



Food and Drug Administration  
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Silver Spring, MD 20993-0002

October 3, 2014

Zimmer, Incorporated  
Mr. Stephen H. McKelvey, MA, RAC  
Senior Project Manager, Trauma Regulatory Affairs  
P.O. Box 708  
Warsaw, Indiana 46581-0708

Re: K142442

Trade/Device Name: Magna-FX<sup>®</sup> Cannulated Screw Fixation System  
Regulation Number: 21 CFR 888.3040  
Regulation Name: Smooth or threaded metallic bone fixation fastener  
Regulatory Class: Class II  
Product Code: HWC, NDG  
Dated: August 29, 2014  
Received: September 2, 2014

Dear Mr. McKelvey:

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 contact the Division of Industry and Consumer Education 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" (21 CFR 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 Industry and Consumer Education 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,

**Ronald P. Jean -S** for

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

Enclosure

DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Food and Drug Administration

Form Approved: OMB No. 0910-0120  
Expiration Date: January 31, 2017  
See PRA Statement below.

## Indications for Use

510(k) Number (if known)

K142442

Device Name

Magna-FX Cannulated Screw Fixation System

Indications for Use (Describe)

The Magna-FX Cannulated Bone Screws are indicated for fractures of:

- The intracapsular hip, femoral condyles, tibial condyles, ankle, acetabulum, pelvis, and other areas where accurate screw placement is required.
- The screw can also be applied to slipped capital femoral epiphysis if image intensification fluoroscopy is used to ascertain the proper position of the screw.

The Mini Magna-FX Cannulated Bone Screws are indicated for:

- Fractures of the medial malleolus, distal tibia, distal radius, calcaneus, talus, patella, and pelvis.
- It can also be used in the reduction of small bone fragments and reduction and fixation with cerclage wire, and the fixation of bone prominences.

Type of Use (Select one or both, as applicable)

Prescription Use (Part 21 CFR 801 Subpart D)

Over-The-Counter Use (21 CFR 801 Subpart C)

**PLEASE DO NOT WRITE BELOW THIS LINE – CONTINUE ON A SEPARATE PAGE IF NEEDED.**

### FOR FDA USE ONLY

Concurrence of Center for Devices and Radiological Health (CDRH) (Signature)

This section applies only to requirements of the Paperwork Reduction Act of 1995.

**\*DO NOT SEND YOUR COMPLETED FORM TO THE PRA STAFF EMAIL ADDRESS BELOW.\***

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### **510(k) Summary**

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

**Contact Person:** Stephen H. McKelvey, MA, RAC  
Senior Project Manager, Regulatory Affairs  
Telephone: (574) 372-4944  
Fax: (574) 372-4605

**Date:** September 22, 2014

**Trade Name:** *Magna-FX*<sup>®</sup> Cannulated Screw Fixation System

**Common Name:** Screw, Fixation, Bone  
Washer, Bolt, Nut, Non-Spinal, Metallic

**Classification Names and References:** Smooth or threaded metallic bone fixation fastener  
(21 CFR 888.3040, HWC)  
Single/multiple component metallic bone fixation  
appliances and accessories (21 CFR 888.3030, NDG)

**Classification Panel:** Orthopedics/87

**Predicate Device(s):** Cannulated Screws and Washers, manufactured by Smith  
& Nephew, Inc., K111994, cleared October 11, 2011.  
Synthes 6.5 mm Cannulated Screw, manufactured by  
Synthes, K021932, cleared September 6, 2002.

**Purpose and Device Description:** The *Magna-FX* Cannulated Screw Fixation System  
consists of a line of cannulated bone screws that are self-  
reaming and self-tapping and an associated washer.  
*Magna-FX* screws are designed to provide rigid fixation  
for various fractures.

**Intended Use:**

The *Magna-FX* Cannulated Bone Screws are indicated for fractures of: The intracapsular hip, femoral condyles, tibial condyles, ankle, acetabulum, pelvis, and other areas where accurate screw placement is required. The screw can also be applied to slipped capital femoral epiphysis if image intensification fluoroscopy is used to ascertain the proper position of the screw.

The Mini *Magna-FX* Cannulated Bone Screws are indicated for: Fractures of the medial malleolus, distal tibia, distal radius, calcaneus, talus, patella, and pelvis. It can also be used in the reduction of small bone fragments and reduction and fixation with cerclage wire, and the fixation of bone prominences.

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

Non-Clinical Performance and Conclusions:

- **Shelf Life** - Accelerated aging testing conducted shows that the sterile devices included in this submission have a shelf life of 10 years.
- **Biocompatibility** – Biocompatibility testing of the subject devices was conducted per ISO 10993-1 and Good Laboratory Practices (21 CFR 58). All testing passed.
- **Performance Testing** – Testing performed included evaluation of screw torsional properties and axial pull out strength per ASTM F543. The results of non-clinical performance testing demonstrate that the devices are safe and effective and substantially equivalent to the predicate devices.

Conclusions: The non-clinical performance data presented in this submission show that the devices are substantially equivalent to the predicate devices.

Clinical Performance and Conclusions: Clinical data and conclusions were not needed for these devices to show substantial equivalence.