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U.S. SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM 10-KSB

[X] ANNUAL REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

FOR THE FISCAL YEAR ENDED DECEMBER 31, 1998

TRANSITION REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

FOR THE TRANSITION PERIOD FROM

COMMISSION FILE NUMBER 1-12471

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

DELAWARE (STATE OR OTHER JURISDICTION OF INCORPORATION OR ORGANIZATION)

68-0232575 (I.R.S. EMPLOYER IDENTIFICATION NO.)

1850 RESEARCH PARK DRIVE, DAVIS, CA (ADDRESS OF PRINCIPAL EXECUTIVE OFFICES)

95616-4884 (ZIP CODE)

(530) 792-2600 (ISSUER'S TELEPHONE NUMBER, INCLUDING AREA CODE)

SECURITIES REGISTERED UNDER SECTION 12(b) OF THE EXCHANGE ACT:

TITLE OF EACH CLASS

NAME OF EACH EXCHANGE ON WHICH EACH CLASS IS REGISTERED

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COMMON STOCK, \$.01 PAR VALUE COMMON STOCK PURCHASE WARRANTS THE PACIFIC EXCHANGE INCORPORATED THE PACIFIC EXCHANGE INCORPORATED

SECURITIES REGISTERED UNDER SECTION 12(g) OF THE ACT:

NOT APPLICABLE (TITLE OF CLASS)

Check whether the issuer: (1) filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the past 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes [X] No [

Check if there is no disclosure of delinquent filers in response to Item 405 of Regulation S-B contained in this form, and no disclosure will be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-KSB or any amendment to this Form 10-KSB. [X]

Revenues for the issuer's most recent fiscal year were \$6,146,434.

The aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the closing price of the common stock on March 17, 1999 was \$9,636,505.

ISSUERS INVOLVED IN BANKRUPTCY PROCEEDINGS DURING THE PAST FIVE YEARS

Check whether the issuer has filed all documents and reports required to be filed by Section 12, 13 or 15(d) of the Exchange Act after the distribution of securities under a plan confirmed by a court. Yes [] No []

APPLICABLE ONLY TO CORPORATE REGISTRANTS

As of March 17, 1999, the issuer had 5,744,037 shares of common stock, \$.01 par value, outstanding.

Transitional Small Business Disclosure Format: Yes [] No [X]

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's definitive Proxy Statement for its 1999 Annual Meeting of Stockholders are incorporated by reference into Part III of this Form 10-KSB in response to Items 9, 10, 11 and 12 of Part III.

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PART I

TTEM 1. DESCRIPTION OF BUSINESS.

Integrated Surgical Systems, Inc. (the "Company") develops, assembles, markets and services image-directed, computer-controlled robotic products for orthopaedic and neurosurgical applications. The Company was incorporated under the laws of the State of Delaware on October 1, 1990.

ORTHOPAEDIC BUSINESS

The Company's principal orthopaedic product is the ROBODOC(R) Surgical Assistant System, consisting of a computer-controlled surgical robot and the Company's ORTHODOC(R) Presurgical Planner. The ROBODOC System has been used for primary total hip replacement surgery on over 4,000 patients in Europe and the United States. The Company believes its "active" robotic system is the only available system that can accurately perform key segments of surgical procedures semi-autonomously 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 IBM.

The ORTHODOC is a computer workstation that uses the Company's proprietary software for preoperative surgical planning. The ORTHODOC is a part of the ROBODOC System, but the Company also markets it separately. 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 development of the DigiMatch(TM) Single Surgery System, two titanium locator pins were placed in the patient's femur in an outpatient procedure before the primary surgery. These locator pins were used during the primary procedure to orient the ROBODOC System to the ORTHODOC preoperative plan. With the development of the DigiMatch technology, this pre-operative outpatient procedure has been eliminated. The orientation of the patient is now accomplished using a proprietary, pinless registration system. 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.

Total hip arthroplasty ("THA") surgery involves the insertion of an implant into a cavity created in the patient's femur. The Company believes that precise fit and correct alignment of the implant within the femoral cavity are key factors in the long-term success of THA surgery. In conventional THA 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 Europe with the ROBODOC System, patients generally have become weight-bearing in a shorter period than generally experienced by patients who have had this surgery performed manually. In addition, clinical data obtained from trials in Europe and the United States indicates that intraoperative fractures have been dramatically reduced in the THA surgeries performed with the ROBODOC System (to the Company's knowledge, no intraoperative fractures have resulted from THA 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 THA surgery performed with the ROBODOC System, as compared to patients who have this surgery performed manually.

In the past, a majority of THA 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 ingrowth. 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. A surgeon using this proprietary hip revision software will have a clearer view of the remaining bone in planning hip revision surgery and therefore will be better able to plan the surgery to have the ROBODOC remove fragmented cement without removing any of the remaining thin thigh bone.

The Company has developed and commenced marketing to its customers in Europe the DigiMatch Single Surgery System, that, in most cases, eliminates the need for an initial surgery to place registration pins in a patient's femur before using the ROBODOC System in total hip replacement surgery. More than 200 patient surgeries have been successfully performed at the Berufsgenossenschaftliche Unfallklinik ("BGU") in Frankfurt, Germany as well as at other customer sites with the DigiMatch Single Surgery System.

The Company plans to amend its investigational device exemption under the Food, Drug and Cosmetic Act, which allowed it to conduct clinical trials for the ROBODOC System in the United States, to permit it to perform a relatively small clinical study showing a correlation between the ROBODOC System using the DigiMatch System technology and the three pin system that was used in its initial clinical evaluations. The Company has deferred the filing of its pre-market approval application to market the ROBODOC System in the United States so that it may incorporate the DigiMatch Single Surgery System, and possibly other technical developments, as part of its pre-market approval application. The Company believes, based upon discussions with representatives of the FDA, that the incorporation of the DigiMatch Single Surgery System will enhance its prospects for obtaining FDA approval. However, there can be no assurance as to when or if the FDA will approve the Company's pre-market approval application to market the ROBODOC System or that such approval, if obtained, will not include unfavorable limitations or restrictions.

NEUROSURGICAL BUSINESS

The Company entered the neurosurgical business through the acquisition of Innovative Medical Machines International, S.A. ("IMMI") on September 5, 1997. The Company's principal neurosurgical product is the NeuroMate System, consisting of an image-guided, computer-controlled robotic arm, head stabilizer and monitor. The Company also offers a workstation with presurgical planning software through arrangements with original equipment manufacturers.

The NeuroMate System has been used to perform over 1,800 neurosurgical procedures in France and Japan. The Company believes that the NeuroMate System, which uses IMMI's proprietary robotic arm and control systems designed specifically for use in the operating room, is the only image-guided, computer-controlled robot currently in use to precisely position and hold critical tools used in the performance of neurosurgical procedures.

Stereotactic neurosurgery is a minimally invasive approach to operating on the brain. Because the brain is largely unexposed, it requires the surgeon to work without direct visualization of the brain itself. This is overcome by a thorough understanding of brain anatomy and by using a spatial coordinate system that allows the surgeon to "navigate" within the brain without directly visualizing it. Essentially, the coordinate space of the patient's brain is correlated to the patient's own CT, magnetic resonance (MR) or other images by using anatomical landmarks that are shared by the patient and the images. This is known as "registration" of the patient's coordinate space to the coordinate space of the images. Once this is accomplished, the patient's CT scan can be used to guide the surgeon to specific sites within the brain through small holes the surgeon has made in the cranium (i.e., not necessitating a craniotomy).

POTENTIAL ORTHOPAEDIC AND NEUROSURGICAL APPLICATIONS

The Company intends to offer separate software packages supporting each new robotic application, when developed by the Company. Some of these developments may be given to the Company's customers without charge. Customers may be required to pay for other developments, such as alternative prosthesis software.

Consequently, the Company's customers would be able to use the Systems as platforms to perform a variety of surgical procedures without incurring significant additional hardware costs. The Company plans to develop software packages for the following orthopaedic surgical and neurosurgical procedures.

- POTENTIAL ORTHOPAEDIC APPLICATIONS

Total Knee Replacement. The Company plans to develop a software package for total knee replacement ("TKR") surgery using the ROBODOC System. The proposed application module 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 application module to be developed by the Company for TKR surgery performed with the ROBODOC System, 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 application module 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.

Acetabulum Replacement and Revision. The Company plans to complement the THA 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 application module for this application, 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 ORTHODOC would better enable it to determine and display the irregular shape 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

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 application module for this application, 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 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-controlled robot would then pre-place screw holes to facilitate the final realignment and make the actual cuts.

- POTENTIAL NEUROSURGICAL APPLICATIONS

Spine surgery. Surgical interventions in the spine generally involve tumor biopsy/resection; vascular repair; implants of plates, rods, screws, or other implantable devices or substances; and bone fusions of various types. The Company believes that its image-directed, computer-controlled robotic technology is applicable in most of these interventions and will significantly enhance precision and accuracy in many of them. Spine surgery is a large segment of both neurosurgery and orthopaedic surgery, as the nature of the abnormality may involve the nervous system or the vertebral column, or both. A significant part of this application involves the insertion of vertebral pedicle screws, discussed below.

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 when the development of the proposed application module for this surgical procedure is completed, the

NeuroMate 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.

MARKETING, SALES AND DISTRIBUTION

The ROBODOC System cannot be marketed in the United States until clearance or approval is obtained from the FDA. The Company has received 510(k) clearance from the FDA to sell the ORTHODOC in the United States. The NeuroMate System also has received 510(k) clearance from the FDA for marketing in the United States and from the Japanese Ministry of Health for marketing in Japan. 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 has commenced marketing the ROBODOC System to orthopaedic and trauma surgeons and hospitals in Europe through direct sales and arrangements with implant manufacturers. To date, the Company's direct sales efforts have been primarily in Germany and Austria. Over 1,600 THA surgeries have been performed with the ROBODOC Systems at the BGU clinic in Frankfurt, Germany since August 1994. As result of a significant increase in the number of THA surgeries performed at the clinic with the ROBODOC System, the BGU clinic purchased a second ROBODOC System in the second quarter of 1996. The Company has been marketing the ORTHODOC to hospitals, orthopaedic surgeons and implant manufacturers in the United States since early 1998.

The NeuroMate System is marketed in Europe through a direct sales force, in Japan through a Japanese distributor, and in the United States through a direct sales force and select distributors.

The Company promotes its products through presentations at trade shows and advertisements in professional journals and technical and clinical publications, as well as through direct mail campaigns.

MANUFACTURING

The Company's production process consists primarily of final assembly of purchased components, testing of the products and packaging, and is conducted at its facilities in Davis, California and Lyon, France. The Company purchases substantially all the components for its systems 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 NeuroMate System consists of a robot arm, electronics control and base. Sankyo Seiki of Japan supplies the robot for the ROBODOC System customized to the Company's specifications and Audemars-Piguet supplies the customized robot for the NeuroMate System. Upon delivery of a robot, the Company performs a series of tests to verify proper functioning. The customization and supply process for the robots currently requires approximately four months lead time. While the robots 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. Ancillary items required to perform robotic surgeries, including devices for fixing the hip and attaching it to the robot, numerous probes, cutter bearing sleeves and tool guides, 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 configured for 110 or 220 AC volt operation.

The Company's production 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 it has obtained ISO-9001 certification, which is required for sales of its products in Europe.

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 \$3,064,000 and \$6,603,000 in connection with the development of the ROBODOC System, the ORTHODOC and the NeuroMate System for the years ended December 31, 1997 and December 31, 1998, respectively.

The Company offers its customers a software package for hip revision surgery, which was developed in collaboration with IBM and Johns Hopkins University and 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 cement mantle. The removal of the cement mantle without removing any of the remaining thin bone structure is a major challenge for the surgeon. The Company believes that its hip revision application module improves surgical planning for hip revision surgery and enables the robot to remove cement more precisely than if the hip revision procedure were 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 \$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 \$2,471,000 in connection with the NIST project through December 31, 1998. As of December 31, 1998, the Company had received approximately \$996,000 under the terms of the grant.

The Company offers a number of lines of prostheses in its software library of hip implants on its ORTHODOC. It is expanding the library to include multiple implant lines, revision stems, and custom-made prostheses. In 1998, the Company received orders from Howmedica (a division of Stryker Corporation), DePuy Inc. (a subsidiary of Johnson & Johnson), Aesculap, AG & Co. KG, Zimmer Inc. (a subsidiary of Bristol-Myers Squibb Company) and PLUS Endoprothetik A.G. to add their respective hip prostheses to its existing software library. When completed, the ROBODOC System will support 14 lines of popular prostheses from seven of the largest orthopaedic companies in the world. The Company will further expand 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 and acetabular cup replacement.

IMMI is the recipient of an interest-free loan from ANVAR (a national agency in France established to aid research and development projects) in the amount of approximately \$143,200. This loan provides funding for the development of the NeuroMate System for spine surgery. This project is currently in its first phase of development in connection with a University hospital in Lille, France. Under certain conditions (e.g., if at the completion of the project it is not deemed a "success") there will be no requirement to repay the loan.

IMMI also is the recipient of a grant from ANVAR in the amount of approximately \$222,000, of which IMMI had received \$174,000 as of December 31, 1998. This grant funds 50% of the cost to build and install

NeuroMate Systems at two clinics in France as well as the costs to perform a clinical study at these sites over a period of fifteen months commencing March 1997.

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 division of Stryker Corporation), 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 Johnson & Johnson), located in Indiana; Biomet, Inc. located in Indiana; and Osteonics, Inc. (a subsidiary of the Stryker Corporation), located in New Jersey. MAQUET, a manufacturer of operating tables located in Germany, recently entered the market with a device similar to ROBODOC. The principal competition for NeuroMate is from manufacturers of frame-based and frameless stereotactic systems, some of which are commonly called "navigators". Approximately twenty navigator models have been introduced, including those by Radionics, Sofamor Danek, and Ohio Medical Surgical Products, all located in the U.S.; Elekta, located in Sweden; and, Fischer Leibingher and Brain Lab, both located in Germany. In addition, there are companies in the medical products industry 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 those of 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 THA 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 most technologically advanced active robotic system that performs a key segment of THA surgery (i.e., milling a bone cavity) under the supervision of a surgeon.

The Company believes the NeuroMate System is the only robotic system presently used for neurosurgery which provides superior accuracy and flexibility as compared to other techniques.

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 negotiated on a customer by customer basis.

The Company trains its customers with its in-house technical staff and services its customers with a direct service staff located in Europe. As needed, technical support also is provided from the U.S. engineering organization.

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 been issued four U.S. patents and has filed seven 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.

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, manufacturing, 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.

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 quality system requirements ("QSR"), documentation 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 compliance inspections by the FDA and certain state agencies.

Following a pre-filing meeting with representatives of the FDA in early 1998, the Company stated that it intended to file its pre-market approval application to market the ROBODOC System with the FDA as part of the pre-submission review process (which process is intended to expedite the FDA's formal pre-market approval process). The Company has deferred the filing of its pre-market approval application with the FDA so that it may incorporate the DigiMatch Single Surgery System, and possibly other technical developments, as part of its pre-market approval application. The Company believes, based upon discussions with representatives of the FDA, that the incorporation of the DigiMatch Single Surgery System will enhance its prospects for obtaining FDA approval. There can be no assurance as to when or if the FDA will grant PMA approval to the ROBODOC System or that such approval, if obtained, will not include unfavorable limitations or restrictions.

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, 510(k) submission 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 different technologies in the ROBODOC System. The FDA likely will require new clinical data to support new indications and enhanced technological characteristics.

In February 1996, the Company filed a 510(k) submission for the ORTHODOC as a stand-alone device. This 510(k) was the first product submission filed by the Company with the FDA. In January 1997, the ORTHODOC received clearance from the FDA for marketing in the United States. The NeuroMate System received 510(k) clearance from the FDA for marketing in the United States in May 1997. Medical device companies may make regulatory decisions that non-significant modifications to a 510(k) cleared product do not require additional regulatory submissions or notifications.

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.

The introduction of the Company's products in foreign markets has subjected and will continue to 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.

The ROBODOC System satisfies international electromedical standard IEC 601-1 and the protection requirements of the Electromagnetic Compatibility 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 Uebermachungs Verein Rheinland ("TUV"), a testing body in Germany, under current German regulations. The ROBODOC System also satisfies the relevant provisions of the Medical Device Directive for a Class II b Medical Device.

The NeuroMate System satisfies the relevant provisions of the Medical Device Directive for a Class IIb Medical Device, thus allowing the Company to apply the CE Mark. In June 1997, the NeuroMate System received clearance from the Japanese Ministry of Health for marketing in Japan.

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. 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, or that such insurance can be maintained at acceptable costs. 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.

EMPLOYEES

As of March 5, 1999, the Company had 84 full time employees, including 44 in research and development, 7 in manufacturing, 8 in regulatory affairs and quality assurance, 14 in sales and marketing and 11 in administration. Except for the employees of IMMI, none of the Company's employees is covered by a collective bargaining agreement. The Company believes its relationship with its employees is satisfactory.

ITEM 2. DESCRIPTION OF PROPERTY.

The Company's executive offices and principal production facilities, comprising a total of approximately 30,500 square feet of space, are located in Davis, California. The Company occupies the facilities in Davis pursuant to a lease that expires in September 2004. The lease provides for rent of \$29,229 per month (plus real estate taxes and assessments, utilities and maintenance), through May 31, 1999, subject to adjustment in subsequent years for cumulative increases in the cost of living index, not to exceed 4% per year.

The Company leases its European facility under a non-cancelable operating lease. The lease is for a term of eight years and expires in 2006. The lease provides for rent of \$7,197 per month.

ITEM 3. LEGAL PROCEEDINGS.

The Company is not a party to any pending legal proceeding and its property is not subject to such proceeding.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS.

No matter was submitted to a vote of security holders, through the solicitations of proxies or otherwise, during the fourth quarter of the fiscal year ended December 31, 1998.

ITEM 5. MARKET FOR COMMON EQUITY AND RELATED STOCKHOLDER MATTERS.

(a) The Company's Common Stock and redeemable Common Stock Purchase Warrants ("Warrants") are traded on the Nasdaq SmallCap Market under the symbols "RDOC" and "RDOCW", respectively. The Company's Common Stock and Warrants also are listed on the Pacific Exchange under the symbols "ROB" and "ROBWS", respectively.* Since November 21, 1997, the Common Stock also has been traded on EASDAQ under the symbol "RDOC."

Set forth below are the high and low closing sale prices for the Common Stock and Warrants on the Nasdaq SmallCap Market for each quarter since January 1, 1997.

	COMMON STOCK ("RDOC")		WARRANTS ("RDOCW")	
QUARTER ENDED	HIGH	LOW	HIGH	LOW
March 31, 1997June 30, 1997			\$1 1/2 \$2 1/4	
September 30, 1997 December 31, 1997			\$3 3/8 \$3 1/8	T
March 31, 1998	\$5 7/8	\$3 15/16	\$1 13/16	\$1 1/8
June 30, 1998	\$7 5/16	\$4 7/8	\$2 3/4	\$1 1/4
September 30, 1998	\$5	\$3	\$1 9/16	\$ 11/16
December 31, 1998	\$4 9/16	\$2 9/16	\$1 1/4	\$ 7/16

⁽b) As of March 17, 1999, there were 119 holders of record of the Common Stock and 10 holders of record of the Warrants. The Company believes that as of March 17, 1999 there were approximately 1,500 and 400 beneficial owners of Common Stock and Warrants, respectively.

ITEM 6. MANAGEMENT'S DISCUSSION AND ANALYSIS OR PLAN OF OPERATION.

The following discussion and analysis relates to the operations of Integrated Surgical Systems, Inc. and does not include the operations of IMMI, except for the results of its operations subsequent to its acquisition by the Company on September 5, 1997, and should be read in conjunction with the consolidated financial statements of Integrated Surgical Systems, Inc., including the notes thereto, appearing elsewhere in this report.

RESULTS OF OPERATIONS

Net Sales. Net Sales for the year ended December 31, 1998 increased by approximately \$1,212,000 or 25% to \$6,146,000 compared to \$4,934,000 for year ended December 31, 1997. This increase in net sales is due to the increase in the sale of ROBODOC Systems. During 1998, nine systems were sold and two were leased compared to seven sold and one leased year during 1997.

Cost of Sales. Cost of sales for 1998 was \$3,413,000 or 56% of net sales as compared to \$3,183,000 or 44% of net sales for the prior year. The higher cost as a percent of sales for 1998 is due primarily to discounts

^{*} No trading activity has been reported by the Pacific Exchange.

granted to several customers who placed orders for multiple systems.

Selling, General and Administrative. Selling, general and administrative expenses for 1998 were \$6,216,000 compared to \$3,701,000 for 1997. Selling, general and administrative expenses increased by \$2,515,000 as the Company staffed its European sales organization with additional sales, administrative, and training personnel. Additionally, sales expenses increased with the addition of a sales staff to begin the marketing of the ORTHODOC and NeuroMate in the United States. Finally, 1998 was the first full year in which the expenses associated with IMMI were reflected in the consolidated results of the Company. IMMI was acquired in September of 1997.

Research and Development. Expenses for research and development during 1998 increased by 115% to \$6,603,000 from \$3,064,000 during 1997. During 1998, the Company elected to aggressively pursue the development of its DigiMatch Single Surgery System proprietary pinless registration technology. This technology eliminates the need for a preliminary surgical procedure to place pins in the patient's femur prior to the implant surgery and at the time a CT image is taken of the patient's bone. Historically this was done to effect an accurate correlation of the patient's CT image to the patient's femur in the THA surgical procedure. In addition, the Company determined that it was competitively appropriate to expend more resources on the development implant base, thus providing its customers with the largest offering of implants from which to select.

During 1998, the Company amortized \$839,000 of identified intangible assets acquired in the IMMI transaction in 1997. This charge was \$559,000 higher than the amount recorded in 1997. Similarly, 1998 was the first full year in which research and development costs of were recorded in connection with IMMI.

Stock Compensation. During 1998, amounts expensed for stock compensation decreased to \$131,000 from \$155,000 during 1997. Amounts decreased since there were fewer shares of options that vested in 1998. Deferred compensation for the non-vested portion is being amortized into expense over the vesting period of the stock options, which generally range from three to four years. As of December 31, 1998, there remains an additional \$86,000 subject to being expensed in future years.

Interest Income and Expense. For 1998, interest income amounted to \$241,000 compared to \$215,000 in 1997. The difference is the result of generally higher average cash balances during the year. During the 1998 year, the Company also made borrowings against a revolving line of credit, and had other interest expenses which, in total, generated interest expense in the amount of \$124,000.

Foreign Currency Gain (Loss). Gains incurred in connection with foreign currency transactions amounted to \$129,158 in 1998 as a result of exchange rates that weakened the U.S. Dollar relative to European currencies. In 1997, transaction losses were approximately \$147,000.

Other Income and Expense. Other expense for 1998 amounted to \$270,000 compared to other income of \$32,000 for the same period in 1997. In June 1998 the Company and six other investors agreed to organize a Dutch company to be known as Marbella High Care B.V. for the purpose of capitalizing a Spanish company to be known as Marbella High Care S/A ("MBHC") to develop a surgical and rehabilitation center in Marbella, Spain. As of December 31, 1998, the Company owned 22% of the outstanding shares of MBHC and accounts for its investment under the equity method. The Company's investment in MBHC, including loans was approximately \$563,000 in 1998. For the year ended December 31, 1998, the Company recorded \$317,000 of expense relating to its investment and advances in MBHC for the period, which has been included in other income (expense).

Preferred Stock Accretion. During 1998, the Company entered into a private placement agreement whereby the Company's Series A Preferred Stock was placed with two private investors. The terms of the preferred stock include a Beneficial Conversion Feature. The value assigned to the Beneficial Conversion Feature, as determined using the quoted market price of the Company's common stock on the date the Series A Preferred Stock was sold, amounted to \$616,000, which represents a discount to the value of the Series A Preferred Stock (the "Discount"). The Discount is being accreted using the straight-line method through March 9, 1999. Approximately \$376,000 of the Discount was accreted in

Net Loss. The net loss applicable to common stockholders for 1998 increased by 138% from \$4,478,000 in 1997 to \$10,644,000 in 1998. The increase in the loss is due primarily to lower gross margins, higher operating expenses, the write-off of the Company's pro-rata share of losses on its investment in MBHC, and amounts attributable to the preferred stock accretion in connection with the private placement in September of 1998.

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 \$36.6 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 \$4,438,000 and \$8,846,000 in 1997 and 1998, respectively. Net cash used for operations in each of these periods resulted primarily from the net loss. Cash used for operations in 1997 reflected an increase in accounts receivable and inventories. Cash used for operations in 1998 reflected an increase in accounts receivable and inventories, partially offset by an increase in customer deposits. 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 ("NST"). The Company received reimbursements from this program of approximately \$317,000 and \$514,000 for 1997 and 1998, respectively.

The Company used cash in investing activities of approximately \$924,000 and \$4,259,000 in 1997 and 1998, respectively. The Company's investing activities have consisted primarily of expenditures for property and equipment that totaled approximately \$377,000 and \$1,746,000 in 1997 and 1998, respectively, investments in sales-type leases of approximately \$453,000 in 1997 and payments of \$119,000 in connection with the purchase of IMMI in 1997. In 1998, the Company also invested \$2,024,000 in marketable securities and \$563,000 in MBHC.

Cash provided by financing activities from inception through 1998 is comprised principally of the net cash proceeds from the sale of a convertible note in the principal amount of \$3,000,000, the sale of convertible preferred stock and warrants for \$14,676,000, the sale of Common Stock and warrants for approximately \$6,137,000 resulting from the Company's initial public offering in November 1996, approximately \$8,440,000 from the Company's European offering of Common Stock in November 1997, and the sale of convertible preferred stock and warrants for \$3,300,400 in September 1998. 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 and \$2,942,000 of preferred stock and warrants to purchase preferred stock was converted into Common Stock and warrants to purchase Common Stock in December 1995 and November 1996, respectively. In 1998, the Company also established a \$1.5 million revolving credit facility with a bank. At December 31, 1998, the outstanding amount of debt against the revolving line of credit was approximately \$678,000.

The Company expects to incur additional operating losses at least through 1999. 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 factors include the requirements for, and the time required to secure, FDA authorization to market the ROBODOC System, the progress of the Company's product development projects and market acceptance of the Company's products. Based on the Company's 1999 business plan the Company expects its current funding and cash flows from operations to be sufficient to finance its operations through 1999. It is likely, however, that the Company may require external financing in 1999 to accomplish its product development and marketing objectives and to prepare for entry into the Japanese market. Should the Company not be able to secure external financing in 1999, it will likely be required to scale back its product development objectives, thus increasing the time required to bring enhancements to the ROBODOC System's functionality to market.

YEAR 2000 COMPLIANCE

The Company has a wide variety of computers and computer software used in the normal course of business. In predominant use throughout the Company are commercially available hardware and software products that are year 2000 compliant.

The Company has potential exposure to the year 2000 computer bug in two areas. First, the Company's accounting and manufacturing system, which are not year 2000 compliant, could cause disruption of business, if it could not be upgraded or replaced by the end of 1999. Secondly, products are computer controlled, and might not function if affected by the year 2000 bug. Company products are not highly date sensitive, which minimizes the impact of any year 2000 issues identified.

Potential exposure in other areas is minimal. Any year 2000 problems with the Company's network or software used for research and development and engineering could adversely affect research and development and engineering costs, but would not immediately affect the ability to continue operations. Such issues could also be resolved in short order with commercially available products. Many of our major product components have relatively long lead times. Temporary interruptions in our supplies caused by any year 2000 issues would not significantly impact our manufacturing schedule, or our ability to service customers. In general, the company has determined that there is a minimal exposure to year 2000 problems through third parties.

The Company is in the process of selecting a solution for its accounting and manufacturing computer system. We plan to complete the replacement or upgrade by the beginning of the fourth quarter of 1999. The Company has completed initial investigations of its products and concluded that there is minimal risk of system failure due to the year 2000 problem. The Company will complete all testing by the end of April 1999.

It is estimated that the Company will need to spend less than \$100,000 to become year 2000 compliant. The majority of this cost relates to upgrading or replacing the Company's accounting and manufacturing system. Expenses include the testing conducted by the Quality Department, Engineering Department involvement in testing and de-bugging, and the Service Department upgrades to customer equipment if any such service is required.

In the worst case scenarios, the Company believes that it would have minimal business interruption due to any foreseeable year 2000 problems. Management believes alternate vendors, and off the shelf solutions will be available to solve any of the Company's undetected problems. In addition, the Company is small enough to allow it to function with minimal operating procedures for short periods of time.

Year 2000 project cost is based on management's best estimate and actual results could differ from those anticipated. If the Company or its vendors are unable to resolve the year 2000 issue in a timely manner, or if there are significant undetected year 2000 issues, such matters could have a material impact on the Company's results of operations. However, the Company believes the necessary modifications and replacement of computer systems will be completed in 1999 and, as a result, the year 2000 issue is not expected to pose significant operational or financial problems for the Company.

ITEM 7. FINANCIAL STATEMENTS.

The financial statements follow Item 13 of this report.

ITEM 8. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.

The Company did not have any changes in or disagreements with its accountants on accounting and financial disclosure.

ITEM III

ITEM 9. DIRECTORS, EXECUTIVE OFFICERS, AND PROMOTION AND CONTROL PERSONS; COMPLIANCE WITH SECTION 16(a) OF THE EXCHANGE ACT.

The information called for by this Item is incorporated by reference to the Company's definitive proxy statement for the 1999 Annual Meeting of Stockholders to be filed pursuant to Regulation 14A.

ITEM 10. EXECUTIVE COMPENSATION.

The information called for by this Item is incorporated by reference to the Company's definitive proxy statement for the 1999 Annual Meeting of Stockholders to be filed pursuant to Regulation 14A.

ITEM 11. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT.

The information called for by this Item is incorporated by reference to the Company's definitive proxy statement for the 1999 Annual Meeting of Stockholders to be filed pursuant to Regulation 14A.

ITEM 12. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS.

The information called for by this Item is incorporated by reference to the Company's definitive proxy statement for the 1999 Annual Meeting of Stockholders to be filed pursuant to Regulation 14A.

ITEM 13. EXHIBITS AND REPORTS ON FORM 8-K.

H to Exhibit 10.5 herein).*

(a) Exhibits:

4.10

4.11

3.1 Form of Certificate of Incorporation of the Registrant amended.	, as
· · · · · · · · · · · · · · · · · · ·	, as
3.2 By-laws of the Registrant.*	
4.1 Form of warrant issued to the underwriters for the Registrant's initial public offering in November 1996.	*
4.2 Form of Warrant Agreement relating to the Registrant's Redeemable Common Stock Purchase Warrants.*	
4.3 Specimen Common Stock Certificate.*	
4.4 Specimen Warrant Certificate (included as Exhibit A to Exhibit 4.2 herein).*	
4.5 1998 Stock Option Plan.***	
4.6 Employee Stock Purchase Plan.***	
4.7 Common Stock Purchase Warrant issued by the Registrant International Business Machines Corporation ("IBM"), d February 6, 1991, as amended (included as Exhibit J to Exhibit 10.5 herein).*	ated
4.8 Stockholders' Agreement between the Founders of the Registrant and IBM, dated February 6, 1991, as amended	.*
4.9 Common Stock Purchase Warrant issued by the Registrant IBM, dated December 21, 1995 (included as Exhibit I to Exhibit 10.5 herein).*	

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 Registrant, IBM,

Series D Preferred Stock Purchase Warrant issued by the Company to IBM, dated December 21, 1995 (included as Exhibit

Warrant issued by the Registrant to Sutter Health, Sutter

Health Venture Partners ("Sutter Health VP") and Keystone

4.12 Registration Rights Agreement among the Registrant, 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).*

EXHIBIT	DESCRIPTION
4.13 4.14	1995 Stock Option Plan, as amended.* Series D Preferred Stock Purchase Warrant issued by the Registrant to IBM, dated February 29, 1996 (together with the warrant referred to in Exhibit 4.10, the "Series D
	Warrants").*
4.15	Form of Lock-up Agreement.*
4.16	Letter Agreement between the Registrant and IBM dated October 29, 1997, amending the Series D Warrants and the Series D Preferred Stock and Warrant Purchase Agreement among the Registrant, IBM and EJ Financial, dated December 21, 1995.**
4.17	Form of warrant issued to CA IB Investmentbank Aktiengesellschaft and Value Management & Research GmbH.**
4.18	Preferred Stock Purchase Agreement, as amended.****
4.19	Certificate of Designations for Series A Convertible Preferred Stock.****
4.20	Form of Warrant issued to purchasers of Series A Convertible Preferred Stock.****
4.21	Form of Registration Rights Agreement for Series A Convertible Preferred Stock financing.****
10.1	Loan and Warrant Purchase Agreement between the Registrant and IBM, dated as of February 6, 1991.*
10.2	License Agreement between the Registrant and IBM, dated February 4, 1991.*
10.3	Series B Preferred Stock Purchase Agreement among the Registrant, Sutter Health and The John N. Kapoor Trust, dated as of April 10, 1992.*
10.4	Series C Preferred Stock Purchase Agreement among the Registrant, Sutter 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 Registrant, IBM and EJ Financial, dated December 21. 1995.*
10.6	Investors Agreement among the Registrant, 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 Registrant and Ramesh Trivedi, dated December 8, 1995.*
10.8	License Agreement between the Registrant and IBM, dated February 4, 1991.*
10.9	Agreement for the Purchase and Use of Sankyo Industrial Products between the Registrant and Sankyo Seiki (American) Inc. dated November 1, 1992.*
10.10	Stock Purchase Agreement dated as of September 5, 1997 between the Registrant and the holders of the outstanding capital stock of Innovative Medical Machines International, S.A.**
10.11	Registration Rights Agreement dated September 5, 1997 by and among the Registrant and the holders of the outstanding

Financial Data Schedule.

23.1

27.1

* Incorporated by reference to the Company's Registration Statement on Form SB-2 (Registration No. 3339207), declared effective on November 20, 1996.

capital stock of Innovative Medical Machines International,

Consent of Ernst & Young LLP, Independent Auditors.

** Incorporated by reference to the Company's Registration Statement on Form SB-2 (Registration No. 333-31481), declared effective on November 14, 1997.

*** Incorporated by reference to the Company's Annual Report on Form 10-KSB for the fiscal year ended December 31, 1997.

**** Incorporated by reference to the Company's Registration Statement on Form S-3 (Registration No. 333-66133), declared effective on January 14, 1999.

SIGNATURES

In accordance with Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

INTEGRATED SURGICAL SYSTEMS, INC.

By: /s/ RAMESH C. TRIVEDI
Ramesh C. Trivedi, President

Ramesh C. Trivedi, President (Principal Executive Officer)

By: /s/ MARK W. WINN

Mark W. Winn, Chief Financial Officer (Principal Financial and Accounting Officer)

Dated: March 25, 1999

Patrick G. Hays

In accordance with the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant on March 25, 1999 in the capacities indicated.

SIGNATURE TITLE

/s/ RAMESH C. TRIVEDI Chief Executive Officer, President and a _____ Director (Principal Executive Officer) Ramesh C. Trivedi Chief Financial Officer (Principal Financial /s/ MARK W. WINN and Accounting Officer) Mark W. Winn /s/ JAMES C. MCGRODDY Director James C. McGroddy /s/ JOHN N. KAPOOR Director John N. Kapoor /s/ PAUL A.H. PANKOW Paul A.H. Pankow Director Gerald D. Knudson /s/ PATRICK G. HAYS Director

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REPORT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS

The Board of Directors and Stockholders Integrated Surgical Systems, Inc.

We have audited the accompanying consolidated balance sheet of Integrated Surgical Systems, Inc. as of December 31, 1998, and the related consolidated statements of operations, stockholders' equity, and cash flows for the years ended December 31, 1997 and 1998. 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, 1998, and the consolidated results of its operations and its cash flows for the years ended December 31, 1997 and 1998 in conformity with generally accepted accounting principles.

ERNST & YOUNG LLP

Sacramento, California February 12, 1999

CONSOLIDATED BALANCE SHEET

DECEMBER 31, 1998

ASSETS

ASSETS	
Current assets: Cash and cash equivalents. Short-term investments. Accounts receivable. Inventory. Other current assets.	\$ 223,581 2,024,278 1,905,138 3,005,658 464,421
Total current assets Net property and equipment Leased equipment, net Long-term net investment in sales-type leases. Intangible assets, net Other assets	7,623,076 1,350,839 641,411 262,334 3,014,978 272,532
	\$ 13,165,170 =======
LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities:	
Accounts payable Value added taxes payable Accrued payroll and related expenses Customer deposits Accrued product retrofit costs. Current portion of bank loans. Other current liabilities.	\$ 1,475,754 347,584 471,278 896,276 135,348 897,021 732,594
Total current liabilities	4,955,855 7,505 143,200
Convertible preferred stock, \$0.01 par value, 1,000,000 shares authorized, 3,520 shares issued and outstanding (\$3,520,000 aggregate liquidation value)	35 56,504 42,343,287 (85,638) (239,736) 207,216 (34,223,058)
Total stockholders' equity	8,058,610 \$ 13,165,170 =======

See accompanying notes. F-3

CONSOLIDATED STATEMENTS OF OPERATIONS

	YEARS ENDED DECEMBER 31,		
		1998	
Net sales Cost of sales	\$ 4,933,824 2,182,842	\$ 6,146,434 3,413,221	
Operating expenses:	2,750,982	2,733,213	
Selling, general and administrative	3,701,264 3,063,925 155,474 331,668	6,216,240 6,602,550 131,352	
Other income (expense):	7,252,331		
Interest income Interest expense Foreign currency gain (loss) Other, net	(147,390) 32,028	(124,095) 129,158 (269,737)	
Loss before provision for income taxes		(10,240,644) 27,235	
Net loss Preferred stock accretion	(4,478,104)		
Net loss applicable to common stockholders	\$(4,478,104)	\$(10,644,143) =======	
Basic and diluted net loss per share		\$ (1.91)	
Shares used in computing basic net loss per share			

See accompanying notes.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

	CONVERTIBLE PREFERRED STOCK		COMMON STOCK		ADDITIONAL PAID-IN	DEFERRED STOCK	PREFERRED STOCK	ACCUMULATED OTHER COMPREHENSIVE
	SHARES	AMOUNT	SHARES	AMOUNT	CAPITAL	COMPENSATION	DISCOUNT	INCOME
Balance at December 31, 1996 Exercise of stock options Issuance of stock options to		\$ 	3,361,161 18,374	\$33,611 184	\$25,807,264 18,416	\$(426,417) 	\$	\$ 8,657
consultantIssuance of warrants to					23,270			
consultant					65,625			
Acquisition of IMMI Issuance of common stock to			619,355	6,194	3,883,356			
consultantSale of common stock, net of			4,500	45	28,215			
offering expenses			1,500,000	15,000	8,425,103			
Stock compensation expense Comprehensive loss:					(31,413)	186,887		
Net loss Foreign currency translation								
adjustments								17,615
Comprehensive loss								
Balance at December 31, 1997			5,503,390	55,034	38,219,836	(239,530)		26,272
Exercise of stock options Issuance of stock options to			142,010	1,420	14,313			
consultant Sale of common stock					208,386			
warrants Sale of convertible preferred stock and warrants, net of					6,930			
offering expenses	3,520	35	5,000	50	3,300,362			
Stock compensation expense					(22,540)	153,892		
Preferred stock discount					616,000		(616,000)	
Preferred stock accretion Comprehensive loss:							376,264	
Net loss Unrealized gains of								
securities Foreign currency translation								50,626
adjustments								130,318
Comprehensive loss								·
Balance at December 31, 1998		\$35	5,650,400	\$56,504	\$42,343,287 =======	\$ (85,638)	\$ (239,736)	\$207,216

TOTAL

	ACCUMULATED DEFICIT	STOCKHOLDERS EQUITY
Balance at December 31, 1996 Exercise of stock options Issuance of stock options to	\$(19,100,811) 	\$ 6,322,304 18,600
consultantissuance of warrants to		23,270
consultant		65,625
Acquisition of IMMI Issuance of common stock to		3,889,550
consultant		28,260
offering expenses		8,440,103
Stock compensation expense Comprehensive loss:		155,474
Net loss Foreign currency translation	(4,478,104)	(4,478,104)
adjustments		17,615
Comprehensive loss		(4,460,489)
Balance at December 31, 1997	(23,578,915)	14,482,697
Exercise of stock options Issuance of stock options to		15,733
consultantSale of common stock		208,386
warrants Sale of convertible preferred stock and warrants, net of		6,930
offering expenses		3,300,447
Stock compensation expense		131,352
Preferred stock discount		

Preferred stock accretion Comprehensive loss:	(376,264)	
Net loss	(10,267,879)	(10,267,879)
Unrealized gains of securities Foreign currency translation		50,626
adjustments		130,318
Comprehensive loss		(10,086,935)
Balance at December 31, 1998	\$(34,223,058)	\$ 8,058,610

See accompanying notes. F-5

CONSOLIDATED STATEMENTS OF CASH FLOWS

INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS

	YEARS ENDED DECEMBER 31,		
	1997	1998	
Cash flows from operating activities:			
Net loss	\$(4,478,104)	\$(10,267,879)	
DepreciationIn-process research and development acquired	228,788 331,678	579,666 	
Amortization of intangible assetsStock compensation	279,680 155,474	839,040 131,352	
Issuance of stock options to consultant Unrealized gain on short-term investments	23,270	208,386 50,626	
Equity in net loss of Marbella High Care B.V		317,000	
Accounts receivable	(809,338) (894,739)	(478,596) (1,110,320)	
Other current assets	(155,998) 532,121	9,188 65,539	
Value added taxes payable	160,809	(91,098)	
Accrued payroll and related expenses Customer deposits	126,997 13,672	54,655 757 604	
Other current liabilities	46,592	757,604 262,217	
Note payable	, 778	262,217 (203)	
Net cash used in operating activities	(4,438,320)		
Purchase of short-term investments		(2,024,278)	
Investment in Marbella High Care B.V	(453,250)	(563, 273)	
Principal payments received on sales-type lease	19,967		
Purchases of property and equipment	(376,573)		
cash acquired Decrease (increase) in other assets	(118,880) 4,446	(12,868)	
Net cash used in investing activities			
Cash flows from financing activities:		(4, 258, 121)	
Proceeds from bank loansPayments on bank loans	71,422 (94,421)	678,447 (69,138)	
Proceeds from sale of preferred stock and warrants		3,300,447	
Net proceeds from sale of common stock and warrants Proceeds from exercise of stock options	8,440,103 18,600		
Net cash provided by financing activities Effect of exchange rate changes on cash and cash	8,435,704	3,932,419	
equivalents	17,615	130,318	
Net increase (decrease) in cash and cash equivalents Cash and cash equivalents at beginning of year	3,090,709 6,001,079	(8,868,207)	
Cash and cash equivalents at end of year	\$ 9,091,788 =======	\$ 223,581 =======	
Supplemental disclosure of cash flow information:			
Cash paid for interest	\$ 25,392	\$ 118,925	

See accompanying notes. F-6

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 1998

1. DESCRIPTION OF BUSINESS

Integrated Surgical Systems, Inc. (the "Company") was incorporated on October 1, 1990 in Delaware. The Company develops, manufactures, markets and services computer-controlled, image-directed robotic products for surgical applications. The Company's principal product is the ROBODOC(R) Surgical Assistant System (ROBODOC(R)), which is designed for orthopedic applications. ROBODOC(R) is currently marketed in Europe.

On September 5, 1997, the Company acquired all of Innovative Medical Machines International, S.A.'s ("IMMI") issued and outstanding capital stock, stock warrants and convertible debt in a transaction accounted for as a purchase (Note 3). IMMI develops, manufactures and markets image guided robotic devices for surgical applications. Its principal product is the NeuroMate(R), a computer controlled surgical robot supporting neurosurgical procedures.

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.

2. SIGNIFICANT ACCOUNTING POLICIES

CONSOLTDATION

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

FOREIGN CURRENCY TRANSLATION

The financial position and results of operations of IMMI and Integrated Surgical Systems BV are measured using their respective local currencies. The subsidiary balance sheet accounts are translated at the 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 gain (loss) was (\$147,390) and \$129,158 during the years ended December 31, 1997 and December 31, 1998, respectively.

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(R) sold for clinical trials have been accrued in the accompanying financial statements. Future retrofit costs are those expected to be required to update ROBODOC(R) 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 reductions of expense 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 AND SHORT-TERM INVESTMENTS

The Company invests its excess cash in various investment grade, interest-bearing securities. As of December 31, 1998, cash equivalents and short-term investments consisted of money market mutual funds, U.S. Treasury Strips and a certificate of deposit. The Company has not experienced any losses on such investments.

Management determines the appropriate classification of debt securities at the time of purchase and re-evaluates such designation as of each balance sheet date. At December 31, 1998, the Company's entire portfolio of investments is classified as available-for-sale. These securities are stated at fair market value, determined based on quoted market prices, with the unrealized gains and losses reported in a separate component of stockholders' equity.

The amortized cost of debt securities classified as available-for-sale is adjusted for amortization of premiums and accretion of discounts to maturity, over the estimated life of the security. Such amortization is included in interest income. Realized gains and losses were not material in any year presented. The cost of securities sold is based on the specific identification method.

For purposes of reporting cash flows, the Company considers highly liquid investments with original maturities of three months or less as cash equivalents.

FAIR VALUES OF FINANCIAL INSTRUMENTS

The carrying values of the bank loans approximate their fair values as of December 31, 1998, based on current incremental borrowing rates for similar types of borrowing arrangements.

Active markets for the Company's other financial instruments that are subject to the fair value disclosure requirements of Statement of Financial Accounting Standards No. 107, which consist of long-term lease receivables and notes payable, do not exist and there are no quoted market prices for these assets and liabilities. 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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED)

INTANGIBLE ASSETS

The Company continually evaluates the value and future benefits of its intangible assets. The Company assesses recoverability from future operations using cash flows and income from operations of the related acquired business as measures. Under this approach, the carrying value would be reduced if it becomes probable that the Company's best estimate for expected future cash flows of the related business would be less than the carrying amount of the related intangible assets. There have been no adjustments to the carrying amounts of intangible assets resulting from these evaluations as of December 31, 1998.

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.

NET INVESTMENT IN SALES-TYPE LEASES

The net investment in sales-type leases consists of the following at December 31, 1998:

Total minimum lease payments receivableLess unearned interest	
Net investment in sales type leases	350,076
Less current portion	(87,742)
Long-term net investment in sales-type leases	\$262,334
	=======

The following represents future minimum lease payments to be received by the Company under its net investment in sales-type leases as of December 31, 1998:

	=======
	\$388,904
2002	,
2001	106,667
2000	106,667
1999	\$106,667

OPERATING LEASES

The Company leases certain of its ROBODOC systems to customers under cancelable operating leases. The typical lease period is 5 years and certain of the leases contain purchase options. The cost of equipment under operating leases as of December 31, 1998 was \$733,781 and the related accumulated amortization thereon was \$92,370.

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 and service support of the ROBODOC(R) and NeuroMate(TM) Systems. Inventory consists of the following at December 31, 1998:

Raw materials	\$1,057,141
Work-in process	763,624
Finished goods	1,184,893
	\$3,005,658
	========

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED)

STOCK-BASED COMPENSATION

As permitted under the provisions of Statement of Financial Accounting Standards No. 123 "Accounting for Stock-Based Compensation" ("SFAS No. 123"), the Company has elected to account for stock-based compensation using the intrinsic value method prescribed by Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees" ("APB No. 25"). Under the intrinsic value method, compensation cost is the excess, if any, of the quoted market price or fair value of the stock at the grant date or other measurement date over the amount an employee must pay to acquire the stock.

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

In 1997, the Financial Accounting Standards Board ("FASB") issued Statement No. 128, Earnings per Share. Statement 128 replaced the calculation of primary and fully diluted earnings per share with basic and diluted earnings per share. Unlike primary earnings per share, basic earnings per share excludes any dilutive effects of options, warrants and convertible securities. Diluted earnings per share is very similar to the previously reported fully diluted earnings per share. All earnings per share amounts have been presented on the basis set forth in Statement 128 (Note 10).

SIGNIFICANT CUSTOMERS AND FOREIGN SALES

The Company recognized approximately 86% of its revenues from seven customers, each representing at least 10% of the Company's total revenue, during the year ended December 31, 1997 and 64% of its revenue from five customers each representing at least 10% of the Company's total revenue, during the year ended December 31, 1998. Foreign sales were approximately \$4,919,000 and \$6,005,000 for the years ended December 31, 1997 and December 31, 1998, respectively.

NEW ACCOUNTING PRONOUNCEMENTS

As of January 1, 1998, the Company adopted Statement 130, Reporting Comprehensive Income. Statement 130 establishes new rules for the reporting and display of comprehensive income and its components. Statement 130 requires unrealized gains or losses on the Company's available-for-sale securities and the foreign currency translation adjustments, which prior to adoption were reported separately in stockholders' equity, to be included in other comprehensive income. Prior year financial statements have been reclassified to conform to the requirements of Statement 130.

In June 1998, the Financial Accounting Standards Board issued Statement 133, Accounting for Derivative Instruments and Hedging Activities, which is required to be adopted in years beginning after June 15, 1999. Management does not anticipate that the adoption of the new Statement will have a significant effect on earnings or the financial position of the Company.

RECLASSIFICATIONS

Certain amounts reported in prior years financial statements have been reclassified to conform with the 1998 presentation.

3. ACQUISITION OF IMMI

Effective September 5, 1997, ISS acquired all of IMMI's issued and outstanding capital stock, stock warrants and convertible debt in a transaction accounted for as a purchase. The purchase price included 619,355 shares of ISS common stock with a fair market value of approximately \$3.9 million and liabilities assumed and acquisition costs of approximately \$1.1 million. The purchase agreement places certain restrictions on the future sale of the ISS stock issued in connection with the purchase for a period of eighteen months.

The purchase price consists of the following:

619,355 shares of ISS common stock	\$3,889,549
Liabilities assumed	883,044
Acquisition costs	266,085
	\$5,038,678
	========

The Company retained independent valuation professionals to assist in the values to be assigned to the individual assets acquired including the intangibles and in-process research and development. A summary of the allocation of purchase price is as follows:

Tangible assets acquired	\$ 573,302
Identified intangible assets	4,133,698
In-process research and development	331,678
	\$5,038,678
	========

Intangible assets consist primarily of developed technology relating to the NeuroMate(R). Accumulated amortization on intangible assets was \$1,118,720 as of December 31, 1998. In the opinion of ISS and IMMI management, the developed technology was completed and had alternative future uses. The estimated useful lives are expected to range from 3 to 5 years. ISS management did not believe that technological feasibility of the acquired in-process research and development had been established. Further, ISS management believed the acquired in-process research and development has no alternative future uses. Therefore, the amount allocated to in-process research and development was required to be immediately expensed under generally accepted accounting principles.

The following represents unaudited proforma statement of operations information as if the acquisition of IMMI occurred on January 1, 1997.

	YEAR ENDED DECEMBER 31, 1997 (UNAUDITED)
Revenue	\$ 5,554,000
Net loss	\$(5,394,000)
Basic net loss per share	\$ (1.24) =======

The above proforma information is presented for illustrative purposes only and may not be indicative of the results that would have been obtained had the transaction actually occurred on January 1, 1997, nor is it necessarily indicative of future combined results of operations.

4. SHORT-TERM INVESTMENTS

Marketable debt securities are classified as available for sale and consist of 1,849,000 shares of U.S. Treasury Strips. The shares have an original cost of \$1,767,773 on August 11, 1998 and a fair market value of \$1,818,399 at December 31, 1998. The shares mature on May 15, 1999. The shares noted above have been pledged as collateral for the line of credit with a bank (Note 7). The net unrealized holding gain as of December 31, 1998 of \$50,626 has been included as a separate component of stockholders' equity.

Additionally, the Company purchased a 1-year certificate of deposit in June 1998 having an original cost of \$200,000 and a fair market value of \$205,879 on December 31, 1998. The certificate of deposit is collateral under a letter of credit to the benefit of the lessor of the Company's U.S. facility. The letter of credit expires on June 30, 1999.

5. PROPERTY AND EQUIPMENT

Property and equipment consists of the following at December 31, 1998:

ROBODOC and NeuroMate System equipmentOther equipmentFurniture and fixtures.	1,677,695
Leasehold improvements	- /
Less accumulated depreciation	3,058,202 (1,707,363)
	\$ 1,350,839 ========

6. INVESTMENT IN MARBELLA HIGH CARE B.V.

Other assets consist primarily of the Company's investment in and advances to Marbella High Care B.V. ("MBHC"). As of December 31, 1998, the Company owned 22% of the outstanding shares of MBHC and accounts for its investment under the equity method. The Company's gross investment in MBHC, including loans, was approximately \$563,000 in 1998. For the year ended December 31, 1998, the Company recorded \$317,000 of expense relating to its investment and advances in MBHC for the period, which has been included in other income (expense).

7. BANK LOANS AND NOTE PAYABLE

Bank loans consist of the following at December 31, 1998:

Develoine line of andit established in love 4000 with an

Revolving line of credit established in June 1998 with an available amount of \$1.5 million at December 31, 1998,	
with interest accruing at prime plus .75% per annum	
(aggregating 8.5% as of December 31, 1998) and expiring on	
June 15, 1999	\$678,447
Revolving line of credit established in July 1996 for five	
years with an available amount of \$196,900 at December 31,	
1998, with interest accruing at 7.15% per annum. The amount available decreases quarterly by 5% of the original	
amount beginning October 1996	196,900
Bank term loan with monthly principal and interest payments	100,000
of approximately \$1,762 over three years from May 1997,	
with interest accruing at 5.75% per annum	29,179
	904,526
Less current portion	897,021
Long-term bank loans	\$ 7,505
	=======

The \$1.5 million revolving line of credit is secured by a security interest in the Company's marketable securities with a carrying value of \$1,818,399 at December 31, 1998. The Company is required to maintain sufficient collateral equal to or greater than the credit limit, plus \$100,000.

The bank term loan is secured by substantially all of IMMI's tangible assets (with a net book value of approximately \$1,804,000 at December 31, 1998) and is guaranteed by the Company.

The Company received an interest free loan with a balance of \$143,200 at December 31, 1998 from a grant organization for the development of a new system. In the case of failure of the project, the grant organization may decide to forgive all or part of the repayments. If the Company sells either a license for the related technology, the prototype developed, or articles manufactured specifically for the research project, 50% of the revenue must be paid to the grant organization in the subsequent year, up to the balance of the loan amount outstanding. According to the contract, any such payments would be considered to be an advance repayment of the loan. The Company has not made any sales of this type through December 31, 1998.

8. STOCKHOLDERS' EQUITY

COMMON STOCK

As of December 31, 1998 the Company has reserved a total of 8,333,782 shares of common stock pursuant to Series A Convertible Preferred Stock, warrants and options outstanding and reserved for future issuance.

INITIAL PUBLIC OFFERING

In November 1996, the Company sold in its initial public offering, a total of 1,525,000 shares of common stock at \$5.00 per share and 1,753,750 warrants at \$0.10 per warrant. In addition, the Company sold to its underwriter warrants to purchase an additional 305,000 shares for total consideration of \$10.00. The net proceeds after underwriters' commissions and fees and other costs associated with the offering were approximately \$6,137,000.

Each warrant entitles the holder 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 20, 1997, and thereafter for a period of four years. The warrants are subject to redemption by the Company at \$0.10 per warrant at any time during the exercise period on not less than 30 days prior written notice to the holders of the warrants provided certain criteria regarding the price performance of the Company's common stock are met.

EUROPEAN OFFERING

On November 20, 1997, the Company sold 1,500,000 shares of Common Stock at approximately \$7.00 per share in an offering to European investors (the "European Offering"). In addition, the Company sold to its underwriters in the European Offering warrants to purchase an additional 150,000 shares for nominal consideration. The net proceeds of the European Offering were approximately \$8.440.000.

Each of the warrants issued to the European Offering underwriters entitles the holder to purchase one share of common stock at an exercise price of \$8.26 per share at any time during the period commencing November 21, 1998, and thereafter for a period of four years.

CONVERTIBLE PREFERRED STOCK

As part of a Stock Purchase Agreement in December 1995 the Company sold a warrant for \$1,333,333 to purchase 1,386,390 shares of Series D Preferred Stock at \$0.01 per share, and in February 1996 sold a warrant for \$666,667 to purchase 693,194 shares of Series D Preferred Stock at \$0.01 per share. On October 29, 1997,

the Company and IBM executed an amendment to the Stock Purchase Agreement pursuant to which the Company and IBM agreed that these combined warrants to purchase 2,079,584 shares of Series D Preferred Stock would be exercisable only for 2,079,584 shares of Common Stock at \$0.01 per share. The warrants expire on December 31, 2005 and have not been exercised as of December 31, 1998. Also on October 29, 1997, the Company delivered to CA IB Investmentbank AG ("CA IB") an agreement not to issue any shares of Common Stock, or any warrants, options or other rights to subscribe for or purchase shares of Series D Preferred Stock, or any other securities convertible into or exercisable or exchangeable for, Series D Preferred Stock, without the consent of CA IB. In addition, the Company's management caused the Board of Directors to present a resolution at the annual meeting of the Company's stockholders to amend the Company's Restated Certificate of Incorporation to eliminate the Series D Preferred Stock therefrom. On April 28, 1998 elimination of Series D Preferred Stock was adopted by the Company's stockholders.

In November 1996, the Board of Directors amended, and the stockholders subsequently approved, the Company's Articles of Incorporation to authorize 1,000,000 shares of undesignated preferred stock. Preferred stock may be issued from time to time in one or more series. The Board of Directors is authorized to determine the rights, preferences, privileges and restrictions granted to and imposed upon any wholly unissued series of preferred stock and designation of any such series without any vote or action by the Company's stockholders.

In September 1998, the Company received net proceeds of \$3,300,447 from the sale of 3,520 shares of Series A Convertible Preferred Stock ("Series A Preferred Stock") and warrants ("Warrants") to purchase 44,000 shares of common stock ("Common Stock").

The Series A Preferred Stock is convertible into shares of Common Stock, at the option of the holder, commencing December 9, 1998, subject to certain limitations, discussed below. The number of shares of Common Stock issuable upon conversion of the Series A Preferred Stock is equal to the quotient of (x) the product of \$1,000 (the stated value of each share of Series A Preferred Stock) and the number of shares of Series A Preferred Stock to be converted and (y) 85% of the lowest sale price of the Common Stock on the Nasdaq SmallCap Market during the five trading days preceding the date of conversion (the "Market Price"), but in no event more than \$4.96 (the "Conversion Price"). As of December 31, 1998, the number of common shares issuable upon conversion was 1,731,262.

Holders of Series A Preferred Stock may convert 25% of their shares commencing December 9, 1998, 50% of their shares commencing January 8, 1999, 75% of their shares commencing February 7, 1999 and 100% of their shares commencing March 9, 1999. The Company may require holders to convert all (but not less than all) of the Series A Preferred Stock at any time after August 24, 2001, or buy out all outstanding shares, at the then Conversion Price.

The value assigned to the beneficial conversion feature, as associated with the Market Price as determined using the quoted market price of the Company's common stock on the date the Series A Preferred Stock was sold, amounted to \$616,000, which represents a discount to the value of the Series A Preferred Stock (the "Discount"). The Discount is being accreted using the straight-line method through March 9, 1999. Approximately \$376,000 of the Discount was accreted in 1998.

Holders of Series A Preferred Stock are not entitled to dividends and have no voting rights, unless required by law or with respect to certain matters relating to the Series A Preferred Stock.

The Company may redeem the Series A Preferred Stock upon written notice to the holders of the Series A Preferred Stock at any time after the earlier of January 10, 1999 and the closing of a registered firm underwritten secondary offering of equity securities, at a redemption price equal to the greater of \$1,500 per share and the Market Price of the Shares of Common Stock into which such Series A Preferred Stock could have been converted on the date of the notice of redemption.

The Warrants are exercisable at any time during the period commencing March 5, 1999 and ending March 5, 2002, at an exercise price of \$4.31, subject to adjustment. The Conversion Price and the number of shares of Common Stock issuable upon conversion are subject to adjustment based upon certain future events.

TSSUANCE OF STOCK AND STOCK WARRANTS

In September 1997, the Company issued 4,500 shares of Common Stock and warrants to purchase 25,000 shares of Common Stock (with an aggregate estimated fair value of \$93,885) to Rickel & Associates, Inc. for services performed in connection with the acquisition of IMMI. The warrants have an exercise price of \$7.50 per share and expire in September 2002.

In September 1998, the Company issued 5,000 shares of Common Stock (with an aggregate estimated fair value of \$20,625) to Trinity Capital Advisors, Inc. for services performed in connection with the Series A Preferred Stock offering.

STOCK OPTION PLANS

The Company has elected to follow Accounting Principles Board Opinion No. 25 "Accounting for Stock Issued to Employees" and related Interpretations in accounting for its employee stock options because, as discussed below, the alternative fair value accounting provided for under FASB Statement No. 123, "Accounting for Stock-Based Compensation," requires use of option valuation models that were not developed for use in valuing employee stock options.

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"). The Company adopted a third plan on April 28, 1998 (the "1998 Plan"). Certain employees of the Company surrendered their options under the 1991 Plan in return for new and additional options granted under the 1995 Plan. During the year ended December 31, 1998, the Company reduced the exercise prices of certain outstanding stock options with exercise prices ranging from \$4.31 to \$8.63 (377,752 options) to \$3.00 per share which was the fair market value of common stock as determined by the Company's Board of Directors on the date of repricing. 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, 2,099,070 shares of the Company's common stock have been reserved for issuance under the Plans. Options granted generally have a term of ten 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.

Pro forma information regarding net income (loss) and earnings (loss) per share is required by SFAS No. 123, which also requires that the information be determined as if the Company has accounted for its employee stock options granted subsequent to December 31, 1994 under the fair value method of that Statement. The fair value for these options was estimated at the date of grant using the Black-Scholes option pricing model with the following weighted-average assumptions for 1997 and 1998, respectively: risk-free interest rates of 6.0% and 5.0%; dividend yield of 0%; volatility factors of the expected market price of the Company's common stock of 0.55 and 0.77; and an expected life of the option of 4 years.

The Black-Scholes option valuation model was developed for use in estimating the fair value of traded options which have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions including the expected stock price volatility. Because the

Company's employee stock options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, in management's opinion, the existing models do not necessarily provide a reliable single measure of the fair value of its employee stock options. For purposes of pro forma disclosures, the estimated fair value of the options is amortized to expense over the vesting period. The Company's pro forma information follows:

	1997	1998
Pro forma net loss Pro forma basic net loss per share		

Because SFAS No. 123 is applicable only to options granted subsequent to December 31, 1994, its pro forma effect will not be fully reflected until 1999.

The following summarizes activity under the Plans for the years ended December 31, 1997 and 1998:

	NUMBER OF SHARES	WEIGHTED AVERAGE EXERCISE PRICE
Outstanding at December 31, 1996 (at \$0.07 to \$7.84 per share)	947,184 354,334 (79,771) (18,374)	
Outstanding at December 31, 1997 (at \$0.07 to \$8.88 per share)	1,203,373 724,252 (456,356) (142,010)	1.97 3.23 5.33 0.11
Outstanding at December 31, 1998 (at \$0.07 to \$8.88 per share)	1,329,259	\$1.93

All options granted in 1997 and 1998 were granted with option prices equal to the fair market value of the Company's stock on the grant date. The weighted average exercise price of options granted in 1997 was \$6.60 and the weighted average grant date fair value of these options was \$3.16.

The weighted average exercise price of options granted in 1998 with option prices equal to the fair market value of the Company's stock on the grant date was \$3.23 and the weighted average grant date fair value of these options was \$1.47.

The following summarizes information related to options outstanding and options exercisable at December 31, 1998:

EXERCISE PRICE		OPTIONS OUTSTANDING	WEIGHTED AVERAGE EXERCISE PRICE	WEIGHTED AVERAGE REMAINING CONTRACTUAL LIFE (IN YEARS)	OPTIONS EXERCISABLE	WEIGHTED AVERAGE EXERCISE PRICE	
,	. 07		606 040	\$0.07	7.4	500 475	Φ0. 07
	\$0.07		696,348	\$0.07	7.1	598,475	\$0.07
	\$2.07		6,760	\$2.07	7.5	4,084	\$2.07
\$2.84	-	\$3.00	374,502	\$3.00	9.7	28,477	\$3.00
\$3.13	-	\$3.94	50,750	\$3.67	9.7		
\$4.00	-	\$4.88	40,500	\$4.71	9.4		
\$5.00	-	\$6.13	106,399	\$5.35	8.1	50,220	\$5.29
\$7.00	-	\$8.88	54,000	\$7.98	8.8	17,024	\$7.98
			1,329,259	\$1.93	8.2	698,280	\$0.77
			=======	=====	===	======	=====

Of the options outstanding at December 31, 1998, options to purchase 698,280 shares of common stock were immediately exercisable at a weighted-average exercise price of \$0.77 per share. A total of 197 shares were still available for grant under the 1995 Plan at December 31, 1998. A total of 421,248 shares were still available for grant under the 1998 Plan at December 31. 1998.

During the year ended December 31, 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. The Company recorded a reduction of \$31,413 and \$22,540 in deferred stock compensation relating to canceled options in 1997 and 1998, respectively. Compensation expense of \$155,474 and \$131,352 was recorded during the years ended December 31, 1997 and 1998, respectively, relating to these options. The remaining \$85,638 will be amortized into expense in future periods.

9. INCOME TAXES

The income tax provisions for the years ended December 31, 1997 and 1998 are comprised of currently payable state franchise taxes and currently payable foreign income taxes.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (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, 1997 and 1998 are as follows:

	1997	1998
Deferred tax assets:		
Net operating loss carryover	\$ 4,677,000	\$ 5,842,000
Research and development	223,000	285,000
Accrued product retrofit costs	21,000	54,000
Inventory	93,000	330,000
Depreciation	126,000	109,000
Stock compensation	220,000	256,000
Loss on investment	,	230,000
Deferred income		358,000
Other	158,000	248,000
	5,518,000	, ,
Less: Valuation allowance	(5,518,000)	(7,712,000)
Net deferred taxes	\$	\$
	========	========

The Company expects the carryforward amounts will not be utilized prior to the expiration of the carryforward periods.

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,		
	1997	1998	
Federal benefit expected at statutory rates Net operating loss with no current benefit Other taxes Foreign income taxes		\$(3,481,777) 3,481,777 14,000 13,235	
	\$ 49,811 ======	\$ 27,235 ======	

As a result of stock sales a change of ownership (as defined in Section 382 of the Internal Revenue Code of 1986, as amended) has occurred. As a result of this change, the Company's federal and state net operating loss carryforwards generated through December 21, 1995 (approximately \$14,300,000 and \$2,600,000, respectively) will be subject to a total annual limitation in the amount of approximately \$400,000.

The Company has at December 31, 1998 a net operating loss carryover of approximately \$16,200,000 for federal income tax purposes which expires between 2005 and 2013, a net operating loss carryforward of approximately \$5,700,000 for state income tax purposes which expires through 2003, and a net operating loss carryforward of approximately \$1,500,000 for foreign income tax purposes. The Company has at December 31, 1998 research and development credit carryovers of approximately \$294,000 and \$448,000 for federal and state income tax purposes, respectively.

The Company paid \$914 and \$800 for income and franchise taxes during the years ended December 31, 1997 and 1998, respectively.

10. NET LOSS PER SHARE INFORMATION

As of December 31, 1998, outstanding options to purchase 1,329,259 shares of common stock (with exercise prices ranging from \$0.07 to \$8.88), outstanding warrants to purchase 4,551,816 shares of common stock (with exercise prices from \$0.07 to \$8.26) and 1,731,262 shares of common stock issuable upon conversion of Series A Preferred Stock could potentially dilute basic earnings per share in the future and have not been included in the computation of diluted net loss per share because to do so would have been antidilutive for the periods presented.

11. COMMITMENTS

The Company leases its U.S. facility under a non-cancelable operating lease. The lease is for a term of seven years and expires on June 2, 2005. The lease provides for rent of \$29,229 per month during the first year of the lease (plus real estate taxes and assessments, utilities and maintenance), subject to adjustment in subsequent years for cumulative increases in the cost of living index, not to exceed 4% per year.

The Company leases its European facility under a non-cancelable operating lease. The lease is for a term of eight years and expires on 2006. The lease provides for rent of \$7,197 per month.

Future payments under non-cancelable facility operating leases are approximately as follows:

1999	\$	422,000
2000		440,000
2001		450,000
2002		457,000
2003		465,000
Thereafter		
	\$2	,658,000
	==	=======

Aggregate rental expense under these leases amounted to \$135,000 and \$309,000 during the years ended December 31, 1997 and 1998, respectively.

Future minimum payments under non-cancelable equipment operating leases are approximately as follows:

1999	\$48,000
2000	33,000
2001	4,000
2002	
	\$85,000

Rental expense for these non-cancelable equipment operating leases during the years ended December 31, 1997 and 1998 was approximately \$17,000 and \$41,000, respectively.

12. CONTINGENCIES

The Company has from time to time been notified of various claims incidental to its business that are not the subject of pending litigation. While the results of claims cannot be predicted with certainty, the Company believes that the final outcome of all such matters will not have a materially adverse effect on its consolidated financial position, results of operations or cash flows.

13. 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 ("USDC"). The grant is 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 approximately \$317,000 and \$514,000 in proceeds under this grant during the years ended December 31, 1997, and 1998, respectively.

14. ANVAR GRANT

During 1996, IMMI received notification it was awarded a \$222,492 grant from the French agency Agence Nationale de Valorisation de la Recherche ("ANVAR") which is a French national agency established to aid research and development projects. The grant is to fund the clinical tests to be performed at two university hospitals on the NeuroMate system over a period of fifteen months commencing March 1997. IMMI received \$173,595 in proceeds under this grant during the year ended December 31, 1997. The grant income is being recognized ratably over the project period.

15. EMPLOYEE STOCK PURCHASE PLAN

Shareholders approved and the Board of Directors adopted the Company's Employee Stock Purchase Plan (the "Purchase Plan") at the annual Shareholders meeting held April 28, 1998. The Purchase Plan provides all eligible employees an opportunity to acquire a proprietary interest in the Company on a payroll deduction or other compensation basis at a 15% discount. The Purchase Plan is intended to qualify as an employee stock purchase plan under Section 423 of the Code. The Purchase Plan covers an aggregate of 300,000 shares of the Company's Common Stock. As of December 31, 1998, no offerings have been made to employees.

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INTEGRATED SURGICAL SYSTEMS, INC.

The undersigned, Ramesh Trivedi, being the President of Integrated Surgical Systems, Inc., corporation organized and existing under the laws of the State of Delaware (the "Corporation"), hereby certifies that:

- 1. The name of the corporation is Integrated Surgical Systems, Inc. The Corporation was originally incorporated under the same name, and the original Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on October 1, 1990.
- 2. This Certificate restates the provisions of the Corporation's Certificate of Incorporation to read as set forth in Exhibit A attached to this Certificate.
- 3. This restatement of the Corporation's Certificate of Incorporation has been duly adopted by the Corporation's Board of Directors in accordance with Sections 242 and 245 of the General Corporation Law of the State of Delaware.

IN WITNESS WHEREOF, the undersigned has hereunto caused this Certificate of Restatement of the Certificate of Incorporation to be executed on behalf of the Corporation this 26th day of November, 1996.

INTEGRATED SURGICAL SYSTEMS, INC.

By: s/ Ramesh C. Trivedi

Ramesh C. Trivedi President

EXHIBIT A

RESTATED CERTIFICATE OF INCORPORATION

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INTEGRATED SURGICAL SYSTEMS, INC.

- 1. The name of the corporation is Integrated Surgical Systems, Inc. (the "Corporation").
- 2. The address of the Corporation's registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street, in the City of Wilmington, County of New Castle, 19801. The name of the registered agent at such address is The Corporation Trust Company.
- 3. The purpose of the Corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of Delaware.
- 4. The total number of shares of capital stock that the Corporation shall have authority to issue is 16,000,000 shares, of which: 15,000,000 shares shall be common stock, \$0.01 par value per share (the "Common Stock"); and 1,000,000 shall be Preferred Stock, \$0.01 par value per share (the "Preferred Stock").

Upon the filing of this Restated Certificate of Incorporation (the "Restatement") with the Delaware Secretary of State, which is concurrent with the closing of the Corporation's initial public offering, each currently outstanding share of Series D Preferred Stock shall be converted into one share of Common Stock, and the Series D Preferred Stock shall be cancelled, retired and eliminated from the authorized capital stock of the Corporation. No fractional shares shall be issued in connection with conversion, and the number of shares issuable to each stockholder shall be determined by rounding upward to the next whole number the total number of shares held by such stockholder

The relative rights, preferences, privileges and restrictions granted to or imposed upon the respective classes of shares of capital stock or holders thereof are as set forth below:

Preferred Stock:

The Preferred Stock may be issued in one or more series, from time to time, with each such series to have such designation, powers, preferences, and relative, participating, optional or other special rights, and qualifications, limitations or restrictions thereof, as shall be stated and expressed in the resolution or resolutions providing for the issue of such series adopted

- y the Board of Directors of the Corporation, subject to the limitations prescribed by law and in accordance with the provisions hereof, the Board of Directors being hereby expressly vested with authority to adopt any such resolution or resolutions. The authority of the Board of Directors with respect to each such series shall include, but not be limited to, the determination or fixing of the following:
- (a) The distinctive designation and number of shares comprising such series, which number may (except where otherwise provided by the Board of Directors in creating such series) be increased or decreased (but not below the number of shares then outstanding) from time to time by like action of the Board of Directors;
- (b) The dividend rate of such series, the conditions and time upon which such dividends shall be payable, the relation which such dividends shall bear to the dividends payable on any other class or classes of stock or series thereof, or any other series of the same class, and whether such dividends shall be cumulative or non-cumulative;
- (c) The conditions upon which the shares of such series shall be subject to redemption by the Corporation and the times, prices and other terms and provisions upon which the shares of the series may be redeemed;
- (d) Whether or not the shares of the series shall be subject to the operation of a retirement or sinking fund to be applied to the purchase or redemption of such shares and, if such retirement or sinking fund be established, the annual amount thereof and the terms and provisions relative to the operation thereof;
- (e) Whether or not the shares of the series shall be convertible into or exchangeable for shares of any other class or classes, with or without par value, or of any other series of the same class, and, if provision is made for conversion or exchange, the times, prices, rates, adjustments, and other terms and conditions of such conversion or exchange;
- (f) Whether or not the shares of the series shall have voting rights, in addition to the voting rights provided by law, and, if so, the terms of such voting rights;
- (g) The rights of the shares of the series in the event of voluntary or involuntary liquidation, dissolution, or upon the distribution of assets of the Corporation;
- (h) Any other powers, preferences and relative participating, optional or other special rights, and qualifications, limitations or restrictions thereof, of the shares of such series, as the Board of Directors may deem advisable and as shall not be inconsistent with the provisions of this Certificate of Incorporation.

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The holders of shares of the Preferred Stock of each series shall be entitled to receive, when and as declared by the Board of Directors, out of funds legally available for the payment of dividends, dividends (if any) at the rates fixed by the Board of Directors for such series, and no more, before any cash dividends shall be declared and paid, or set apart for payment, on the Common Stock with respect to the same dividend period.

The holders of shares of the Preferred Stock of each series shall be entitled upon liquidation or dissolution or upon the distribution of the assets of the Corporation to such preferences as provided in the resolution or resolutions creating such series of Preferred Stock, and no more, before any distribution of the assets of the Corporation shall be made to the holders of shares of the Common Stock. Whenever the holders of shares of the Preferred Stock shall have been paid the full amounts to which they shall be entitled, the holders of shares of the Common Stock shall be entitled to share ratably in all remaining assets of the Corporation."

CERTIFICATE OF AMENDMENT OF THE

RESTATED CERTIFICATE OF INCORPORATION

OF INTEGRATED SURGICAL SYSTEMS, INC.

The undersigned, Ramesh Trivedi, being the Chief Executive Officer and President of Integrated Surgical Systems, Inc., a corporation organized and existing under the laws of the State of Delaware, hereby certifies that:

- The name of the corporation is Integrated Surgical Systems, Inc. (the "Corporation").
- The Restated Certificate of Incorporation of the Corporation is hereby amended by deleting Article 4 in its entirety and by substituting the following new Article 4:
 - "4. The total number of shares of capital stock that the Corporation shall have authority to issue is 16,000,000, of which 1,000,000 shares shall be preferred stock, \$0.01 par value per share (the "Preferred Stock"), and 15,000,000 shares shall be common stock, \$0.01 par value per share (the "Common Stock").

The Preferred Stock may be issued in one or more series, from time to time, with each such series to have such designation, powers, preferences, and relative, participating, optional or other special rights, and qualifications, limitations or restrictions thereof, as shall be stated and expressed in the resolution or resolutions providing for the issue of such series adopted by the Board of Directors of the Corporation, subject to the limitations prescribed by law and in accordance with the provisions hereof, the Board of Directors being hereby expressly vested with authority to adopt any such resolution or resolutions. The authority of the Board of Directors with respect to each such series shall include, but not be limited to, the determination of fixing of the following:

(a) The distinctive designation and number of shares comprising such series, which number may (except where otherwise provided by the Board of Directors in creating such series) be increased or decreased (but not below the number of shares then outstanding) from time to time by like action of the Board of Directors;

- (b) The dividend rate of such series, the conditions and time upon which such dividends shall be payable, the relation which such dividends shall bear to the dividends payable on any other class or classes of stock or series thereof, or any other series of the same class, and whether such dividends shall be cumulative or non-cumulative;
- (c) The conditions upon which the shares of such series shall be subject to redemption by the Corporation and the times, prices and other terms and provisions upon which the shares of the series may be redeemed;
- (d) Whether or not the shares of the series shall be subject to the operation of a retirement or sinking fund to be applied to the purchase or redemption of such shares and, if such retirement or sinking fund be established, the annual amount thereof and the terms and provisions relative to the operation thereof;
- (e) Whether or not the shares of the series shall be convertible into or exchangeable for shares of any other class or classes, with or without par value, or of any other series of the same class, and, if provision is made for conversion or exchange, the times, prices, rates, adjustments, and other terms and conditions of such conversion or exchange;
- (f) Whether or not the shares of the series shall have voting rights, in addition to the voting rights provided by law, and, if so, the terms of such voting rights;
- (g) The rights of the shares of the series in the event of voluntary or involuntary liquidation, dissolution, or upon the distribution of assets of the Corporation; and
- (h) Any other powers, preferences and relative participating, optional or other special rights, and qualifications, limitations or restrictions thereof, of the shares of such series, as the Board of Directors may deem advisable and as shall not be inconsistent with the provisions of this Certificate of Incorporation.

The holders of shares of the Preferred Stock of each series shall be entitled to receive, when and as declared by the Board of Directors, out of funds legally available for the payment of dividends, dividends (if any) at the rates fixed by the Board of Directors for such series, and no more, before any cash

The holders of shares of the Preferred Stock of each series shall be entitled upon liquidation or dissolution or upon the distribution of the assets of the Corporation to such preferences as provided in the resolution or resolutions creating such series of Preferred Stock, and no more, before any distribution of the assets of the Corporation shall be made to the holders of shares of the Common Stock. Whenever the holders of shares of the Preferred Stock shall have been paid the full amounts to which they shall be entitled, the holders of shares of the Common Stock shall be entitled to share ratably in all remaining assets of the Corporation."

3. This Amendment has been duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware.

IN WITNESS WHEREOF, I have hereunto set my hand and caused this Amendment to be executed on behalf of the Corporation this 13th day of May, 1998.

Integrated Surgical Systems, Inc.

By: s/ Ramesh C.Trivedi

Ramesh C. Trivedi Chief Executive Officer and President

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1 EXHIBIT 21.1

SUBSIDIARIES

Name 	Jurisdiction of Incorporation	Ownership
Integrated Surgical Systems BV	Netherlands	100%
Innovative Medical Machines International, S.A.	France	100%
Innovative Medical Machines International, Inc.	Delaware	100%
Marbella High Care BV	Netherlands	22%

CONSENT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS

We consent to the incorporation by reference in the Registration Statements (Form S-3 Nos. 333-42051, 333-66133, 333-9207, 333-16539) of Integrated Surgical Systems, Inc. and in the related Prospectuses of our report dated February 12, 1999, with respect to the consolidated financial statements of Integrated Surgical Systems, Inc. included in this Annual Report (Form 10-KSB) for the year ended December 31, 1998.

We also consent to the incorporation by reference in the Registration Statements (Form S-8 Nos. 333-44093, 333-70779) pertaining to the 1995 Stock Option Plan, As Amended, 1998 Stock Option Plan and Employee Stock Purchase Plan of Integrated Surgical Systems, Inc. of our report dated February 12, 1999, with respect to the consolidated financial statements of Integrated Surgical Systems, Inc. included in this Annual Report (Form 10-KSB) for the year ended December 31, 1998.

ERNST & YOUNG LLP

Sacramento, California March 23, 1999

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YEAR

DEC-31-1998

DEC-31-1998

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0

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