510(k) Summary For

AXIOM Sireskop SD

Submitted by: Siemens Medical Systems, Inc. 51 Valley Stream Parkway Malvern, PA 19355

June 13, 2005

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

1. Contact Person

Mr. Gary Johnson

Technical Specialist, Regulatory Affairs, Submissions

Siemens Medical Solutions USA, Inc.

51 Valley Stream Parkway E-50

Malvern, PA 19355

Phone: (610) 448 1778

Fax: (610) 448-1787

2. Device Name and Classification

Trade Name:

AXIOM Sireskop SD

Classification Name:

Image intensified fluoroscopic X-ray System

Classification Panel:

Radiology

CFR Section:

21 CFR § 892.1650

Device Class:

Class II

Device Code:

MQB

3. Intended Use

The AXIOM Sireskop SD is intended to be used as a universal diagnostic imaging system for radiographic and fluoroscopic studies. Using either film cassettes or a digital mobile flat detector, it can perform a range of applications including general R/F, angiography and pediatric examinations.

AXIOM Sireskop SD is applicable for emergency treatment on an outpatient basis, as well as for bedside examinations.

4. Substantial Equivalence

The AXIOM Sireskop SD with Mobile Flat Detector is substantially equivalent to the commercially available Siemens systems, the AXIOM Sireskop SD (Sireskop SX), and the AXIOM ICONOS R200 (URF Digital OT). The Sireskop SX, marketed as AXIOM Sireskop SD was described in premarket notification K951358 which received FDA Clearance on May 15, 1995. The URF Digital OT, marketed as AXIOM ICONOS R200 was described in premarket notification K992660 and received FDA clearance on April 21, 1997.

5. Device Description

AXIOM Sireskop SD is a floor-mounted universal fluoroscopic x-ray diagnostic system (R/F system), that was developed for tableside examinations in combination with an explorator. The explorator holds an image intensifier and the CCD camera.

AXIOM Sireskop SD can be configured as a single tube system, with only an undertable tube or a dual tube system which contains an additional 3D overhead tube crane, that can be moved longitudinally and laterally as well as vertically. The dual x-ray tubes allow a quick change between undertable and overtable exposure modes. The undertable tube is used for fluoroscopy and radiographic exposures taken with the Digital Imaging System. The overtable tube is suspended from an overhead tube support for exposures with a table bucky or bucky wall stand, either with film cassettes or a mobile Flat Detector. For processing the digital images from the Digital Imaging System or digital mobile Flat Detector, the AXIOM Sireskop SD is equipped with the Fluorospot COMPACT digital imaging system.

6. Summary of Technological Characteristics of the Principal Device as Compared with the Predicate Device

AXIOM Sireskop SD is not a stand-alone device, but functions as the platform for specific X-ray components (image intensifier, X-ray tube and housing, explorator, mobile flat detector, digital imaging system, Bucky cassette holder, Bucky detector holder, Bucky wall stand, collimator, generator etc.) and television camera systems (Videomed DH/ DHC) to create a flexible universal fluoroscopic X-ray system (R/F system)

Many of the components used in AXIOM Sireskop SD are either commercially available with current Siemens systems or include minor modifications to existing components.

7. General Safety and Effectiveness Concerns

Instructions for use are included within the device labeling, and the information provided will enable the user to operate the device in a safe and effective manner. Several safety features including visual and audible warnings are incorporated into the system design. In addition the AXIOM Sireskop SD is continually monitored, and if an error occurs, the system functions will be blocked and an error message will be displayed.

Furthermore the operators are health care professionals familiar with and responsible for the X-ray examinations to be performed. To minimize electrical, mechanical and radiation hazards, Siemens adheres to recognized and established industry practice, and all equipment is subject to final performance testing.



Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

JUL 7 - 2005

Mr. Gary Johnson Technical Specialist, Regulatory Affairs, Submissions Siemens Medical Solutions USA, Inc. 51 Valley Stream Parkway MALVERN PA 19355 Re: K051602

Trade/Device Name: AXIOM Sireskop SD Regulation Number: 21 CFR 892.1650 Regulation Name: Image-intensified

fluoroscopic x-ray system

Regulatory Class: II Product Code: MQB Dated: June 13, 2005 Received: June 16, 2005

Dear Mr. Johnson:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and 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) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, 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 <u>Code of Federal Regulations</u>, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 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), please contact the Office of Compliance at one of the following numbers, based on the regulation number at the top of this letter:

| 21 CFR 876.xxxx | (Gastroenterology/Renal/Urology) | 240-276-0115 |
|-----------------|----------------------------------|--------------|
| 21 CFR 884.xxxx | (Obstetrics/Gynecology) | 240-276-0115 |
| 21 CFR 892.xxxx | (Radiology) | 240-276-0120 |
| Other | | 240-276-0100 |

Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address http://www.fda.gov/cdrh/industry/support/index.html.

Sincerely yours,

Manay C. Brogdon
Nancy C. Brogdon

Director, Division of Reproductive, Abdominal, and Radiological Devices

Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure

SECTION 3

INDICATIONS FOR USE

| 510(k) Number (if known): <u>K051602</u> | |
|--|--------------------------------|
| Device Name: <u>AXIOM Sireskop SD</u> | • |
| Indications for Úse: | |
| The AXIOM Sireskop SD is intended to be used as a universal dradiographic and fluoroscopic studies. Using either film cassettes detector, it can perform a range of applications including general pediatric examinations. | or a digital mobile flat |
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| (Please do not write below this line - continue on anothe | τ page if needed) |
| Concurrence of the CDRH, Office of Device E | valuation (ODE) |
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| | |
| Prescription Use OR Over-The-O | Counter Use |
| | Lounter Ose |
| (per 21 CFR 801.109) | e.v. |
| (Division Sign-Off) Division of Reproductive, Abdominal, and Radiological Devices 5 1944, Number | n |
| 510(k) for Siemens AXIOM Sireskop SD Page 11 of 48 | Siemens Medical Systems, Inc. |