



Osseus Fusion Systems, LLC  
% Mr. Nathan Wright  
Engineer and Regulatory Specialist  
Empirical Testing Corp.  
4628 Northpark Drive  
Colorado Springs, Colorado 80918

March 1, 2022

Re: K213590

Trade/Device Name: Blue Topaz Sacroiliac Screw System  
Regulation Number: 21 CFR 888.3040  
Regulation Name: Smooth Or Threaded Metallic Bone Fixation Fastener  
Regulatory Class: Class II  
Product Code: OUR  
Dated: January 28, 2022  
Received: January 31, 2022

Dear Mr. Wright:

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,


for

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

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|---|--|
| DEPARTMENT OF HEALTH AND HUMAN SERVICES<br>Food and Drug Administration<br><b>Indications for Use</b>   | Form Approved: OMB No. 0910-0120<br>Expiration Date: 06/30/2020<br>See PRA Statement on last page. |
| 510(k) Number (if known)<br>K213590   |  |
| Device Name<br>Blue Topaz Sacroiliac Screw System   |  |
| Indications for Use (Describe)<br><br>The Blue Topaz Sacroiliac Screw System is intended for sacroiliac joint fusion for conditions including sacroiliac joint disruptions and degenerative sacroiliitis.   |  |
| Type of Use (Select one or both, as applicable)<br><input checked="" type="checkbox"/> Prescription Use (Part 21 CFR 801 Subpart D) <input type="checkbox"/> Over-The-Counter Use (21 CFR 801 Subpart C)  |  |
| <b>CONTINUE ON A SEPARATE PAGE IF NEEDED.</b>   |  |
| <p style="text-align: center;">This section applies only to requirements of the Paperwork Reduction Act of 1995.</p> <p style="text-align: center;"><b>*DO NOT SEND YOUR COMPLETED FORM TO THE PRA STAFF EMAIL ADDRESS BELOW.*</b></p> <p>The burden time for this collection of information is estimated to average 79 hours per response, including the time to review instructions, search existing data sources, gather and maintain the data needed and complete and review the collection of information. Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing this burden, to:</p> <p style="text-align: center;"> Department of Health and Human Services<br/> Food and Drug Administration<br/> Office of Chief Information Officer<br/> Paperwork Reduction Act (PRA) Staff<br/> PRASStaff@fda.hhs.gov </p> <p style="text-align: center;"><i>“An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB number.”</i></p> |  |

## 5. 510(K) SUMMARY

|                            |   |
|----------------------------|---|
| Submitter's Name:          | Osseus Fusion Systems, LLC  |
| Submitter's Address:       | 1931 Greenville Ave, Suite 200<br>Dallas, Texas 75206   |
| Submitter's Telephone:     | 888-330-5960  |
| Contact Person:            | Nathan Wright MS<br>Empirical Testing Corp.<br>1-719-351-0248<br><a href="mailto:nwright@empiricaltech.com">nwright@empiricaltech.com</a> |
|                            | <br><small>EMPIRICAL TESTING CORP.</small>             |
| Date Summary was Prepared: | November 11, 2021   |
| Trade or Proprietary Name: | Blue Topaz Sacroiliac Screw System  |
| Common or Usual Name:      | Sacroiliac Joint Fixation   |
| Classification:            | Class II per 21 CFR §888.3040   |
| Product Code:              | OUR   |
| Classification Panel:      | Orthopedic Devices – Spinal Devices (DHT6B)   |

### DESCRIPTION OF THE DEVICE SUBJECT TO PREMARKET NOTIFICATION:

The Blue Topaz Sacroiliac Screw System consists of cannulated, fully threaded screws intended to facilitate fusion of the sacroiliac joint. The Blue Topaz Sacroiliac Screw System is fabricated from medical grade titanium alloy (Ti-6Al-4V ELI) per ASTM F136. The Blue Topaz System implants come in various sizes and lengths to accommodate patient anatomy. Optional washers are included for each screw diameter to aid in conforming to patient anatomy.

### INDICATIONS FOR USE

The Blue Topaz Sacroiliac Screw System is intended for sacroiliac joint fusion for conditions including sacroiliac joint disruptions and degenerative sacroiliitis.

### TECHNOLOGICAL CHARACTERISTICS

The subject and predicate devices have nearly identical technological characteristics and the minor differences do not raise any new issues of safety and effectiveness. Specifically, the following characteristics are identical between the subject and predicates:

- Indications for Use
- Materials of manufacture
- Structural support mechanism
- Size

**Predicate Devices**

| <b>510k #</b> | <b>Trade or Proprietary or Model Name</b> | <b>Manufacturer</b> | <b>Product Code</b> | <b>Type</b> |
|---------------|---|---------------------|---------------------|-------------|
| K152237       | Entasis™ Dual-Lead Sacroiliac Implant     | CoreLink, LLC       | OUR                 | Primary     |
| K181881       | Outlet Sacroiliac Joint Fusion System     | SIJ Surgical        | OUR                 | Additional  |
| K121148       | SAMBA™ Screw System                       | Medical Designs LLC | HWC, OUR            | Additional  |

**PERFORMANCE DATA**

The Blue Topaz Sacroiliac Screw System has been tested in the following test modes:

- Static and Dynamic Cantilever Bending per ASTM F2193
- Driving Torque per ASTM F543
- Static Torsion per ASTM F543
- Pullout per ASTM F543

The results of this non-clinical testing show that the strength of the Blue Topaz Sacroiliac Screw System is sufficient for its intended use and is substantially equivalent to legally marketed predicate devices.

**CONCLUSION**

The overall technology characteristics and mechanical performance data lead to the conclusion that the Blue Topaz Sacroiliac Screw System is substantially equivalent to the predicate device.