A long-term note payable was entered into between the Company and a large corporation, a representative of which is a member of the Company's Board of Directors. Simple interest on the note payable accrued

5. NOTES PAYABLE -- (CONTINUED) at 9.25% per annum. On December 20, 1995, the long-term note payable and accrued interest totaling \$4,224,373 was converted into a warrant to purchase 126,895 shares of the Company's common stock at \$0.01 per share which is currently exercisable and expires on December 31, 2005.

In conjunction with the note agreement, the Company also entered into a License Agreement with this corporation whereby the corporation granted the Company the rights to the technology underlying the ROBODOC System at the time of the Company's incorporation. In consideration for this License Agreement, the Company issued to the corporation a warrant to purchase 67,587 shares of the Company's common stock at a price of \$0.07 per share. This warrant expires on December 31, 2000 and has not been exercised as of September 30, 1996.

6. STOCKHOLDERS' EQUITY

COMMON STOCK

As of December 31, 1995 the Company has reserved a total of 5,836,747 shares of common stock pursuant to outstanding warrants, options and convertible preferred stock.

CONVERTIBLE PREFERRED STOCK

On December 20, 1995, all outstanding shares of Series B and Series C preferred stock were converted into 60,964 and 102,405 shares of common stock, respectively. Also on that date, all accumulated and unpaid dividends on Series B and Series C were converted into 17,910 and 22,681 shares of the Company's common stock, respectively.

The Company entered into a Series D preferred stock and warrant agreement during 1995. Under the terms of this agreement, the Company received \$2 million in proceeds at the first closing which occurred on December 21, 1995, and granted an option to purchase additional Series D stock and a warrant to purchase Series D Stock as described below. At the first closing, the Company sold 693,195 shares of Series D preferred stock for \$0.96 per share. It also sold for \$1,333,333 a warrant to purchase 1,386,390 shares of Series D at \$0.01 per share. The warrant expires on December 31, 2005 and has not been exercised as of September 30, 1996. The purchasers received an option to purchase an additional 346,597 shares of Series D preferred stock and a warrant to purchase an additional 693,194 shares of Series D preferred stock, all with the same terms as in the first closing.

On February 19, 1996, the option holder exercised the option and the Company sold 346,597 shares of Series D preferred stock for \$0.96 per share. The Company also sold a warrant for \$666,667 to purchase 693,194 shares of Series D at \$0.01 per share.

Series B and Series C preferred stockholders who did not purchase Series D stock were issued warrants to purchase an aggregate of 446,087 shares of the Company's common stock at a price of \$0.74 per share in consideration for their consent to the terms of the recapitalization and Series D stock sale. The Company granted another warrant to purchase an additional 138,872 shares of common stock at \$0.74 per share in conjunction with the second closing of the Series D preferred stock described above. These warrants may be exercised only under certain conditions including the closing of a registered public offering in which the Company would have a pre-money market valuation of at least \$10,000,000 (Note 10), the sale of the Company for consideration at least equal to \$10,000,000, or in certain circumstances when the Company s valuation exceeds \$10,000,000. These warrants expire on the earlier of 30 days after a notice of a proposed exercise event or December 31, 2005. On August 25, 1996 and October 29, 1996, certain holders of these warrants entered into amended warrant agreements with the Company which included a provision allowing for a cashless exercise. Under the terms of the cashless exercise, these warrant holders accepted 72,126

6. STOCKHOLDERS' EQUITY -- (CONTINUED) CONVERTIBLE PREFERRED STOCK -- (CONTINUED)

fewer shares as consideration for not being required to make the cash exercise payment of \$0.74 per share. This resulted in these warrant holders receiving 512,831 shares of Common Stock upon their exercise on August 25, 1996 and October 29, 1996.

As part of the Series D offering, the Company offered to all stockholders who did not purchase Series D stock or the Series D warrant ("non-participating stockholder(s)") the right to purchase Series D stock with the same terms and conditions as the December 1995 offering. The Company has reserved 753,589 shares of Series D stock for this offering. Each non-participating stockholder will be allowed to purchase a number of shares based upon current ownership in relation to other non-participating stockholders. This offer expired in March 1996.

The holders of Series D convertible preferred stock have the following per share liquidation preferences and conversion rates:

Liquidation preference	\$0.96
Conversion rate	\$0.96

The holders of convertible preferred stock have participating rights to receive dividends when and as declared on the shares of common stock by the Board of Directors. No dividends have been declared as of September 30, 1996.

Each share of the convertible preferred stock is convertible into common stock at the conversion rate described above divided by the "Conversion Price" subject to certain anti-dilution adjustments. At December 31, 1995 and September 30, 1996, the Conversion Price was \$0.96 per share for Series D, making each share of convertible preferred stock convertible into common stock on a one-for-one basis. Automatic conversion of shares will occur in the event of a firm underwritten public offering resulting in aggregate gross cash proceeds to the Company of at least \$7,500,000 (Note 10).

Holders of the Company's convertible preferred stock vote as if their shares have been converted to common stock. In addition, preferred shares are subject to certain transfer restrictions and are entitled to certain registration rights.

Whenever the Company proposes to issue, deliver, or sell certain "Voting Securities," the holder of the warrant resulting from the conversion of the long-term note payable (Note 5) has the right of first offer to purchase such Voting Securities. Subsequently, the holders of convertible preferred stock are entitled to purchase an amount of such Voting Securities which would result in the preferred stockholder retaining its percentage interest in the total voting power of the Company in effect prior to such issuance. These shares may be purchased at a price per share equal to the selling price of the Voting Securities. The anti-dilution rights granted to the holders of convertible preferred stock terminate in the event the stockholder holds less than 337,933 shares of convertible preferred stock.

STOCK OPTION PLANS

The Company established a stock option plan in 1991 (the "1991 Plan") and on December 13, 1995, it established a new stock option plan (the "1995 Plan"). Certain employees of the Company will surrender their options under the 1991 Plan in return for new and additional options granted under the 1995 Plan. Officers, employees, directors and consultants to the Company may participate in the Plans. Options granted under the Plans may be incentive stock options or non-statutory stock options. 1,249,070 shares of the Company's common stock have been reserved for issuance under the Plans. Options granted generally have a

6. STOCKHOLDERS' EQUITY -- (CONTINUED) STOCK OPTION PLANS -- (CONTINUED) term of five years from the date of the grant. The exercise price of incentive stock options granted under the Plans may not be less than 100% of the fair market value of the Company's common stock on the date of the grant. The exercise price of non-statutory stock options granted under the Plans may not be less than 85% of the fair market value of the Company's common stock on the date of the grant. For a person who, at the time of the grant, owns stock representing 10% of the voting power of all classes of Company stock, the exercise price of the incentive stock options or the non-statutory stock options granted under the Plans may not be less than 110% of the fair market value of the common stock on the date of the grant.

The following summarizes activity under the Plans for the years ended December 31, 1994 and 1995 and the nine months ended September 30, 1996:

Outstanding at December 31, 1993	46,465
Granted (at \$7.84 per share)	11,415
Canceled (at \$3.33 to \$7.84 per share)	(4,513)
Exercised (at \$3.33 and \$7.84 per share)	(335)
Outstanding at December 31, 1994	53,032
Granted (at \$4.88 per share)	32,713
Canceled (at \$3.33 to \$7.84 per share)	(9,439)
Exercised (at \$3.33 per share)	(781)
Outstanding at December 31, 1995 (at \$3.33 to \$7.84 per share)	75,525
Granted (at \$0.07 per share) (unaudited)	941,545
Canceled (at \$3.33 to \$7.84 per share) (unaudited)	(67,928)
Exercised (at \$0.25 per share) (unaudited)	(72)
Outstanding at September 30, 1996 (at \$0.07 to \$7.84 per share) (unaudited)	949,070

Of the options outstanding at December 31, 1995, options to purchase 46,453 shares of common stock were immediately exercisable at prices ranging from \$3.33 to \$7.84 per share. Of the options outstanding at September 30, 1996, options to purchase 396,370 shares of common stock were immediately exercisable at prices ranging from \$0.07 to \$7.84 per share. A total of 1,033,495 and 300,000 shares were still available for grant under the Plan at December 31, 1995 and September 30, 1996, respectively.

During the nine months ended September 30, 1996, the Company recorded deferred stock compensation of \$783,666 relating to stock options granted during the period with exercise prices less than the estimated fair value of the Company's common stock, as determined by an independent valuation analysis, on the date of grant. The deferred stock compensation is being amortized into expense over the vesting period of the stock options which generally range from 3 to 5 years. Deferred compensation relating to stock options which vested immediately was expensed on the date of grant. Compensation expense of \$310,159 was recorded during the nine months ended September 30, 1996 relating to these stock options, and the remaining \$473,507 will be amortized into expense in future periods.

7. INCOME TAXES

The income tax provisions for the years ended December 31, 1994 and 1995 and the nine months ended September 30, 1995 and 1996 are comprised of currently payable state franchise taxes and currently payable foreign income taxes.

7. INCOME TAXES -- (CONTINUED) Deferred taxes result from temporary differences in the recognition of certain revenue and expense items for income tax and financial reporting purposes. The significant components of the Company's deferred taxes as of December 31, 1994 and 1995 are as follows:

	1994	1995
Deferred tax assets:		
Net operating loss carryover	\$ 4,759,000	\$ 2,200,000
Research and development credit	404,000	
Capitalized research and development	566,000	16,000
Accrued product retrofit costs	88,000	95,000
Inventory		97,000
Other	178,000	104,000
	5,995,000	2,512,000
Less: Valuation allowance	(5,995,000)	(2,512,000)
Net deferred taxes	\$	s
	Ψ = = = = = = = = = = = = = = = = = = =	φ === =========

The principal reasons for the difference between the effective income tax rate and the federal statutory income tax rate are as follows:

	YEARS ENDED DECEMBER 31,	
	1994	1995
Federal benefit expected at statutory rates Net operating loss with no current benefit State franchise taxes Foreign income taxes		\$(1,377,000) 1,377,000 3,046 67
	\$ 10,787	\$ 3,113
	===========	==========

In connection with the Company's Series D preferred stock sale (Note 6) a change of ownership (as defined in Section 382 of the Internal Revenue Code of 1986, as amended) occurred. As a result of this change, the Company's federal and state net operating loss carryforwards generated through December 21, 1995 (approximately \$13,500,000 and \$4,500,000, respectively) will be subject to a total annual limitation in the amount of approximately \$400,000. Except for the amounts described below, the Company expects that the carryforward amounts will not be utilized prior to the expiration of the carryforward periods.

As a consequence of the limitation, the Company has at December 31, 1995 a net operating loss carryover of approximately \$6,000,000 for federal income tax purposes which expires between 2005 and 2009, and net operating loss carryforward of approximately \$2,000,000 for state income tax purposes which expires between 1997 and 1999.

The Company paid 10,787 and 5,280 for income and franchise taxes during the years ended December 31, 1994 and 1995, respectively.

8. COMMITMENTS

The Company leases its facilities under two non-cancelable operating leases. One of the leases has an escalation clause of 5% per annum and has a term of approximately five years. The Company has the right to terminate the lease at the end of the third year. The fee associated with this cancellation privilege is 50% of the unamortized portion of the total tenant improvements (which is expected to be approximately \$32,000). The

8. COMMITMENTS -- (CONTINUED) Company's other facility does not have an escalation clause and has a term of approximately 3 years. Future payments under non-cancelable facility operating leases are approximately as follows:

1996	\$114,000
1997	86,000
1998	44,000

Aggregate rental expense under these leases amounted to \$136,880 and \$135,980 during the years ended December 31, 1994 and 1995, respectively.

Future minimum payments under non-cancelable equipment operating leases are approximately \$10,000 per year through the year ended December 31, 2000. Rental expense for these non-cancelable leases during the years ended December 31, 1994 and 1995 was approximately \$11,000 and \$14,000, respectively.

9. NIST GRANT

During 1994, the Company received notification it was awarded a \$1,960,000 National Institute of Science and Technology ("NIST") grant from the U.S. Department of Commerce. The grant will be shared by the Company and two strategic partners to fund approximately 49% of a \$4 million joint development project to adapt the ROBODOC System for use in hip revision surgery. The development project and related NIST Grant began in 1995. The Company received \$19,409 in proceeds under this grant during the year ended December 31, 1995 and \$93,099 during the nine months ended September 30, 1996.

10. SUBSEQUENT EVENTS

On November 6, 1996, the Company effected a one-for-1.479586 reverse split of the Company's common stock. All references in the accompanying financial statements to the number of capital shares and per-share amounts have been retroactively restated to reflect the reverse split.

If the Company's initial public offering is consummated and results in aggregate gross cash proceeds to the Company of at least \$7,500,000, all of the Series D convertible preferred stock outstanding as of the closing date will automatically be converted into an aggregate of approximately 1,039,792 shares of common stock, based on the shares of Series D outstanding at September 30, 1996. Unaudited pro forma stockholders' equity at September 30, 1996, as adjusted for the conversion of preferred stock, is disclosed on the consolidated balance sheets.

[LOGO]

[PHOTO]

[PHOTO]

The ROBODOC(R) Surgical Assistant System(the "ROBODOC System"). Pictured on the left is the ORTHODOC(R) Presurgical Planner. The computer controlled surgical robot is seen on the right. The robot included in the ROBODOC System ("ROBODOC System") is manufactured to the Company's specifications by an independent supplier and is incorporated into the ROBODOC System. See "Business -- Manufacturing."

[PHOTO]

ORTHODOC'S software reduces image distortion caused by the metal in an existing hip implant, allowing the surgeon to visualize the bone, the cement, and the implant clearly. The surgery can now be planned in 3-D and frequent complications can be avoided.

PART II INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 24. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Article VI of the Registrant's by-laws provides that a director or officer shall be indemnified against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement (provided such settlement is approved in advance by the Registrant) in connection with certain actions, suits or proceedings, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation--a "derivative action") if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful. A similar standard of care is applicable in the case of derivative actions, except that indemnification only extends to expenses (including attorneys' fees) incurred in connection with the defense or settlement of such an action, except that no person who has been adjudged to be liable to the Registrant shall be entitled to indemnification unless a court determines that despite such adjudication of liability but in view of all of the circumstances of the case, the person seeking indemnification is fairly and reasonably entitled to be indemnified for such expenses as the court deems proper.

Article 6.5 of the Registrant's by-laws further provides that directors and officers are entitled to be paid by the Registrant the expenses incurred in defending the proceedings specified above in advance of their final disposition, provided that such payment will only be made upon delivery to the Registrant by the indemnified party of an undertaking to repay all amounts so advanced if it is ultimately determined that the person receiving such payments is not entitled to be indemnified.

Article 6.4 of the Registrant's by-laws provides that a person indemnified under Article VI of the by-laws may contest any determination that a director, officer, employee or agent has not met the applicable standard of conduct set forth in the by-laws by petitioning a court of competent jurisdiction.

Article 6.6 of the Registrant's by-laws provides that the right to indemnification and the payment of expenses incurred in defending a proceeding in advance of its final disposition conferred in the Article will not be exclusive of any other right which any person may have or acquire under the by-laws, or any statute or agreement, or otherwise.

Finally, Article 6.7 of the Registrant's by-laws provides that the Registrant may maintain insurance, at its expense, to reimburse itself and directors and officers of the Registrant and of its direct and indirect subsidiaries against any expense, liability or loss, whether or not the Registrant would have the power to indemnify such persons against such expense, liability or loss under the provisions of Article VI of the by-laws. The Registrant has applied for such insurance, and expects to have such insurance in effect on the date this Registration Statement is declared effective by the Securities and Exchange Commission.

Article 11 of the Registrant's certificate of incorporation eliminates the personal liability of the Registrant's directors to the Registrant or its stockholders for monetary damages for breach of their fiduciary duties as a director to the fullest extent provided by Delaware law. Section 102(b)(7) of the DGCL provides for the elimination off such personal liability, except for liability (i) for any breach of the director's duty of loyalty to the Registrant or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL or (iv) for any transaction from which the director derived any improper personal benefit.

Reference is made to Section of the Underwriting Agreement between the Registrant, Rickel & Associates, Inc. and Aegis Capital Corp. (the "Underwriters"), filed as Exhibit 1.1 to this Registration Statement, which provides for indemnification by the Underwriters of the Registrant and the directors and officers of the Registrant under certain limited circumstances.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 (the "Securities Act") may be permitted to directors, officers or persons controlling the Registrant pursuant to the foregoing

provisions, the Registrant has been informed that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

ITEM 25. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following table sets forth the expenses (other than underwriting discounts and commissions) which will be paid by the Registrant in connection with the issuance and distribution of the securities being registered hereby. With the exception of the SEC registration fee and the NASD filing fee, all amounts indicated are estimates.

SEC Registration fee	\$ 8,674.91
NASD filing fee	3,015.72
NASDAQ filing fee	8,776.00
Pacific Stock Exchange filing fee	22,000.00
Underwriters' expense allowance	210,375.00
Representatives's consulting fee	24,000.00
Directors' and Officers' liability insurance	150,000.00
Printing expenses (other than stock certificates)	80,000.00
Printing and engraving of stock and warrant certificates	3,000.00
Legal fees and expenses (other than blue sky)	100,000.00
Accounting fees and expenses	70,000.00
Blue sky fees and expenses (including legal and filing	
fees)	50,000.00
Transfer Agent and Warrant Agent fees and expenses	3,500.00
Miscellaneous	16,658.37
Total	\$750,000.00
	========

ITEM 26. RECENT SALE OF UNREGISTERED SECURITIES

During the past three years, the Registrant has sold securities to a limited number of persons, as described below. Except as indicated, there were no underwriters involved in the transactions and there were no underwriting discounts or commissions paid in connection therewith. The purchasers of securities in each such transaction represented their intention to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the certificates for the securities issued in such transactions. All purchasers of securities in each such transaction had adequate access to information about the Registrant, and in the case of transactions exempt from registration under Section 4(2) of the Securities Act, were sophisticated investors.

- On December 20, 1995, as part of a recapitalization, the Registrant issued 30,482 shares of Common Stock to each of Sutter Health and the John N. Kapoor Trust (the "Kapoor Trust") upon conversion of the Series B Preferred Stock. The issuance of these shares was exempt from registration under Section 3(a)(9) of the Securities Act.
- 2. On December 20, 1995, as part of a recapitalization, the Registrant issued 8,955 shares of Common Stock to each of Sutter Health and the Kapoor Trust in consideration for the cancellation of all accumulated dividends on the Series B Preferred Stock. The issuance of these shares was exempt from registration under Section 4(2) of the Securities Act.
- 3. On December 20, 1995, as part of a recapitalization, the Registrant issued 89,604 shares of Common Stock to Sutter Health and 12,801 shares of Common Stock to Keystone Financial Corporation ("Keystone") upon conversion of the Series C Preferred Stock. The issuance of these shares was exempt from registration under Section 3(a)(9) of the Securities Act.
- 4. On December 20, 1995, as part of a recapitalization, the Registrant issued 19,512 shares of Common Stock to Sutter Health and 3,169 shares of Common Stock to Keystone in consideration

for the cancellation of all accumulated dividends on the Series C Preferred Stock. The issuance of these shares was exempt from registration under Section 4(2) of the Securities Act.

- 5. On December 21, 1995, as part of a recapitalization, the Registrant issued a warrant to purchase 126,895 shares of Common Stock, at an exercise price of \$0.02 per share, to International Business Machines Corporation ("IBM") in exchange for the cancellation of the Company's promissory note in the principal amount of \$3,000,000 and accrued interest thereon. The issuance of this warrant was exempt from registration under Section 4(2) of the Securities Act.
- 6. On December 21, 1995, as part of a recapitalization, the Registrant issued 693,195 shares of Series D Preferred Stock to EJ Financial Investments V, L.P. ("EJ Financial") for an aggregate purchase price of \$666,667 (\$0.96 per share). In addition, EJ Financial received an option to purchase an additional 346,597 shares of Series D Preferred Stock on the same terms and conditions as it purchased the Series D Preferred Stock, which option was exercised on February 19, 1996. The issuance of these securities was exempt from registration under Section 4(2) of the Securities Act.
- 7. On December 21, 1995, as part of a recapitalization, the Registrant issued a warrant to purchase 1,386,390 shares of Series D Preferred Stock (the "Series D Warrants") to IBM, at an exercise price of \$0.01 per share, for an aggregate purchase price of \$1,333,333 (\$0.96 per warrant). In addition, IBM received an option to purchase Series D Warrants to purchase an additional 693,194 shares of Series D Preferred Stock on the same terms and conditions as it purchased the Series D Warrants, which option was exercised on February 19, 1996. The issuance of these securities was exempt from registration under Section 4(2) of the Securities Act.
- 8. On December 21, 1995, as part of a recapitalization, the Registrant issued warrants to purchase 390,888 shares, 11,899 shares and 43,300 shares of Common Stock to Sutter Health, Sutter Health Venture Partners L.P. and Keystone, respectively, at an exercise price of \$0.74 per share, in consideration for their consent to the terms of the recapitalization. The issuance of these warrants was exempt from registration under Section 4(2) of the Securities Act.
- 9. On December 21, 1995, as part of a recapitalization, the Registrant issued warrants to purchase 121,686 shares, 3,705 shares and 13,481 shares of Common Stock to Sutter Health, Sutter Health Venture Partners L.P. and Keystone, respectively, at an exercise price of \$0.74 per share, in connection with the exercise of certain options by EJ Financial and IBM. The issuance of these warrants was exempt from registration under Section 4(2) of the Securities Act.
- 10. From July 24, 1993 through December 31, 1994, the Registrant granted options to purchase an aggregate of 11,415 shares of Common Stock to employees of the Registrant pursuant to the Registrant's employee stock option plans, at an exercise price of \$7.84 per share. The grant of these options was exempt from registration under Rule 701 of the Securities Act.
- 11. From January 1, 1995 through December 31, 1995, the Registrant granted options to purchase an aggregate of 32,713 shares of Common Stock to employees of the Registrant pursuant to the Registrant's employee stock option plans, at an exercise price of \$4.88 per share. The grant of these options was exempt from registration under Rule 701 of the Securities Act.
- 12. From January 1, 1996 through September 30, 1996, the Registrant granted options to purchase an aggregate of 941,545 shares of Common Stock to employees of the Registrant pursuant to the Registrant's employee stock option plans. Of these options, options to purchase 899,637 shares were granted at an exercise price of \$0.07 per share, options to purchase 21,631 shares were granted at an exercise price of \$2.07 per share, and options to purchase 20,277 were granted at an exercise price of \$5.92 per share. The grant of these options was exempt from registration under Rule 701 of the Securities Act.
- 13. From January 1, 1993 through December 31, 1994, the Registrant issued and sold an aggregate of 399 shares of Common Stock to two employees of the Registrant upon exercise of stock options granted pursuant to the Registrant's employee stock option plans. Of such shares, 241 were issued at

an exercise price of \$3.33 per share and 158 were issued at an exercise price of \$7.84 per share. The issuance and sale of these shares was exempt from registration under Rule 701 of the Securities Act.

- 14. From January 1, 1995 through December 31, 1995, the Registrant issued and sold an aggregate of 781 shares of Common Stock to three employees of the Registrant upon exercise of stock options granted pursuant to the Registrant's employee stock option plans, at an exercise price of \$3.33 per share. The issuance and sale of these shares was exempt from registration pursuant to Rule 701 promulgated under the Securities Act.
- 15. From January 1, 1996 through September 30, 1996, the Registrant issued and sold an aggregate of 72 shares of Common Stock to two employees of the Registrant upon exercise of stock option granted pursuant to the Registrant's employee stock option plans. Of such shares, 17 shares were issued at an exercise price of \$0.07 per share and 55 shares were issued at an exercise price of \$0.31 per share. The issuance and sale of these shares was exempt from registration pursuant to Rule 701 promulgated under the Securities Act.
- 16. On June 17, 1994, the Registrant issued 390 shares of Common Stock to a former employee of the Registrant and 152 shares of Common Stock to his attorney, in connection with the termination of the employee's employment. These shares were valued at \$7.84 per share. The issuance of the shares was exempt from registration pursuant to Rule 504 promulgated under the Securities Act.
- 17. On November 23, 1994, the Registrant issued 676 shares of Common Stock to a supplier of the Registrant in payment of accrued interest on note payable. The issuance of the shares was exempt from registration under Section 4(2) of the Securities Act.
- 18. On August 25, 1996, the Company issued 449,374 and 13,680 shares of Common Stock to Sutter Health and Sutter Health Venture Partners, respectively, at an exercise price of \$0.74 per share. The issuance of these securities was exempt from Registration under Section 4(2) of the Securities Act.
- 19. On October 29, 1996, the Company issued 49,777 shares of Common Stock to Keystone Financial Corporation at an exercise price of \$0.74 per share. The issuance of these securities was exempt from registration under Section 4(2) of the Securities Act.

ITEM 27. EXHIBITS

- 1.1 -- Form of Underwriting Agreement, as revised.
- 3.1 -- Form of Certificate of Incorporation of the Company, as amended.
- 3.2 -- By-laws of the Company.
- 4.1 -- Form of Underwriters' Warrants, as revised.
- 4.2 -- Form of Public Warrant Agreement, as revised.
- 4.3 -- Specimen Common Stock Certificate.
- 4.4 -- Specimen Warrant Certificate (included as Exhibit A to Exhibit 4.2 herein).
- 4.5 -- Form of Series D Preferred Stock Certificate.
- 4.6 -- Form of Consulting Agreement between the Company and Rickel & Associates, Inc.
- 4.7 -- Common Stock Purchase Warrant issued by the Company to International Business Machines Corporation ("IBM"), dated February 6, 1991, as amended (included as Exhibit J to Exhibit 10.5 herein).
- 4.8 -- Stockholders' Agreement between the Founders of the Company and IBM, dated February 6, 1991, as amended.
- 4.9 -- Common Stock Purchase Warrant issued by the Company to IBM, dated December 21, 1995 (included as Exhibit I to Exhibit 10.5 herein).

87

4.10	- Series D Preferred Stock Purchase Warrant issued by the Company to IBM,	
	dated December 21, 1995 (included as Exhibit H to Exhibit 10.5 herein).	
4.11	- Warrant issued by the Company to Sutter Health, Sutter Health Venture	
	Partners ("Sutter Health VP") and Keystone Financial Corporation	
	("Keystone"), dated December 21, 1995 (included as Exhibits K, L and M,	
	respectively, to Exhibit 10.5 herein).	
4.12	- Registration Rights Agreement among the Company, IBM, John N. Kapoor Trust	
	("Kapoor"), EJ Financial Investments V, L.P. ("EJ Financial"), Keystone,	
	Sutter Health and Sutter Health VP, dated as of December 21, 1995 (included	
4 40	as Exhibit G to Exhibit 10.5 herein).	
4.13	- 1995 Stock Option Plan, as amended.	
4.14	- Series D Preferred Stock Purchase Warrant issued by the Company to IBM,	
4.15	dated February 29, 1996.	
4.15 5.1	- Form of Lock-up Agreement. - Opinion of Snow Becker Krauss P.C.	
5.1 10.1	- Loan and Warrant Purchase Agreement between the Company and IBM, dated as	
10.1	of February 6, 1991.	
10.2	- License Agreement between the Company and IBM, dated February 6, 1991.	
10.3	- Series B Preferred Stock Purchase Agreement among the Company, Sutter	
10.3	Health and The John N. Kapoor Trust, dated as of April 10, 1992.	
10.4	- Series C Preferred Stock Purchase Agreement among the Company, Sutter	
1014	Health and Keystone, dated as of November 13, 1992, as amended December 13,	
	1995.	
10.5	- Series D Preferred Stock and Warrant Purchase Agreement among the Company,	
	IBM and EJ Financial, dated December 21, 1995.	
10.6	- Investors Agreement among the Company, IBM, Wendy Shelton-Paul Trust,	
	William Bargar, Brent Mittelstadt, Peter Kazanzides, Kapoor, Sutter Health,	
	Sutter Health VP and EJ Financial, dated as of December 21, 1995 (included	
	as Exhibit F to Exhibit 10.5 herein).	
10.7	- Employment Agreement between the Company and Ramesh Trivedi, dated December	
	8, 1995.	
10.8	- License Agreement between the Company and IBM, dated February 4, 1991.	
10.9	- Agreement for the Purchase and Use of Sankyo Industrial Products between	
	the Company and Sankyo Seiki (American) Inc. dated November 1, 1992.	
*11.1	- Statement of computation of earnings per share.	
21.1	- Subsidiaries of the Company.	
23.1	- Consent of Snow Becker Krauss P.C. (to be included in Exhibit 5.1 to this	
	Registration Statement).	
*23.2	- Consent of Ernst & Young LLP, independent auditors, is included in Part II	
	of this Registration Statement.	
24.1	- Power of Attorney (included on the signature page of this Registration	
*07 1	Statement).	
*27.1	- Financial Data Schedule.	

- -----

* Filed with Amendment No. 3.

ITEM 28. UNDERTAKINGS

(A) RULE 415 OFFERING

The undersigned small business issuer hereby undertakes that it will:

- (1) File, during any period in which it offers or sells securities, a post-effective amendment to this registration statement to:
 - (i) Include any prospectus required by section 10(a)(3) of the Securities Act.
 - (ii) Reflect in the prospectus any facts or events which, individually or together, represent a fundamental change in the information set forth in the registrant 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% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.
 - (iii) Include any additional or changed material information on the plan of distribution.
- (2) For determining any liability under the Securities Act, treat each post-effective amendment as a new registration statement relating to the securities offered, and the offering of such securities at that time to be the initial bona fide offering thereof.
- (3) File a post-effective amendment to remove from registration any of the securities that remain unsold at the end of the offering.

(D) EQUITY OFFERINGS BY NON-REPORTING SMALL BUSINESS ISSUERS

The undersigned small business issuer hereby undertakes that it will provide the Underwriters at the closing specified in the Underwriting Agreement certificates in such denominations and registered in such names as required by the Underwriters to permit prompt delivery to each purchaser.

(E) REQUEST FOR ACCELERATION OF EFFECTIVE DATE

Insofar as indemnification for liabilities arising under the Securities Act of 1933 (the "Securities Act") may be permitted to directors, officers and controlling persons of the small business issuer pursuant to the foregoing provisions, or otherwise, the small business issuer has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the small business issuer of the expenses incurred or paid by a director, officer, or controlling person of the small business issuer 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 small business issuer 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 Securities Act and will be governed by the final adjudication of such issue.

- (F) RULE 430A OFFERING
 - (1) For determining any liability under the Securities Act, treat the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the small business issuer under Rule 424(b)(1) or (4) or 497(h) under the Securities Act as part of this registration statement as of the time the Commission declared it effective.
 - (2) For determining any liability under the Securities Act, treat each post-effect amendment that contains a form of prospectus as a new registration statement for the securities offered in the registration statement, and that offering of the securities at that time as the initial bona fide offering of those securities.

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 REQUIREMENT FOR FILING ON FORM SB-2 AND HAS DULY CAUSED THIS AMENDMENT TO THE REGISTRATION STATEMENT TO BE SIGNED ON ITS BEHALF BY THE UNDERSIGNED, THEREUNTO DULY AUTHORIZED, IN THE CITY OF SACRAMENTO IN THE STATE OF CALIFORNIA ON NOVEMBER 6, 1996.

INTEGRATED SURGICAL SYSTEMS, INC.

By:	/s/ RAMESH C. TRIVEDI	By:	/s/ MICHAEL J. TOMCZAK
President	Ramesh C. Trivedi Chief Executive Officer and		Michael J. Tomczak Chief Financial Officer
			(Principal Financial and
	(Principal Executive Officer)		Accounting Officer)

PURSUANT TO THE REQUIREMENTS OF THE SECURITIES ACT OF 1993, THIS AMENDMENT TO THE REGISTRATION STATEMENT HAS BEEN SIGNED BY THE FOLLOWING PERSONS ON NOVEMBER 6, 1996, IN THE CAPACITIES INDICATED.

SIGNATURE	TITLE
/s/ RAMESH C. TRIVEDI Ramesh C. Trivedi	Chief Executive Officer, President, and Director (Principal Executive Officer)
/s/ MICHAEL J. TOMCZAK Michael J. Tomczak	Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)
*	Chairman of the Board of Directors
James C. McGroddy	
*	Director
Wendy Shelton-Paul	
*	Director
John N. Kapoor	
*	Director
Paul A.H. Pankow	
*/s/ RAMESH C. TRIVEDI	
By: Ramesh C. Trivedi (Attorney-in-fact)	

EXHIBIT NUMBER		DESCRIPTION	SEQUENTIALLY NUMBERED PAGED
1.1		Form of Underwriting Agreement, as revised	
3.1		Form of Certificate of Incorporation of the Company, as amended	
3.2		By-laws of the Company	
4.1		Form of Underwriters' Warrants, as revised	
4.2		Form of Public Warrant Agreement, as revised	
4.3		Specimen Common Stock Certificate	
4.4		Specimen Warrant Certificate (included as Exhibit A to Exhibit 4.2 herein)	
4.5		Form of Series D Preferred Stock Certificate	
4.6		Form of Consulting Agreement between the Company and Rickel & Associates, Inc	
4.7		Common Stock Purchase Warrant issued by the Company to International Business Machines Corporation ("IBM"), dated February 6, 1991, as amended (included as Exhibit J to Exhibit 10.5 herein)	
4.8		Stockholders' Agreement between the Founders of the Company and IBM,	
4 0		dated February 6, 1991, as amended	
4.9		December 21, 1995 (included as Exhibit I to Exhibit 10.5 herein)	
4.10		Series D Preferred Stock Purchase Warrant issued by the Company to IBM, dated December 21, 1995 (included as Exhibit H to Exhibit 10.5 herein)	
4.11		Warrant issued by the Company to Sutter Health, Sutter Health Venture Partners ("Sutter Health VP") and Keystone Financial Corporation ("Keystone"), dated December 21, 1995 (included as Exhibits K, L and M,	
4.12		respectively, to Exhibit 10.5 herein) Registration Rights Agreement among the Company, IBM, John N. Kapoor Trust ("Kapoor"), EJ Financial Investments V, L.P. ("EJ Financial"), Keystone, Sutter Health and Sutter Health VP, dated as of December 21, 1995 (included as Exhibit G to Exhibit 10.5 herein)	
4.13		1995 Stock Option Plan, as amended	
4.14		Series D Preferred Stock Purchase Warrant issued by the Company to IBM, dated February 29, 1996.	
4.15		Form of Lock-up Agreement.	
5.1		Opinion of Snow Becker Krauss P.C	
10.1		Loan and Warrant Purchase Agreement between the Company and IBM, dated as of February 6, 1991	
10.2		License Agreement between the Company and IBM, dated February 6, 1991	
10.3		Series B Preferred Stock Purchase Agreement among the Company, Sutter Health and The John N. Kapoor Trust, dated as of April 10, 1992	
10.4		Series C Preferred Stock Purchase Agreement among the Company, Sutter Health and Keystone, dated as of November 13, 1992, as amended December 13, 1995	
10.5			
10.6		Investors Agreement among the Company, IBM, Wendy Shelton-Paul Trust, William Bargar, Brent Mittelstadt, Peter Kazanzides, Kapoor, Sutter Health, Sutter Health VP and EJ Financial, dated as of December 21, 1995 (included as Exhibit F to Exhibit 10.5 herein)	

EXHIBIT NUMBER	DESCRIPTION	SEQUENTIALLY NUMBERED PAGED	
10.7	Employment Agreement between the Company and Ramesh Trivedi, dated December 8, 1995		
10.8	License Agreement between the Company and IBM, dated February 4, 1991		
10.9 -	- Agreement for the Purchase and Use of Sankyo Industrial Products between the Company and Sankyo Seiki (American) Inc. dated November 1, 1992		
11.1	Statement of computation of earnings per share		
	Subsidiaries of the Company		
23.1	Consent of Snow Becker Krauss P.C. (to be included in Exhibit 5.1 to this Registration Statement)		
*23.2	Consent of Ernst & Young LLP, independent auditors, is included in Part II of this Registration Statement		
24.1	Power of Attorney (included on the signature page of this Registration Statement)		
27.1	Financial Data Schedule		

- -----

* Filed with Amendment No. 3.

EXHIBIT 11.1

INTEGRATED SURGICAL SYSTEMS, INC.

STATEMENT OF COMPUTATION OF EARNINGS PER SHARE

	YEARS ENDED DECEMBER 31,		NINE MONTHS ENDED SEPTEMBER 30,	
	1994	1995	1995	1996
Primary and fully diluted:				
Average common shares outstanding	68,356	75,180	69,200	335,044
Common and common equivalent shares issued during the twelve month period prior to the initial public offering at prices below the assumed public offering price in accordance with Staff				
Accounting Bulletin No. 83	4,103,697	4,103,697	4,103,697	4,042,635
Shares used in per share calculations		4,178,877 ======		
Net loss Preferred stock dividends		\$(4,053,528) (936,325)		
Net loss applicable to common stockholders	\$(5,796,959)	\$(4,989,853)	(\$3,680,445)	\$(2,122,377)
Net loss per common and common share equivalent	\$ (1.39) ========	\$ (1.19) ====================================	\$(0.88) ===================================	========== \$ (0.48) =========

CONSENT OF INDEPENDENT AUDITORS

We consent to the reference to our firm under the captions "Experts" and "Selected Financial Information" and to the use of our report dated January 29, 1996, in Amendment No. 3 to the Registration Statement (Form SB-2, No. 333-9207) and related Prospectus of Integrated Surgical Systems, Inc. for the registration of 3,750,000 shares of its common stock and warrants to purchase 2,175,000 shares of its common stock.

ERNST & YOUNG LLP

Sacramento, California

November 5, 1996

```
9-M0S
              DEC-31-1996
                  JAN-01-1996
SEP-30-1996
                               1,132,503
0
                           12,721
0
868,695
          868,695
2,296,998
307,589
1,016,193
2,618,521
1,171,000
                                        0
                10,398
                           0
7,370
1,437,123
                  , 1, 748, 065
1, 748, 065
664, 979
3, 251, 314
(51, 118)
0
2, 117, 110`
2,618,521
                  (2,117,110)
          (2,117,110)
5,267
(2,122,377)
0
                                 0
                                          0
                      (2,122,377)
(0.48)
(0.48)
```