

**510(k) SUMMARY – Intuitive Surgical, Inc.**

K990144

This summary of 510(k) safety and effectiveness information is submitted in accordance with the requirements of SMDA 1990 and 21 CFR 807.92.

**510(k) Number: TBD**

**Applicant Information:**

Date Prepared: January 15, 1999  
Name: Intuitive Surgical, Inc.  
Address: 1340 W. Middlefield Road  
Mountain View, California 94043  
Contact Person: Michael A. Daniel  
Phone Number: (650) 237-7036  
Facsimile Number: (650) 526-2060

**Device Information:**

Classification: Class I / II Gynecologic Laparoscope and Accessories  
Electrocautery, Endoscope and Accessories  
Trade Name: Intuitive Surgical™ Instruments / Accessories:  
“Resposable” (limited reuse) Endoscopic Instruments  
including: Scissors, Scalpels, Forceps, Clip Applier,  
Electrocautery and accessories, Pick-ups and Needle  
Drivers / Holders for use with:  
The Intuitive Surgical™ Endoscopic Instrument Control System  
Common Name: Endoscopic Instruments and Accessories  
Classification Name: Endoscope and Accessories, 21 CFR 876.1500  
Gynecologic laparoscope and Acces. 21 CFR 884.1720

**Predicate Devices:**

The Intuitive Surgical™ Endoscopic Instruments and Tools are substantially equivalent in intended use and/or method of operation to the following predicate devices:

1. Various Class I Exempt and Class II endoscopic electrocautery surgical instruments including the Baxter Healthcare Endoscopic Instruments (K931340) and the Deknatel Snowden Pencer Diamond Touch™ Brand of Endoscopic Instruments (K960400).
2. The Intuitive Surgical™ Endoscopic Instrument Control System and selected instruments (K975001).

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## **510(k) SUMMARY – Intuitive Surgical, Inc. (Continued)**

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### **Device Description:**

The working ends and elements of the Intuitive Surgical™ Endoscopic Instruments and Accessories are essentially identical in size and shape to the predicate devices referenced and represent standard embodiments of standard surgical tools modified for use with the Intuitive Surgical™ Endoscopic Instrument Control System.

### **Intended Use:**

The Intuitive Surgical™ Endoscopic Instrument Control System is intended to assist in the accurate control of Intuitive Surgical™ Endoscopic Instruments including, rigid endoscopes, blunt and sharp endoscopic dissectors, scissors, scalpels, forceps / pick-ups, needle holders, clip applicators, endoscopic retractors, stabilizers, electrocautery and accessories during laparoscopic surgical procedures. It is intended to be used by professionals in operating room environments.

### **Comparison to Predicate Device(s):**

The Intuitive Surgical™ Instruments are essentially identical in terms of shape, size, function and tissue effect to the standard Class I and II endoscopic instruments cited. Further, the Intuitive Surgical™ Instrument Control System with the additional endoscopic instruments is substantially equivalent to the cleared Intuitive Surgical™ Instrument Control System (K975001).

### **In Vitro Test Data:**

Design analysis and comparison as well as in vitro testing confirm that basic functional characteristics are substantially equivalent to the predicate devices cited.

### **Clinical Study Data:**

An extensive prospectively randomized and concurrently controlled clinical study was performed to demonstrate substantial equivalence to the predicate devices cited in terms of safety and effectiveness.

### **Summary:**

Based upon the product technical information, intended use, and performance information provided in the pre-market notification, the Intuitive Surgical Endoscopic Instrument Control System has been shown to be substantially equivalent to currently marketed predicate devices.

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Intuitive™ and Intuitive Surgical™ is a registered trademark of Intuitive Surgical, Inc.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

David Casal, Ph.D.  
Vice President of Clinical, Regulatory  
and Quality Affairs  
Intuitive Surgical, Inc.  
1340 W. Middlefield Road  
Mountain View, California 94043

JUL 11 2000

Re: K990144

Trade Name: Intuitive Surgical™ da Vinci Endoscopic Instrument Control System and  
Endoscopic Instruments

Regulatory Class: II

Product Code: NAY

Dated: 18 November 1999

Received: 29 November 1999

Dear Dr. Casal:

We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act and the following limitation:

Any future design changes that affect the operating surgeons ability to personally and immediately intervene in the surgical procedure being performed will be considered to have a major impact on the device's intended use. Therefore, any design changes that remove the operating surgeon from the immediate vicinity of the patient will require the submission of a traditional or abbreviated 510(k) submission.

The general controls of the Act include requirements for annual registration, listing of devices, good manufacturing practices, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. A substantially equivalent determination assumes compliance with the Current Good Manufacturing Practice requirements, as set forth in the Quality System Regulation (QS) for

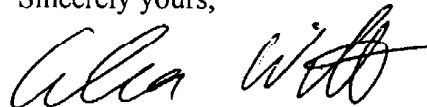
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Medical Devices: General regulation (21 CFR Part 820) and that, through periodic QS inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result in regulatory action. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4659. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its internet address "<http://www.fda.gov/cdrh/dsma/dsmamain.html>".

Sincerely yours,



Celia M. Witten, Ph.D., M.D.  
Director  
Division of General, Restorative  
and Neurological Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

**INDICATIONS FOR USE STATEMENT**

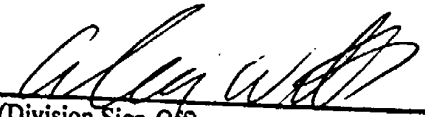
510(k) Number (if known): K990144

Device name: Intuitive Surgical™ da Vinci™ Endoscopic Instrument Control System and Endoscopic Instruments

Indications for Use:

The Intuitive Surgical™ Endoscopic Instrument Control System (hereinafter referred to as the "da Vinci™ System") is intended to assist in the accurate control of Intuitive Surgical™ endoscopic instruments including: rigid endoscopes, blunt and sharp endoscopic dissectors, scissors, scalpels, forceps / pick-ups, needle holders, endoscopic retractors, stabilizers, electrocautery and accessories during laparoscopic surgical procedures such as cholecystectomy or Nissen fundoplication. It is intended for use by trained physicians in an operating room environment.

Intuitive Surgical™ Endoscopic Instruments including scissors, scalpels, forceps/pick-ups, needle holders, clip applicators, and electrocautery are intended for endoscopic manipulation of tissue, including: grasping, cutting, blunt and sharp dissection, approximation, ligation, electrocautery and suturing.

  
(Division Sign-Off)  
Division of General Restorative Devices  
510(k) Number K 990144

PLEASE DO NOT WRITE BELOW THIS LINE  
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Concurrence of CDRH, Office of Device Evaluation (ODE)

Prescription Use

OR

Over-the Counter Use

(per 21 CFR §801.109

(Optional Format 1-2-96)