



K130661 (1/3)

P.O. Box 708  
Warsaw, IN 46581-0708  
574 267-6131

**MAY 09 2013**

**510(k) Summary**

**Sponsor:** Zimmer, Inc.  
P.O. Box 708  
Warsaw, IN 46581-0708

**Contact Person:** Anthony Francalancia  
Senior Specialist, Regulatory Affairs  
Telephone: (574) 372-4570  
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**Date:** March 11, 2013

**Trade Name:** *Zimmer® Trabecular Metal™* Reverse Shoulder System

**Common Name:** Reverse Shoulder System Implants

**Classification Names/References:** KWT - 21 CFR § 888.3650 - Shoulder joint metal/polymer non-constrained cemented prosthesis. KWS - 21 CFR § 888.3660 - Shoulder joint metal/polymer semi-constrained cemented prosthesis. HSD - 21 CFR § 888.3690 - Shoulder joint humeral (hemi-shoulder) metallic uncemented prosthesis.

**Classification Panel:** Orthopedics/87

**Predicate Device(s):** *Zimmer® Trabecular Metal™* Reverse Shoulder System, manufactured by Zimmer, K052906, cleared December 19, 2005.  
*Zimmer® Trabecular Metal™* Reverse Shoulder System, Sizes 8mm and 10mm, manufactured by Zimmer, K060704, cleared May 19, 2006.  
*Zimmer® Trabecular Metal™* Reverse Shoulder System, Base Plates and Humeral Stems, manufactured by Zimmer, K121543, cleared October 11, 2012.  
*Zimmer® Trabecular Metal™* Reverse Shoulder System, Non-Porous Humeral Stems, manufactured by Zimmer, K122692, cleared December 3, 2012.

**Purpose and Device Description:** The *Zimmer Trabecular Metal* Reverse Shoulder System consists of conventional and reverse, semi- and non-

constrained shoulder prostheses for total or hemiarthroplasty applications.

**Intended Use:**

**Indications for Use:** The *Zimmer Trabecular Metal* Shoulder System is indicated for the following:

**Hemiarthroplasty/Total application:**

- the treatment of severe pain or significant disability in degenerative, rheumatoid, or traumatic disease of the glenohumeral joint;
- ununited humeral head fractures of long duration;
- irreducible 3-and 4-part proximal humeral fractures;
- avascular necrosis of the humeral head, or other difficult clinical management problems where arthrodesis or resectional arthroplasty is not acceptable.

**Reverse application:**

- the treatment of severe pain or significant disability in degenerative, rheumatoid, or traumatic disease of the glenohumeral joint;
- ununited humeral head fractures of long duration;
- irreducible 3-and 4-part proximal humeral fractures;
- avascular necrosis of the humeral head, or other difficult clinical management problems (such as a failed total shoulder arthroplasty or grossly rotator cuff deficient joint) where arthrodesis or resectional arthroplasty is not acceptable.

The assembled humeral component may be used alone for hemiarthroplasty or combined with the glenoid component or reverse components for total shoulder arthroplasty (conventional or reverse applications).

The humeral components are intended for either cemented or uncemented use. The reverse base plate is intended for uncemented use, and requires two screws for fixation. When used in a total shoulder application, the all-polyethylene glenoid components are intended for cemented use only. In the USA, the *Trabecular Metal* Glenoid must be cemented under the base (see surgical technique for details) or fully cemented in place.

**Comparison to Predicate Device:** This submission is for a labeling modification to the predicates. The labeling modification consists of the

addition of Magnetic Resonance Imaging (MRI) compatibility information to the Package Insert, and application of the “MR Conditional” symbol on the package label.

**Performance Data (Nonclinical and/or Clinical):**

**Non-Clinical Performance and Conclusions:**

The components of the *Zimmer Trabecular Metal* Reverse Shoulder System have been evaluated for compatibility in the MRI environment, per Guidance for Industry and FDA Staff, “Establishing Safety and Compatibility of Passive Implants in the Magnetic Resonance (MR) Environment”, August 2008. Based upon the results, the subject shoulder implants are recommended to bear the “MR Conditional” labeling and include MR compatibility safety information within the package insert.

**Clinical Performance and Conclusions:**

Clinical data and conclusions were not needed for this submission



May 9, 2013

Zimmer, Incorporated  
% Mr. Anthony Francalancia  
Senior Specialist, Regulatory Affairs  
P.O. Box 708  
Warsaw, Indiana 46581-0708

Re: K130661  
Trade/Device Name: Zimmer® Trabecular Metal™ Reverse Shoulder System  
Regulation Number: 21 CFR 888.3650  
Regulation Name: Shoulder joint metal/polymer non-constrained cemented prosthesis  
Regulatory Class: II  
Product Codes: KWT, KWS, HSD  
Dated: March 11, 2013  
Received: March 18, 2013

Dear Mr. Francalancia:

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

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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 contact 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>. 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,

Erin D. Keith

For

Mark N. Melkerson  
Director  
Division of Orthopedic Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

## Indications for Use

**510(k) Number (if known):** K130661

**Device Name:**

*Zimmer® Trabecular Metal™* Reverse Shoulder System

**Indications for Use:**

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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)

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Casey L. Hanley, Ph.D.  
Division of Orthopedic Devices