

Smith & Nephew, Inc.
 Summary of Safety and Effectiveness
 MDF Revision Hip System

JUL 31 2008

Contact Person and Address

Rishi Sinha
 Regulatory Affairs Specialist
 Smith & Nephew, Inc.
 Orthopaedic Reconstruction
 1450 Brooks Road
 Memphis, TN 38116
 (901)399-6054

Date of Summary: 07/08/2008

Name of Device: Smith & Nephew MDF Revision Hip System**Common Name:** Hip Stem**Device Description**

The Smith & Nephew MDF Revision Hip System is comprised of a stem, modular neck, and modular sleeve component. The components of the revision hip system modularly connect together to form the complete MDF Revision Hip System construct. The MDF hip stem is a straight, tapered, distally fixed, modular stem designed to match the geometry of the femur. The stems are proportionally sized and shaped in sizes 11 through 25 and have modular neck and sleeve options to address patient anatomy. The stems and sleeves are manufactured from titanium alloy (Ti-6Al-4V) and the necks are manufactured from cobalt chrome. Each modular sleeve is coated with Smith & Nephew's Stiktite porous coating. A hydroxylapatite (HA) coating will be applied to the porous coated areas of the MDF modular sleeve by a plasma spray technique.

Device Classification

21 CFR 888.3353 Hip joint metal/ceramic/polymer semi-constrained cemented or non porous uncemented prosthesis – Class II

Product Code

MEH – Prosthesis, hip, semi-constrained, uncemented, metal/polymer, non-porous, calcium-phosphate

Indications for Use

Total hip components are indicated for uncemented use in individuals undergoing primary and revision surgery where other treatments or devices have failed in rehabilitating hips damaged as a result of trauma, inflammatory joint disease such as rheumatoid arthritis, or noninflammatory degenerative joint disease (NIDJD) or any of its composite diagnoses such as osteoarthritis; avascular necrosis; traumatic arthritis; slipped capital epiphysis; fused hip; fracture of the pelvis; diastrophic variant; old, remote osteomyelitis with an extended drainage-free period; nonunion, femoral neck fracture and trochanteric fractures of the proximal femur with head involvement that are unmanageable using other techniques; femoral osteotomy, or Girdlestone resection; fracture dislocation of the hip; and correction of deformity. Smith & Nephew MDF Revision Hip System components are intended for single use only and are to be implanted without bone cement.

Substantial Equivalence Information

The overall design of the Smith & Nephew MDF Revision Hip System is substantially equivalent to previously cleared devices listed below.

MANUFACTURER	DESCRIPTION	510(K)	CLEARANCE DATE
Smith & Nephew, Inc.	Emperion (Modular) Hip Stem	K042127	11/19/2004
Smith & Nephew, Inc.	MIS Hip Stem	K072417	1/10/2008
Smith & Nephew, Inc.	Anthology Hip Stem	K052792	10/07/2005
Smith & Nephew, Inc.	Echelon Hip Stem	K963486	11/27/1996



Food and Drug Administration
9200 Corporate Boulevard
Rockville MD 20850

Smith & Nephew, Inc.
Orthopaedic Reconstruction
% Mr. Rishi Sinha
Regulatory Affairs Specialist
1450 Brooks Road
Memphis, TN 38116

JUL 31 2008

Re: K081124
Trade/Device Name: MDF Revision Hip System
Regulation Number: 21 CFR 888.3353
Regulation Name: Hip joint metal/ceramic/polymer semi-constrained
Cemented or nonporous uncemented prosthesis
Regulatory Class: Class II
Product Code: MEH
Dated: July 8, 2008
Received: July 15, 2008

Dear Mr. Sinha:

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 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); 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 – Mr. Rishi Sinha

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" (21CFR 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 <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,



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

Enclosure

Indications for Use

510(k) Number (if known): K081124 (pg 1/1)

Device Name: MDF Revision Hip System

Indications for Use:

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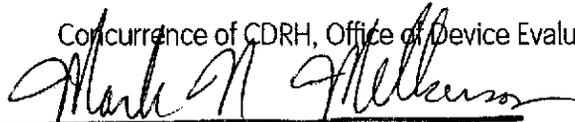
Prescription Use X
(Part 21 CFR 801 Subpart D)

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)



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

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510(k) Number K081124