## K071723

### **Summary of Safety and Effectiveness**

Submitter:

Zimmer GmbH

Sulzer Allee 8

Winterthur, Switzerland CH-8404

Contact Person:

Dalene T. Binkley, MS, RAC

Senior Associate, Corporate Regulatory Affairs

Telephone: 574-372-4907 Fax: (574) 372-4605

Date:

September 24, 2007

Trade Name:

Zimmer<sup>®</sup> Porolock<sup>®</sup> MIS Stem

Common Name:

Total Hip Prosthesis

Classification Name and Reference:

- 1. KWA Hip joint metal/metal semi-constrained with uncemented acetabular shell, 21 CFR § 888. 3330
- 2. JDL Hip joint metal/metal semi-constrained with cemented acetabular shell, 21 CFR § 888. 3320
- 3. LZO Hip joint metal/ceramic/polymer semiconstrained cemented or nonporous uncemented prosthesis, 21 CFR § 888.3353
- 4. KWY Hip joint femoral (hemi-hip) metal/polymer cemented or uncemented prosthesis, 21 CFR § 888.3390
- 5. KWL Hip joint femoral (hemi-hip) metallic cemented or uncemented prosthesis, 21 CFR § 888.3360
- 6. LWJ Hip joint femoral (hemi-hip) metallic cemented or uncemented prosthesis, 21 CFR § 888.3350
- 7. JDI Hip joint metal/polymer semi-constrained cemented prosthesis, 21 CFR § 888.3310
- 8. KWZ Hip joint metal/polymer constrained cemented or uncemented prosthesis, 21 CFR § 888.33

#### Predicate Device:

Zimmer M/L Taper Hip Prosthesis, manufactured by Zimmer, Inc., K032726, cleared October 22, 2003.

Durom<sup>®</sup> Acetabular Component and Metasul<sup>®</sup> LDH<sup>™</sup> Large Diameter Heads, manufactured by Zimmer GmbH, K053536, cleared March 16, 2006.

Alloclassic<sup>®</sup> Zweymueller<sup>®</sup> SL/SLL Femoral Stem, manufactured by Zimmer GmbH, K030373, cleared March 6, 2003.

### **Device Description:**

The Zimmer Porolock MIS Stem is a modular femoral stem intended for total or hemi-hip arthroplasty. The curved, uncemented stem and is coated proximally with Titanium Vacuum Plasma Sprayed (Ti-VPS) and rough-blasted distally. The 12/14 femoral stem is available in multiple sizes in order to address different patient morphologies.

#### Intended Use:

This femoral stem is for total or hemi-hip arthroplasty and is indicated for the following conditions:

Patient conditions of noninflammatory degenerative joint disease (NIDJD), e.g., avascular necrosis, osteoarthritis, and inflammatory degenerative joint disease (IJD), e.g., rheumatoid arthritis;

Those patients with failed previous surgery where pain, deformity, or dysfunction persists;

Revision of previously failed hip arthroplasty.

Total hip replacements may be considered for younger patients if any unequivocal indication outweighs the risks associated with the age of the patient and modified demands regarding activity and hip joint loading are assured. This includes severely crippled patients with multiple joint involvement, for whom an immediate need of hip mobility leads to an expectation of significant improvement in the quality of their lives.

This stem is for uncemented use only.

**Comparison to Predicate Device:** 

The Zimmer Porolock MIS Stem is packaged, manufactured, and sterilized using the same materials and processes as the predicate devices. The subject device also has the same intended use and fixation methods as the predicate devices.

Performance Data (Nonclinical and/or Clinical):

Non-Clinical Performance and Conclusions:

Non-clinical testing demonstrated that the *Zimmer Porolock* MIS Stem met performance requirements and is as safe and effective as the predicate devices.



Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

MAR - 7 2008

Zimmer GmbH % Ms. Dalene T. Binkley Senior Associate, Warsaw Regulatory Affairs P.O. Box 708 Warsaw, IN 46581-0708

Re: K071723

Trade/Device Name: Zimmer® Porolock® MIS Stem

Regulation Number: 21 CFR 888.3330

Regulation Name: Hip joint metal/metal semi-constrained, with an uncemented

acetabular component, prosthesis

Regulatory Class: Class III

Product Code: KWA, KWZ, JDL, LZO, KWY, KWL, LWJ, JDI

Dated: March 3, 2008 Received: March 4, 2008

Dear Ms. Binkley:

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 <u>Federal Register</u>.

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 – Ms. Dalene Binkley

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 Center for Devices and Radiological Health's (CDRH's) Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding postmarket surveillance, please contact CDRH's Office of Surveillance and Biometric's (OSB's) Division of Postmarket Surveillance at (240) 276-3474. For questions regarding the reporting of device adverse events (Medical Device Reporting (MDR)), please contact the Division of Surveillance Systems at (240) 276-3464. You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at toll-free number (800) 638-2041 or (240) 276-3150 or the Internet address <a href="http://www.fda.gov/cdrh/industry/support/index.html">http://www.fda.gov/cdrh/industry/support/index.html</a>.

Sincerely yours,

Mark N. Melkerson

Mark M Melken

Director

Division of General, Restorative and Neurological Devices Office of Device Evaluation Center for Devices and Radiological Health

Enclosure

# K071723

## Indications for Use

510(k) Number (if known):	
Device Name:	
Zimmer® Porolock® MIS Stem	
Indications for Use:	
This femoral stem is for total or hemi-hip arthroplasty and is indicated for the conditions: Patient conditions of noninflammatory degenerative joint disease avascular necrosis, osteoarthritis and inflammatory degenerative joint disease rheumatoid arthritis; those patients with failed previous surgery where pain, dysfunction persists; revision of previously failed hip arthroplasty.	se (NIDJD), e.g., se (IJD), e.g.,
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Prescription Use X AND/OR Over-The-Counts (Part 21 CFR 801 Subpart D) (21 CFR 807 Su	: :
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Concurrence of CDRH, Office of Device Evaluation (ODE  Med Rell Grant  (Division Sign Off)  Division of General, Restorative,  and Neurological Devices	Page 1 of 1
510(k) Number 671723	