K050442

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MAR 2 3 2005

510(k) Summary

The following information is provided following the format of 21 CFR 807.92 for the Millennium Multi-leaf Collimator

Submitter: Varian Medical Systems
3100 Hansen Way M/S E-110
Palo Alto, CA 94304-1129
Contact Name: Vy Tran
Phone: (650) 424-5731
Fax: (650) 842-5040
Email: vy.tran@varian.com
Date summary was prepared: February 17, 2005

1. **Name of the Device:**

Trade/Proprietary Name:	Millennium Multi-Leaf Collimator
Common or Usual Name:	Accessory to Medical Linear Accelerator
Classification Name:	Medical Charged Particle Radiation Therapy System 21 CFR §892.5050 Class II Product Code: 90 IYE

2. Predicate Devices to claim substantial equivalence:
   a. Varian Medical Systems' Millennium Multi-leaf Collimator (K990085)

3. Device Description:

   Millennium Multi-Leaf Collimator (MLC) Release v7.0 is a modification of the present MLC device (K990085) to include the following:

   1. Large Field IMRT treatments
   2. Smooth motion control
   3. Faster patient plan downloads via ethernet

   The Varian Millennium Multileaf Collimator (MLC) is an x-ray collimator designed to be mounted on a Varian Clinac® radiation therapy linear accelerator and is intended to shape the x-ray field perimeter. Field shape can either be static (fixed) or dynamic. Dynamic field shapes are controlled as a function of either Clinac® dose fraction or gantry angle.

5. Intended Use Statement: The Varian Millennium Multileaf Collimator (MLC) is an accessory X-ray collimator designed to be mounted on a Varian Clinac radiotherapy linear accelerator and is intended to shape the X-ray field perimeter. Field shape can be either static (fixed) or dynamic. Dynamic field shapes are

controlled as function of Clinac dose fraction or gantry angle. The intended use is to assist the radiation oncologist in the delivery of radiation to defined target volumes while sparing surrounding normal tissue and critical organs from excess radiation.

6. Summary of the Technological Characteristics: The Substantial Equivalence Comparison Chart provides a comparison of the technological characteristics to those of the predicate devices. This chart is located in Tab 8 of the submission.

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration
9200 Corporate Boulevard
Rockville MD 20850

MAR 2 3 2005

Ms. Vy Tran
Corporate Director, Regulatory Affairs
Varian Medical Systems, Inc.
3100 Hansen Way
PALO ALTO CA 94304-1038

Re: K050442
Trade/Device Name: Millenium 120 MLC
Regulation Number: 21 CFR §892.5050
Regulation Name: Medical charged-particle radiation therapy system
Regulatory Class: II
Product Code: IYE
Dated: February 17, 2005
Received: February 22, 2005

Dear Ms. Tran:

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 Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

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/dsma/dsmamain.html

Sincerely yours,

Nancy C. Brogdon

Nancy C. Brogdon
Director, Division of Reproductive,
Abdominal, and Radiological Devices
Office of Device Evaluation
Center for Devices and Radiological Health

Enclosure

510(k) Number (if known): K050442
Device Name: Millennium120 MLC

Indications For Use:

The Varian Millennium 120 Multi-leaf Collimator (MLC) is provided to assist the radiation oncologist in the delivery of radiation to defined target volumes while sparing surrounding normal tissue and critical organs from excess radiation. In static mode, the MLC performs the same function as the customized shadow blocks. In a dynamic mode, a series of MLC leaf positions can be indexed to either Clinac dose fraction or gantry angle to create a changing beam shape while the radiation beam is on to create a three dimensional dose distribution.

(PLEASE DO NOT WRITE BELOW THIS LINE – CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

(Optional Format 3-10-98)

David A Seymour

(Division Sign-Off)
Division of Reproductive, Abdominal, and Radiological Devices
510(k) Number K050442

Prescription Use ✓