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**III. 510(K) SUMMARY**

**SUBMITTED BY:**

**JUN 27 2003**

Globus Medical Inc.  
303 Schell Lane  
Phoenixville, PA 19460  
(610) 994-3164  
Contact: Daniel S. Paul

**DEVICE NAME:**

Sustain Spacer

**CLASSIFICATION:**

Per CFR 21, §888.3060: Implant, fixation, spinal intervertebral body fixation orthosis devices. Class II.  
Product code is MQP. The Panel code is 87.

**PREDICATE DEVICES:**

Synthes SynMesh System: K003275  
SE date: April 23, 2001  
And  
Synthes Vertebral Spacer Ti: K020152  
SE date: April 16, 2002  
And  
Synthes Vertebral Spacer Ti (Narrow and Curved): K024364  
SE Date: March 17, 2003

**DEVICE DESCRIPTION:**

The Sustain Spacer is a vertebral body replacement device used to provide structural stability in skeletally mature individuals following corpectomy or vertebrectomy. The system is comprised of spacers of various fixed heights and footprints to fit the anatomical needs of a wide variety of patients. Each spacer has an axial hole to allow grafting material to be packed inside of the spacer. Protrusions on the superior and inferior surfaces of each device will grip the endplates of the adjacent vertebrae to resist expulsion.

The Sustain Spacer devices are made from commercially pure titanium or titanium alloy as specified in ASTM F67, F136 and F1295.

**INTENDED USE:**

The Sustain Spacer is a vertebral body replacement device intended for use in the thoracolumbar spine (T1-L5) to replace a collapsed, damaged, or unstable vertebral body due to tumor or trauma (i.e., fracture). The Sustain Spacer is intended to be used with supplemental spinal fixation systems that have been labeled for use in the thoracic and/or lumbar spine (i.e., posterior pedicle screw and rod systems, anterior plate systems, and anterior screw and rod systems). The interior of the spacer can be packed with bone grafting material.

The Sustain Spacer is designed to provide anterior spinal column support even in the absence of fusion for a prolonged period.

**PERFORMANCE DATA:**

Mechanical testing in accordance with the "Guidance for Industry and FDA Staff, Guidance for Spinal System 510(k)s", September 27, 2000 was presented.

**BASIS OF SUBSTANTIAL EQUIVALENCE:**

The Sustain Spacer implants are similar to the predicate Synthes SynMesh vertebral body replacement device(s), (K003275) and Synthes Vertebral Spacer *Ti* vertebral body replacement device(s) (K020125 and K024364) with respect to technical characteristics and performance.



Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

JUN 27 2003

Mr. Daniel S. Paul  
Director, Quality Assurance and Regulatory Affairs  
Globus Medical Inc.  
303 Schell Lane  
Phoenixville, PA 19460

Re: K031302  
Trade Name: Sustain Spacer  
Regulation Number: 21 CFR 888.3060  
Regulation Name: Spinal intervertebral body fixation orthosis  
Regulatory Class: II  
Product Code: MQP  
Dated: April 23 and May 13, 2003  
Received: April 24 and May 15, 2003

Dear Mr. Paul:

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.

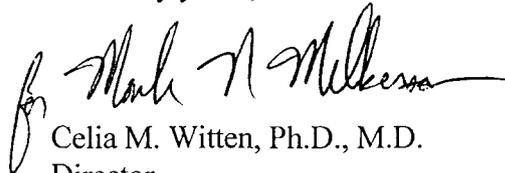
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's 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.

Page 2 - Mr. Daniel S. Paul

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 (301) 594-4659. 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 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,

A handwritten signature in black ink, appearing to read "Celia M. Witten". The signature is written in a cursive style with a long horizontal flourish extending to the right.

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:** K031302

**Device Name:** Sustain Spacer

**Indications:**

The Sustain Spacer is a vertebral body replacement device intended for use in the thoracolumbar spine (T1-L5) to replace a collapsed, damaged, or unstable vertebral body due to tumor or trauma (i.e., fracture). The Sustain Spacer is intended to be used with supplemental spinal fixation systems that have been labeled for use in the thoracic and/or lumbar spine (i.e., posterior pedicle screw and rod systems, anterior plate systems, and anterior screw and rod systems). The interior of the spacer can be packed with bone grafting material.

The Sustain Spacer is designed to provide anterior spinal column support even in the absence of fusion for a prolonged period.

(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 \_\_\_\_\_ OR Over-The-Counter Use \_\_\_\_\_  
(Per 21 CFR 801.109)

*for Mark A. Melkers*  
\_\_\_\_\_  
(Division Sign-Off)  
Division of General, Restorative  
and Neurological Devices

510(k) Number           K031302