



NOV 20 2003

GE Medical Systems

3000 N. Grandview Blvd. W-1140  
Waukesha, WI 53188

K033502

**510(k) SUMMARY OF SAFETY AND EFFECTIVENESS**

This 510(k) summary of Safety and Effectiveness information is submitted in accordance with the requirement of 21 CFR Part 807.87(h).

**Submitter:** John W. Jaeckle  
Lead CT Safety and Regulatory Engineer  
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Date Prepared: October 8, 2003

**PRODUCT IDENTIFICATION**

Name: LightSpeed 6.0 CT Scanner System  
Classification Name: Computed Tomography X-ray System  
21CFR892.1750, 90-JAK  
Manufacturer: General Electric Medical Systems  
3000 N. Grandview Blvd.  
Waukesha, WI 53188  
Distributor: Same as Manufacturer  
Marketed Devices: The LightSpeed 6.0 CT Scanner System is of comparable type and substantially equivalent to currently marketed Computed Tomography X-ray Systems that comply with the same or equivalent standards and have the same intended uses, such as the previous LightSpeed CT Scanners (LightSpeed 5.0, 4.0, etc.).

**DEVICE DESCRIPTION**

The LightSpeed 6.0 CT Scanner System is composed of a gantry, patient table, console, and PDU, and includes image acquisition hardware, image acquisition and reconstruction software, and associated accessories. LightSpeed 6.0 is evolutionary modification to LightSpeed 5.0 (K030420) and is designed to be a head and whole body CT scanner incorporating the same basic operating principles.

Materials and construction are equivalent to the LightSpeed 5.0 CT Scanner System, which are compliant with UL 2601-1, IEC 60061-1 and associated collateral and particular standards, and 21CFR Subchapter J.

### **Indications for Use:**

The LightSpeed 6.0 CT Scanner System is indicated for head and whole body X-ray Computed Tomography applications.

### **Comparison with Predicate:**

LightSpeed 6.0 is a modification of the LightSpeed 5.0 CT Scanner System and has identical indications for use. It has the same technological characteristics and operating principles, is comparable in key safety and effectiveness features, and uses the same basic design, construction, and materials.

In the opinion of GE Medical Systems, the LightSpeed 6.0 CT Scanner System is of comparable type and substantially equivalent to currently marketed head and whole body X-ray computed tomography systems that comply with the same or equivalent standards and have the same intended uses. LightSpeed 6.0 will be certified to comply with the X-ray requirements of 21CFR1020.30 and 1020.33, as well as the safety requirements of UL2601-1, and IEC 60601-1 and associated collateral and particular standards.

### **Adverse Effects on Health:**

Potential electrical, mechanical and radiation hazards are identified in a risk management summary (hazard analysis) and controlled by:

- System verification and validation to ensure performance to specifications, Federal Regulations, and user requirements.
- Adherence to industry and international standards. (UL/CSA and IEC).

### **CONCLUSIONS**

The LightSpeed 6.0 CT Scanner Systems does not result in any new potential safety risks and performs as well as or better than devices currently on the market. GE considers the LightSpeed 6.0 CT System to be equivalent to other marketed devices with the same indications for use and meeting similar standards.



Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

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GE Medical Systems  
% Mr. Juergen Welte  
Acting Program Manager 510(k)  
TUV Rheinland of North America  
12 Commerce Road  
NEWTOWN CT 06470

Re: K033502  
Trade/Device Name: LightSpeed 6.0 CT Scanner System  
Regulation Number: 21 CFR 892.1750  
Regulation Name: Computed tomography  
x-ray system  
Regulatory Class: II  
Product Code: 90 JAK  
Dated: November 4, 2003  
Received: November 5, 2003

Dear Mr. Welte:

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 (PMA), 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 the letter:

|                                  |                |
|----------------------------------|----------------|
| 8xx.1xxx                         | (301) 594-4591 |
| 876.2xxx, 3xxx, 4xxx, 5xxx       | (301) 594-4616 |
| 884.2xxx, 3xxx, 4xxx, 5xxx, 6xxx | (301) 594-4616 |
| 892.2xxx, 3xxx, 4xxx, 5xxx       | (301) 594-4654 |
| Other                            | (301) 594-4692 |

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 Part 807.97) you may obtain. Other general information on your responsibilities under the Act may be obtained 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  
Director, Division of Reproductive,  
Abdominal and Radiological Devices  
Office of Device Evaluation  
Center for Devices and Radiological Health

Enclosure

STATEMENT OF INTENDED USE

510(k) Number (if known): K033502

Device Name: LightSpeed 6.0 CT Scanner System

Indications For Use:

The LightSpeed 6.0 CT Scanner System is indicated for head and whole body X-ray Computed Tomography applications.

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

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Concurrence of CDRH, Office of Device Evaluation (ODE)

Prescription Use   /    
(Per 21 CFR 801.109)

-OR-

Over-The-Counter Use \_\_\_\_\_

Nancy C Brogdon  
(Division Sign-Off)  
Division of Reproductive, Abdominal,  
and Radiological Devices  
510(k) Number K033502

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