



Si-Bone, Inc.  
Meirav Harsat  
Director, Regulatory Affairs  
47 El Camino Real, Suite 101  
Santa Clara, California 95050

June 30, 2023

Re: K231689

Trade/Device Name: iFuse TORQ<sup>®</sup> Implant System  
Regulation Number: 21 CFR 888.3040  
Regulation Name: Smooth or threaded metallic bone fixation fastener  
Regulatory Class: Class II  
Product Code: OUR, HWC, OLO  
Dated: June 8, 2023  
Received: June 9, 2023

Dear Meirav Harsat:

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 <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.

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) for

devices or postmarketing safety reporting (21 CFR 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 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 <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](mailto:DICE@fda.hhs.gov)) or phone (1-800-638-2041 or 301-796-7100).

Sincerely,

Colin  
O'Neill -S 

Colin O'Neill, M.B.E.  
Assistant Director  
DHT6B: Division of Spinal Devices  
OHT6: Office of Orthopedic Devices  
Office of Product Evaluation and Quality  
Center for Devices and Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known)  
K231689

Device Name  
iFuse TORQ® Implant System

### Indications for Use (Describe)

The iFuse TORQ Implant System is indicated for sacroiliac joint fusion for:

- Sacroiliac joint dysfunction including sacroiliac joint disruption and degenerative sacroiliitis.
- Augmenting immobilization and stabilization of the sacroiliac joint in skeletally mature patients undergoing sacropelvic fixation as part of a lumbar or thoracolumbar fusion.

The iFuse TORQ Implant System is also indicated for fracture fixation of the pelvis, including acute, non-acute and non-traumatic fractures.

The iFuse TORQ Navigation instruments are intended to be used with the iFuse TORQ Implant System to assist the surgeon in precisely locating anatomical structures in iFuse TORQ Implant System procedures, in which the use of stereotactic surgery may be appropriate, and where reference to a rigid anatomical structure, such as the pelvis or vertebra, can be identified relative to the acquired image (CT, MR, 2D fluoroscopic image or 3D fluoroscopic image reconstruction) and / or an image data based model of the anatomy. iFuse TORQ Navigation instruments are intended to be used with the Medtronic StealthStation System.

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)

### CONTINUE ON A SEPARATE PAGE IF NEEDED.

This section applies only to requirements of the Paperwork Reduction Act of 1995.

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## 510(k) SUMMARY – iFuse TORQ® Implant System

### I. SUBMITTER

SI-BONE, Inc.  
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Meirav Harsat, Director of Regulatory Affairs, SI-BONE, Inc.  
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Phone: 650-862-4942  
Date Prepared: June 08, 2023

### II. DEVICE

Trade Name of Device:	iFuse TORQ® Implant System
Common or Usual Name:	Sacroiliac Joint Fixation
Regulation Number:	21 CFR 888.3040, Smooth or threaded metallic bone fastener
Product Code:	OUR, HWC and OLO

### III. PREDICATE AND REFERENCE DEVICES

Primary Predicate:	iFuse TORQ Implant System (K222605)
Additional Predicates:	TransLoc 3D™ (K211496) SpineFrontier® SIJFuse™ Sacroiliac Joint Fusion Device System (K150017)

### IV. DEVICE DESCRIPTION

The iFuse TORQ Implant System consists of threaded, fenestrated, cannulated, 3D-printed implants and associated instruments. Implants are constructed from medical grade titanium alloy (Ti-6Al-4V ELI per ASTM F3001). The implants are fully threaded or with a lag design and provided with optional washers. The washers are intended to add additional support under the head of the screw in situations where the bone quality is poor. The cannulated implants are compatible with off-the-shelf 3.2 mm guidewires. The implants, available in various lengths and diameters, allow for packing of autograft and allograft materials.

### V. PURPOSE

This 510(k) premarket notification is submitted to request clearance for an additional trajectory for placement of the device.

## VI. INDICATIONS FOR USE

The iFuse TORQ Implant System is indicated for sacroiliac joint fusion for:

- Sacroiliac joint dysfunction including sacroiliac joint disruption and degenerative sacroiliitis.
- Augmenting immobilization and stabilization of the sacroiliac joint in skeletally mature patients undergoing sacropelvic fixation as part of a lumbar or thoracolumbar fusion.

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The iFuse TORQ Navigation instruments are intended to be used with the iFuse TORQ Implant System to assist the surgeon in precisely locating anatomical structures in iFuse TORQ Implant System procedures, in which the use of stereotactic surgery may be appropriate, and where reference to a rigid anatomical structure, such as the pelvis or vertebra, can be identified relative to the acquired image (CT, MR, 2D fluoroscopic image or 3D fluoroscopic image reconstruction) and / or an image data based model of the anatomy. iFuse TORQ Navigation instruments are intended to be used with the Medtronic StealthStation System.

## VII. COMPARISON OF TECHNOLOGICAL CHARACTERISTICS WITH THE PREDICATE DEVICE

The subject device has identical technological characteristics compared to the primary predicate device and similar technological characteristics compared to the additional predicates. Risk analyses confirm that the differences do not raise different questions of safety and effectiveness.

## VIII. PERFORMANCE DATA

An assessment of applicable performance data demonstrated that the subject device and its predicates are substantially equivalent.

## IX. CONCLUSIONS

The subject device has been shown to be substantially equivalent to the primary and additional predicate devices. The subject device has the same intended use and indications for use as the primary predicate and an indication for use that is similar to the additional predicate devices. The differences in the indications for use between the subject device and the additional predicate do not affect the safety and effectiveness of the device and do not alter the intended therapeutic, diagnostic, prosthetic, or surgical use of the device. The subject device is the primary predicate and has similar technological characteristics to the additional predicates. The differences in the technological characteristics between the subject device and the additional predicates do not raise different questions of safety and effectiveness.