

510(k) SUMMARY

Submitter Information

Submitter's Name: OrthoHelix Surgical Designs, Inc.
Address: 1065 Medina Rd, Suite 500
Medina, Ohio 44256
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Prepared By: Jackson Heavener
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Date Prepared: 05/05/2014

JUL 11 2014

Device Information

Trade Name: MaxLock Extreme™ System

Common Name: Plates/Screws

Classification Name: Plate, Fixation, Bone and Screw, Fixation, Bone

Device Classification: Single/multiple component metallic bone fixation appliances
Class II per 21 CFR 888.3030 and 888.3040
Panel: Orthopedic, Product Code: HRS/HWC

Material Composition: Titanium Alloy, PEEK

Device Description: The MaxLock Extreme™ System consists of various size plates and screws used to stabilize and aid in the fusion or repair of fractured bones and bone fragments. The plates are offered in different lengths and sizes. The screws are offered in different diameters and lengths. All implantable components are manufactured from implant grade titanium alloy or PEEK.

Indications for Use: The MaxLock Extreme™ System is indicated for the following:

- The MaxLock Extreme™ Universal Module is indicated for use in adult or pediatric patients as indicated for pelvic, small and long bone fracture fixation and fixation of bones that have been surgically prepared (osteotomy) for correction of deformity or arthrodesis. Indications for use include internal fixation of the tibia, fibula, femur, humerus, ulna, radius, and bones in the hand, wrist, foot and ankle.
- The MaxLock Extreme™ Clavicle Module is indicated for fractures, fusions and osteotomies of the clavicle and bones in the hand, wrist, foot and ankle.
- The MaxLock Extreme™ Foot Module is indicated for fractures, fusions and osteotomies of bones in the hand, wrist, foot and ankle in pediatric and adult patients.
- The MaxLock Extreme™ Distal Radius Module is indicated for fractures and osteotomies of the distal radius in adult patients.

Substantial Equivalence: The new MaxLock Extreme™ System is substantially equivalent to the existing OrthoHelix MaxLock Extreme™ System, Universal Module (K123203) as well as Stryker VariAx Elbow System (K073527, K092433 &

K101056) the Depuy Orthopaedics, Anatomic Locking Plating System (K082300) and the Acumed Congruent Bone Plating System (K012655). Finite element analysis was performed on the subject plating device and the predicate device to determine the worst case implant. Benchtop mechanical testing was performed to validate the results of the finite element analysis and to facilitate a comparison of the strength of the subject and predicate devices. The results support a determination of substantial equivalence. Further benchtop testing and calculations were performed on the subject screws to arrive at a determination of substantial equivalence. Due to similarities in indications, design, and materials, no other testing was required. No new issues of safety and effectiveness have been raised.



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

July 11, 2014

OrthoHelix Surgical Designs, Incorporated
Mr. Brian Hockett
Director of Research and Development
1065 Medina Road, Suite 500
Medina, Ohio 44256

Re: K141301
Trade/Device Name: MaxLock Extreme™ System
Regulation Number: 21 CFR 888.3030
Regulation Name: Single/multiple component metallic bone fixation appliances and accessories
Regulatory Class: Class II
Product Code: HRS, HWC
Dated: May 2, 2014
Received: May 19, 2014

Dear Mr. Hockett:

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 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

Indications for Use

510(k) Number (if known): K141301

Device Name: MaxLock Extreme™ System

Indications for Use:

The MaxLock Extreme System™ is indicated for the following:

- The MaxLock Extreme Universal Module is indicated for use in adult or pediatric patients as indicated for pelvic, small and long bone fracture fixation and fixation of bones that have been surgically prepared (osteotomy) for correction of deformity or arthrodesis. Indications for use include internal fixation of the tibia, fibula, femur, humerus, ulna, radius, and bones in the hand, wrist, foot and ankle.
- The MaxLock Extreme Clavicle Module is indicated for fractures, fusions and osteotomies of the clavicle and bones in the hand, wrist, foot and ankle.
- The MaxLock Extreme Foot Module is indicated for fractures, fusions and osteotomies of bones in the hand, wrist, foot and ankle in pediatric and adult patients.
- The MaxLock Extreme Distal Radius Module is indicated for fractures and osteotomies of the distal radius in adult patients.

Prescription Use X

AND/OR

Over-The-Counter-Use _____

(Part 21 CFR 801 Subpart D)

(21 CFR 801 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE OF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

Elizabeth Frank -S

Division of Orthopedic Devices

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