

JUL 25 2012

**510(k) Summary of Safety and Effectiveness**

Proprietary Name: Hoffmann 3 Modular External Fixation System

Common Name: External Fixation System

Classification Name and Reference: Single/multiple component metallic bone fixation appliances and accessories 21 CFR §888.3030

Regulatory Class: Class II

Product Codes: 87 KTT: Appliance, Fixation, Nail/Blade/Plate Combination, Multiple Components

For Information contact: Estela Celi, Regulatory Affairs Associate  
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Date Prepared: April 24, 2012

**Description:**

This Traditional 510(k) submission is intended to address a sterilization modification to the previously cleared Hoffmann 3 Modular External Fixation System and the addition of a new Apex Fixation Pin. The Hoffmann 3 Modular External Fixation System consists of Rods, Couplings, Clamps and Pins that can be combined to construct different frame configurations that are MR conditional. The additional component will be a new Apex Fixation Pin manufactured from stainless steel. The modification is to provide the previously cleared components and the additional Apex Fixation Pin as part of a sterile kit. This external fixation system may also be used with the components in other Howmedica Osteonics external fixation systems such as the Hoffmann II MRI and Hoffmann II Compact MRI External Fixation Systems and in conjunction with other commercially available Apex Pins.

**Intended Use:**

The Hoffmann 3 Modular External Fixation System is used to provide stabilization of open and/or unstable fractures and where soft tissue injury may preclude the use of other fracture treatments such as IM rods, casts or other means of internal fixation.

**Indications:**

The Hoffmann 3 Modular External Fixation System components are external fixation frame components for use with the components of the Hoffmann II MRI and Hoffmann II Compact MRI External Fixation Systems, in conjunction with Apex Pins. It is intended to provide stabilization of open and/or unstable fractures and where soft tissue injury precludes the use of other fracture treatments such as IM rods, casts or other means of internal fixation.

The indications for use of external fixation devices include:

- Bone fracture fixation
- Osteotomy
- Arthrodesis
- Correction of deformity
- Revision procedure where other treatments or devices have been unsuccessful
- Bone reconstruction procedures

**Summary of Technologies:**

Device comparison showed that the proposed device is substantially equivalent in intended use, materials and performance characteristics to the following predicate devices:

- K111786 Hoffmann 3 Modular External Fixation System
- K001886 Apex Fixation Pins (reference predicate)

**Non-Clinical Testing:**

Non-clinical laboratory testing and engineering evaluations were performed for the Hoffmann 3 System components to determine substantial equivalence. Testing demonstrated that the subject Hoffmann 3 System components are substantially equivalent to devices currently cleared for marketing.

The following testing was performed:

- Corrosion Testing

Engineering Evaluations were completed for the following:

- Insertion Testing
- Pullout Strength Testing
- Rotation Testing
- Static and Dynamic Cantilever Bending Testing

Magnetic Resonance Environment Testing

- Radio Frequency Heating Testing
- Force and Torque Testing
- Artifact Testing

**Clinical Testing:** Clinical testing was not required for this submission.

**Conclusion:** The Hoffmann 3 System is substantially equivalent to the predicate devices identified in this premarket notification.



Food and Drug Administration  
10903 New Hampshire Avenue  
Document Control Room - WO66-G609  
Silver Spring, MD 20993-0002

JUL 25 2012

Stryker Corp.  
Howmedica Osteonics Corp.  
% Ms. Estela Celi  
Regulatory Affairs Associate  
325 Corporate Drive  
Mahwah, NJ 07430

Re: K121252

Trade/Device Name: Hoffmann 3 Modular External Fixation System  
Regulation Number: 21 CFR 888.3030  
Regulation Name: Single/multiple component metallic bone fixation appliances  
and accessories  
Regulatory Class: Class II  
Product Code: KTT  
Dated: April 24, 2012  
Received: April 25, 2012

Dear Ms. Celi:

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 go to <http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. 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 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,



*f* Mark N. Melkerson  
Director  
Division of Surgical, Orthopedic  
and Restorative Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

**Indications for Use**

510(k) Number (if known): K121252 (pg 1/1)

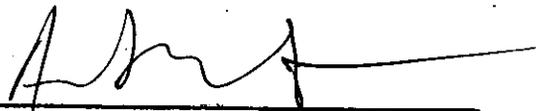
Device Name: Hoffmann 3 Modular External Fixation System

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(Division Sign-Off)  
Division of Surgical, Orthopedic,  
and Restorative Devices

510(k) Number K121252

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 OF  
NEEDED)

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Concurrence of CDRH, Office of Device Evaluation (ODE)