



August 21, 2025

Treace Medical Concepts
Brittany Grochala
Sr. Regulatory Affairs Specialist II
100 Palmetto Park Place
Ponte Vedra, Florida 32081

Re: K251135

Trade/Device Name: Treace Medical Concepts (TMC) Implant 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: HRS, JDR, HWC
Dated: April 11, 2025
Received: April 14, 2025

Dear Brittany Grochala:

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 (the 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 available at <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm> 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 Federal Register.

Additional information about changes that may require a new premarket notification are provided in the FDA guidance documents entitled "Deciding When to Submit a 510(k) for a Change to an Existing Device" (<https://www.fda.gov/media/99812/download>) and "Deciding When to Submit a 510(k) for a Software Change to an Existing Device" (<https://www.fda.gov/media/99785/download>).

Your device is also subject to, among other requirements, the Quality System (QS) regulation (21 CFR Part 820), which includes, but is not limited to, 21 CFR 820.30, Design controls; 21 CFR 820.90, Nonconforming product; and 21 CFR 820.100, Corrective and preventive action. Please note that regardless of whether a change requires premarket review, the QS regulation requires device manufacturers to review and approve changes to device design and production (21 CFR 820.30 and 21 CFR 820.70) and document changes and approvals in the device master record (21 CFR 820.181).

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 Part 803) for devices or postmarketing safety reporting (21 CFR Part 4, Subpart B) for combination products (see <https://www.fda.gov/combination-products/guidance-regulatory-information/postmarketing-safety-reporting-combination-products>); 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 Part 4, Subpart A) for combination products; and, if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR Parts 1000-1050.

All medical devices, including Class I and unclassified devices and combination product device constituent parts are required to be in compliance with the final Unique Device Identification System rule ("UDI Rule"). The UDI Rule requires, among other things, that a device bear a unique device identifier (UDI) on its label and package (21 CFR 801.20(a)) unless an exception or alternative applies (21 CFR 801.20(b)) and that the dates on the device label be formatted in accordance with 21 CFR 801.18. The UDI Rule (21 CFR 830.300(a) and 830.320(b)) also requires that certain information be submitted to the Global Unique Device Identification Database (GUDID) (21 CFR Part 830 Subpart E). For additional information on these requirements, please see the UDI System webpage at <https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance/unique-device-identification-system-udi-system>.

Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <https://www.fda.gov/medical-devices/medical-device-safety/medical-device-reporting-mdr-how-report-medical-device-problems>.

For comprehensive regulatory information about medical devices and radiation-emitting products, including information about labeling regulations, please see Device Advice (<https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance>) and CDRH Learn (<https://www.fda.gov/training-and-continuing-education/cdrh-learn>). 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 (<https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory->

[assistance/contact-us-division-industry-and-consumer-education-dice](#)) for more information or contact DICE by email (DICE@fda.hhs.gov) or phone (1-800-638-2041 or 301-796-7100).

Sincerely,

CHRISTOPHER FERREIRA -S

Christopher Ferreira, M.S.

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

Indications for Use

Please type in the marketing application/submission number, if it is known. This textbox will be left blank for original applications/submissions.

K251135

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Please provide the device trade name(s).

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Treace Medical Concepts (TMC) Implant Fixation System

Please provide your Indications for Use below.

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The TMC Implant Fixation System is intended for use in stabilization of fresh fractures, revision procedures, joint fusion and reconstruction of the feet. The system can be used in both pediatric (aged >12-21) and adult (aged 22 and over) patients. In the foot, the system can be used for the following specific examples:

- Osteotomy of the 1st metatarsal for the treatment of deformity (e.g., hallux valgus) such as:
 - Opening base wedge osteotomy
 - Closing base wedge osteotomy
 - Crescentic osteotomy
 - Proximal Chevron osteotomy
 - Distal Chevron osteotomy (Austin)
 - Transverse osteotomy
- Arthrodesis of the tarsometatarsal (TMT) joints or the 1st metatarsophalangeal (MTP) joint for the treatment of deformity (e.g., hallux valgus, hallux rigidus, metatarsus adductus) and/or arthritis
- First metatarsal fracture fixation
- Flatfoot Osteotomies
 - Lateral Column Lengthening (Evans Osteotomy)
 - Plantar Flexion Opening Wedge Osteotomy of the Medial Cuneiform (Cotton Osteotomy)
- Mid / Flatfoot Fusions
 - LisFranc Arthrodesis and/or Stabilization
 - Intercuneiform Fusions
 - Navicular-Cuneiform (NC) Fusion
 - Talo-Navicular (TN) Fusion
 - Calcaneo-Cuboid (CC) Fusion
- Medial Column Fusion

Please select the types of uses (select one or both, as applicable).

- ☒ Prescription Use (Part 21 CFR 801 Subpart D)
- ☐ Over-The-Counter Use (21 CFR 801 Subpart C)

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510(k) Summary
Treace Medical Concepts (TMC) Implant Fixation System
August 20, 2025

Company:	Treace Medical Concepts, Inc. 100 Palmetto Park Place Ponte Vedra, FL 32081
Establishment Registration:	3011623994
Primary Contact:	Brittany Grochala, Senior Regulatory Affairs Specialist II Phone: 515-865-0494 Fax: 904-834-7169 Email: bgrochala@treace.net
Secondary Contact:	Kristina Hall, Sr. Director, Regulatory Affairs Phone: 904-373-5940 ext. 1321 Fax: 904-834-7169 Email: khall@treace.net
Trade Name:	Treace Medical Concepts (TMC) Implant Fixation System
Common Name:	Primary: Plate, fixation, bone Subsequent: Staple, fixation, bone; Screw, fixation, bone
Classification:	Class II
Regulation Number:	21 CFR 888.3030 21 CFR 888.3040
Panel:	87- Orthopedic
Product Code(s):	Primary: HRS Subsequent: JDR, HWC

Predicate Device(s):

- Primary Predicate: TMC Plating System (S.E. K240173 02/22/2024)
- Additional Predicate: TMC Compression Implant System (S.E. K243658 S.E. 12/26/2024)

Device Description:

The TMC Implant Fixation System is comprised of straight, L-shaped, H-shaped, anatomically curved plates, intramedullary plates, cannulated and non-cannulated compression implants, and associated instruments. It includes 2.5 mm, 2.7 mm, 3.0 mm, and 3.3 mm diameter cannulated and non-cannulated, locking, and non-locking screws in lengths ranging from 10-36 mm. The plates, screws, and compression implants are intended for use in stabilization of fresh fractures, revision procedures, joint fusion and reconstruction of the feet. All implantable components are manufactured from implant grade titanium alloy (Ti-6Al-4V-ELI) per ASTM F136 and are provided sterile by gamma irradiation.

The changes described in this submission do not impact reprocessing, sterility, shelf-life, and biocompatibility considerations in comparison to the predicate device. The software, cybersecurity, EMC, and wireless technology sections are not applicable to the subject device.

Indications for Use:

The TMC Implant Fixation System is intended for use in stabilization of fresh fractures, revision procedures, joint fusion and reconstruction of the feet. The system can be used in both pediatric (aged >12-21) and adult (aged 22 and over) patients. In the foot, the system can be used for the following specific examples:

- Osteotomy of the 1st metatarsal for the treatment of deformity (e.g., hallux valgus) such as:
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- First metatarsal fracture fixation
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- Mid / Flatfoot Fusions
 - LisFranc Arthrodesis and/or Stabilization
 - Intercuneiform Fusions
 - Navicular-Cuneiform (NC) Fusion
 - Talo-Navicular (TN) Fusion
 - Calcaneo-Cuboid (CC) Fusion
- Medial Column Fusion

Substantial Equivalence:

The subject TMC Implant Fixation System is substantially equivalent to the following predicate devices:

- Primary Predicate: TMC Plating System (S.E. K240173 02/22/2024)
- Additional Predicate: TMC Compression Implant System (S.E. K243658 S.E. 12/26/2024)

The TMC Implant Fixation System is substantially equivalent to the primary predicate TMC Plating System (S.E. K240173 02/22/2024) based on similar intended use, materials, packaging, sterilization, and mechanical performance.

Thus, it can be concluded that the subject devices do not raise new questions about safety and effectiveness and are substantially equivalent to the predicate devices.

Performance Testing:

Mechanical testing including static and dynamic 4-point bend testing based on ASTM F382 Standard Specification and Test Method for Metallic Bone Plates was completed between the subject and predicate device. Further, axial pullout testing was performed and was assessed with modified acceptance criteria derived from the FDA Guidance for Orthopedic Non-Spinal Metallic Bone Screws and Washers – Performance Criteria for Safety and Performance Based Pathway, issued November 22, 2024. The testing and analysis demonstrated that the subject devices met all acceptance criteria and therefore are substantially equivalent to the predicate devices.

Conclusion:

The subject TMC Implant Fixation System has similar intended use, overall design, materials, and mechanical properties to that of the predicate devices. Therefore, it can be concluded that the subject device is at least as safe and effective and substantially equivalent to the predicate devices.