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

In accordance with the Food and Drug Administration Rule to implement provisions of the Safe Medical Devices Act of 1990 and in conformance with 21 CFR 807, this information serves as a Summary of Safety and Effectiveness for the use of the PROFEMUR® LX Hip Stem.

Submitted By: Wright Medical Technology, Inc.  
Date: January 11, 2006  
Contact Person: Theresa Leister  
Regulatory Affairs Specialist II  
Proprietary Name: PROFEMUR® LX Hip Stem  
Common Name: Hip Stem  
Classification Name and Reference: 21 CFR 888.3320 Hip joint metal/ metal semi-constrained, with a cemented acetabular component prosthesis – Class III  
21 CFR 888.3330 Hip joint metal/ metal semi-constrained, with an uncemented acetabular component prosthesis – Class III  
21 CFR 888.3353 Prosthesis, hip, semi-constrained, metal/ceramic/polymer, cemented or non-porous, uncemented– Class II  
Device Product Code and Panel Code: Orthopedics/87/ LZO, JDL, KWA

**DEVICE INFORMATION**

**A. INTENDED USE**

The PROFEMUR® LX Hip Stem is indicated for use in total hip arthroplasty for reduction or relief of pain and/or improved hip function in skeletally mature patients with the following conditions:

1. non-inflammatory degenerative joint disease such as osteoarthritis, avascular necrosis, ankylosis, protrusio acetabuli, and painful hip dysplasia;
2. inflammatory degenerative joint disease such as rheumatoid arthritis;
3. correction of functional deformity; and,
4. revision procedures where other treatments or devices have failed

## **B. DEVICE DESCRIPTION**

The design features of the PROFEMUR® LX Hip Stem are summarized below:

- Manufactured from titanium alloy (Ti6Al4V)
- Offered in one medial flare option
- Tri-planar proximal geometry with plasma sprayed surface
- Cylindrical, splined, and slotted distal stem with glassbead surface
- Threaded hole with slot impaction mechanism
- Polished distal tip and collar

## **C. SUBSTANTIAL EQUIVALENCE INFORMATION**

The indications for use of the PROFEMUR® LX Hip Stem are identical to the predicate devices. The design features of the PROFEMUR® LX Hip Stem are substantially equivalent to those of the predicate devices. The fundamental scientific technology of the modified device has not changed relative to the predicate devices. The safety and effectiveness of the PROFEMUR® LX Hip Stem are adequately supported by the substantial equivalence information, materials information, and analysis data provided within this Premarket Notification.



JAN 13 2006

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Theresa Leister  
Regulatory Affairs Specialist II  
Wright Medical Technology, Inc.  
5677 Airline Road  
Arlington, Tennessee 38002

Re: K053588  
Trade/Device Name: PROFEMUR® LX Hip Stem  
Regulation Number: 21 CFR 888.3330  
Regulation Name: Hip joint metal/metal semi-constrained, with an uncemented acetabular component prosthesis  
Regulatory Class: III  
Product Code: KWA, LZO, JDL  
Dated: December 22, 2005  
Received: December 23, 2005

Dear Ms. Leister:

We have reviewed your Section 510(k) premarket notification of intent to market the devices referenced above and have determined the devices are 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), they 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 devices comply 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 (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 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/industry/support/index.html>.

Sincerely yours,



*SM* Mark N. Melkerson,  
Acting Director  
Division of General, Restorative  
and Neurological Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

cc: HFZ-401 DMC  
HFZ-404 510(k) Staff  
HFZ-410 Division  
D.O.

f/t:ELF:rrr: 1/12/06

K053588

### Indications for Use

510(k) Number (if known):

Device Name: PROFEMUR® LX Hip Stem

Indications For Use:

**The PROFEMUR® LX Hip Stem is indicated for use in total hip arthroplasty for reduction or relief of pain and/or improved hip function in skeletally mature patients with the following conditions:**

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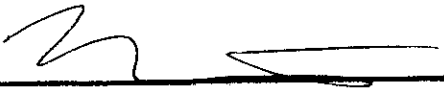
Prescription Use X  
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 807 Subpart C)

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

Concurrence of CDRH, Office of Device Evaluation (ODE)

  
**(Division Sign-Off)**  
**Division of General, Restorative,**  
**and Neurological Devices**

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