

May 13, 2020

Nextremity Solutions, Inc. Elise Fox Quality and Regulatory Specialist 210 North Buffalo Street Warsaw, Indiana 46580

Re: K200124

Trade/Device Name: InCore MPJ System Regulation Number: 21 CFR 888.3040

Regulation Name: Smooth Or Threaded Metallic Bone Fixation Fastener

Regulatory Class: Class II Product Code: HWC Dated: January 17, 2020 Received: January 21, 2020

#### Dear Elise Fox:

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. Although this letter refers to your product as a device, please be aware that some cleared products may instead be combination products. The 510(k) Premarket Notification Database located at <a href="https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm">https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm</a> identifies combination product submissions. 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 <u>Federal Register</u>.

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

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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) for devices or postmarketing safety reporting (21 CFR 4, Subpart B) for combination products (see <a href="https://www.fda.gov/combination-products/guidance-regulatory-information/postmarketing-safety-reporting-combination-products">https://www.fda.gov/combination-products/guidance-regulatory-information/postmarketing-safety-reporting-combination-products</a>); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820) for devices or current good manufacturing practices (21 CFR 4, Subpart A) for combination products; and, if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

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 <a href="https://www.fda.gov/medical-devices/medical-device-safety/medical-device-reporting-mdr-how-report-medical-device-problems">https://www.fda.gov/medical-device-problems</a>.

For comprehensive regulatory information about medical devices and radiation-emitting products, including information about labeling regulations, please see Device Advice (<a href="https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance">https://www.fda.gov/training-and-continuing-education/cdrh-learn</a>). Additionally, you may contact the Division of Industry and Consumer Education (DICE) to ask a question about a specific regulatory topic. See the DICE website (<a href="https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance/contact-us-division-industry-and-consumer-education-dice">https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance/contact-us-division-industry-and-consumer-education-dice</a>) for more information or contact DICE by email (<a href="DICE@fda.hhs.gov">DICE@fda.hhs.gov</a>) or phone (1-800-638-2041 or 301-796-7100).

Sincerely,

Shumaya Ali, MPH
Assistant Director
DHT6C: Division of Restorative, Repair
and Trauma Devices
OHT6: Office of Orthopedic Devices
Office of Product Evaluation and Quality
Center for Devices and Radiological Health

Enclosure

# DEPARTMENT OF HEALTH AND HUMAN SERVICES

Form Approved: OMB No. 0910-0120

Food and Drug Administration	Expiration Date: 06/30/2020
<b>Indications for Use</b>	See PRA Statement below.
510(k) Number (if known)	
K200124	
Device Name	
InCore® MPJ System	
Indications for Use (Describe)	
The Nextremity Solutions InCore® MPJ System is a First Metatarsophalangeal Joint Arthrodesis (also kn	three-part construct intended for internal fixation for own as 1 <sup>st</sup> MPJ Fusion).
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
	USE ONLY
Concurrence of Center for Devices and Radiological Health (CDRH) (S	Signature)

Form FDA 3881

# 510(k) Summary

**Prepared:** May 11<sup>th</sup>, 2020

**Submitter:** Nextremity Solutions, Inc.

210 North Buffalo Street Warsaw, IN 46580

**Contact:** Elise Fox

Quality and Regulatory Specialist

elise.fox@nextremity.com Phone: 574-376-2062 FAX: 574-966-1396

**Proprietary Name:** InCore® MPJ System

**Common Name:** Bone Screw System

**Classification:** 21 CFR §888.3040: Smooth or threaded metallic bone fixation fastener;

Class II

**Product Code:** HWC

# **Substantially Equivalent Devices:**

- Extremity Medical Screw and Washer System (IO FiX), K121417 Primary Predicate
- Nextremity Solutions InCore® Lapidus System, K180257- Additional Predicate
- Nextremity Solutions InCore® TMT System, K192578- Additional Predicate

# **Device Description:**

The InCore MPJ System consists of a post and two headless compression screws. Posts are available with a 4.9mm diameter, in an 18mm length, and in right and left orientations. Screws are available in a 2.7mm diameter and lengths of 16 to 52mm. The post is inserted into the metatarsal head and compression screws are inserted into the phalange and into the post to maintain apposition of the bones during fusion. A post plug screw is threaded into the top of the post after all components have been implanted to prevent tissue ingrowth into the post and facilitate removal, if needed. All implants are manufactured from color anodized Ti-6Al-4V alloy conforming to ASTM F-136.

The system is provided with a set of accessory instruments designed for preparation of the implant site and insertion of the implants into bone.

#### **Intended Use / Indications:**

The Nextremity Solutions InCore MPJ System is a three-part construct intended for internal fixation for First Metatarsophalangeal Joint Arthrodesis (also known as 1<sup>st</sup> MPJ Fusion).

# **Summary of Technologies/Substantial Equivalence:**

The InCore MPJ System is substantially equivalent to the predicate devices in regard to its intended use and indications, material, design, sizes, and mechanical properties. Differences between the subject device system and the predicate device systems do not raise new types of safety and effectiveness questions.

## **Non-Clinical Testing:**

Endotoxin testing was performed on another Nextremity product which is considered worst case. Results met the endotoxin limit of <20 EU / kit. During manufacturing, endotoxin testing will be conducted on the worst-case product in each sterilization lot. Endotoxin testing is performed using the Limulus Amebocyte Lysate (LAL) test Kinetic-Chromogenic Method according to the European Pharmacopeia and the United States Pharmacopeia. To evaluate the strength of the InCore MPJ System and components, axial pull-out strength, torque to failure, and 3-point bend tests were performed on worst case compression screws according to ASTM F543-13 and ASTM F1264-16. Static 3-point bend and dynamic 3-point bend tests were performed on worst case constructs according to ASTM F382-17. These tests confirmed that the strength of the InCore MPJ System is substantially equivalent to predicate devices with similar indications and is adequate for its intended use.

### **Clinical Testing:**

Clinical testing was not necessary to demonstrate substantial equivalence of the InCore MPJ System to the predicate device.

#### **Conclusions/Substantial Equivalence:**

Differences between the subject device system and the predicate device systems do not raise new types of safety and effectiveness questions. The InCore MPJ System is substantially equivalent to the predicate devices in regard to its intended use, material, design, sizes, and mechanical properties.