

K130016

**SECTION 5: 510(K) Summary**

**FEB 05 2013**

**Submitter:** LeMaitre Vascular, Inc.  
63 Second Avenue  
Burlington, MA 01803

**Contact Person:** Xiang Zhang  
Director of Regulatory Affairs  
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**Date Prepared:** January 2, 2013

**Trade Name:** LifeSpan ePTFE Vascular Graft

**Common Name:** Vascular graft prosthesis

**Classification Name:** Prosthesis, Vascular Graft

**Predicate Devices:** Baxter reinforced expanded PTFE vascular graft (K933590); Baxter reinforced expanded PTFE stepped vascular graft (K944844); Baxter ePTFE externally supported vascular grafts (K944858); LifeSpan reinforced ePTFE straight, externally supported, stepped vascular grafts (K032900)

**Device Description:** LifeSpan Vascular Grafts are consisting of a base tube of expanded PTFE that is wrapped with PTFE tape for better strength. Externally supported grafts have a monofilament of PTFE wrapped over the tape for added crush and kink resistance. The stepped and tapered grafts have a small diameter end and a large diameter end.

All models of the graft have a printed black orientation line consisting of "LeMaitre LifeSpan" printed repeatedly along the length of the graft. This 510k is to add an alternative ink for the printing the orientation line.

**Intended Use:**

- The LifeSpan ePTFE vascular grafts are indicated for use as a vascular prosthesis only. The grafts are intended for bypass or reconstruction of diseased or occluded blood vessels, or for arteriovenous shunts for blood access. The physician must evaluate each alternative method of treatment, discuss the risks and benefits with each patient, and decide whether to use a prosthetic vascular graft based upon all available factors.
- Grafts with removable external monofilament support over the length of the graft are used in bypass or reconstruction of occluded or diseased vessels, where compression or kinking could jeopardize patency.
- Grafts with external monofilament support in the middle of the graft may be used for the creation of an arteriovenous shunt for blood access; however, the graft must not be cannulated in the area of the external monofilament support.
- Stepped and tapered grafts are used for the creation of arteriovenous shunts for blood access. Stepped and tapered configurations may reduce the risk of steal syndrome and high cardiac output.

**Summary of Technological Characteristics:**

LifeSpan Vascular Grafts are consisting of a base tube of expanded PTFE that is wrapped with PTFE tape for better strength. Externally supported grafts have a monofilament of PTFE wrapped over the tape for added crush and kink resistance. The stepped and tapered grafts have a small diameter end and a large diameter end.

**Summary of Product Testing:**

Biocompatibility test was performed for the alternative new ink.

**Summary of Pre-clinical Study:**

The biocompatibility of the device was tested per ISO10993-1.

**Conclusion:**

LeMaitre Vascular has demonstrated that the LifeSpan ePTFE Vascular Graft printed with the new ink is substantially equivalent to the predicate devices based on its indications for use and fundamental scientific technology.



Food and Drug Administration  
10903 New Hampshire Avenue  
Document Control Center – WO66-G609  
Silver Spring, MD 20993-0002

LeMaitre Vascular, Inc.  
C/O Xiang Zhang,  
Director of Regulatory Affairs  
62 Second Avenue  
Burlington, MA 01803

**FEB 05 2013**

Re: K130016

Trade/Device Name: LifeSpan ePTFE Vascular Graft  
Regulation Number: 21 CFR 870.3450  
Regulation Name: Vascular Graft Prosthesis  
Regulatory Class: Class II  
Product Code: DSY  
Dated: January 2, 2013  
Received: January 3, 2013

Dear Mr. Zhang:

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. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to 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); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); 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.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

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) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,

**Matthew G. Hillebrenner**

for  
Bram D. Zuckerman, M.D.  
Director  
Division of Cardiovascular Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

**SECTION 4: INDICATION FOR USE STATEMENT**

510(k) Number (if known): K130016

Device Name: LifeSpan ePTFE Vascular Graft

**Indications for Use:**

The LeMaitre LifeSpan ePTFE vascular grafts are indicated for use as a vascular prosthesis only. The grafts are intended for bypass or reconstruction of diseased or occluded blood vessels, or for arteriovenous shunts for blood access.

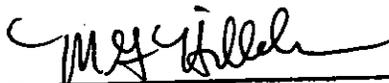
Prescription Use X and/or Over-The Counter Use \_\_\_\_\_

(Part 21 CFR 801 Subpart D) (21 CFR 807 Subpart C)

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ID NEEDED)

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Concurrence of CDRH, Office of Device Evaluation (ODE)



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(Division Sign-Off)  
Division of Cardiovascular Devices

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