



October 2, 2024

Foundation Surgical Group, Inc.  
% Hannah Taggart  
Regulatory Associate  
Empirical Technologies  
4628 Northpark Drive  
Colorado Springs, Colorado 80918

Re: K241487

Trade/Device Name: Interwedge<sup>®</sup> Standalone Lateral  
Regulation Number: 21 CFR 888.3080  
Regulation Name: Spinal Intervertebral Body Fixation Orthosis  
Regulatory Class: Class II  
Product Code: MAX, OVD  
Dated: September 6, 2024  
Received: September 6, 2024

Dear Ms. Taggart:

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](mailto:DICE@fda.hhs.gov)) or phone (1-800-638-2041 or 301-796-7100).

Sincerely,

**Brent Showalter -S**

Brent Showalter, Ph.D.

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

DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Food and Drug Administration

**Indications for Use**

Form Approved: OMB No. 0910-0120  
Expiration Date: 06/30/2023  
See PRA Statement below.

510(k) Number *(if known)*  
K241487

Device Name  
Interwedge® Standalone Lateral

Indications for Use *(Describe)*

The Interwedge® Standalone Lateral is a standalone lateral lumbar interbody fusion device intended for use in patients with degenerative disc disease (DDD) at one or two contiguous levels of the lumbosacral spine (L1-S1). DDD is defined as discogenic back pain with degeneration of the disc confirmed by history and radiographic studies. These patients should be skeletally mature and have had at least six (6) months of non-operative treatment. In addition, these patients may have up to Grade 1 spondylolisthesis or retrolisthesis at the involved level(s).

The Interwedge® Standalone Lateral is to be filled with autogenous bone graft and/or allogeneic bone graft composed of cancellous, cortical, and/or corticocancellous bone, and is to be used with the two titanium alloy screws which accompany the implant. Should a physician choose to use fewer than these two screws, additional supplemental fixation must be used to augment stability.

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.

**\*DO NOT SEND YOUR COMPLETED FORM TO THE PRA STAFF EMAIL ADDRESS BELOW.\***

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## K241487 510(k) SUMMARY

|                                |                                                                                                                                                                                                                                 |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Submitter's Name:              | Foundation Surgical Group, Inc.                                                                                                                                                                                                 |
| Submitter's Address:           | 7327 E Tierra Buena Lane, Suite 101<br>Scottsdale, AZ 85260                                                                                                                                                                     |
| Submitter's Telephone:         | 908-421-3971                                                                                                                                                                                                                    |
| Contact Person:                | Hannah Taggart MS<br>Empirical Technologies<br>1-719-457-1152<br><a href="mailto:htaggart@empiricaltech.com">htaggart@empiricaltech.com</a>  |
| Date Summary was Prepared:     | July 3, 2024                                                                                                                                                                                                                    |
| Trade or Proprietary Name:     | Interwedge® Standalone Lateral                                                                                                                                                                                                  |
| Device Classification Name:    | Intervertebral Body Fusion Device with Integrated Fixation, Lumbar                                                                                                                                                              |
| Classification & Regulation #: | Class II per 21 CFR §888.3080                                                                                                                                                                                                   |
| Product Code:                  | OVD                                                                                                                                                                                                                             |
| Classification Panel:          | Orthopedic – Spinal Devices (DHT6B)                                                                                                                                                                                             |

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

The Interwedge® is a lateral standalone intervertebral body fusion device in the lumbosacral spine (L1-S1) intended to provide stability and promote fusion between adjacent vertebrae.

The Interwedge® consists of the intravertebral wedge (or spacer) with a lateral plate and a contralateral staple. The lateral plate, with two or four bones screw options, and the contralateral staple provide the integrated fixation to the construct. The Interwedge device is offered in a range of implant sizes and heights to cater to different patient anatomy. The spacer, lateral plate, and staple components will be additively manufactured from Ti-6Al-4 ELI per ASTM F3001. The sub-components of the staple mechanism and the integrated fixation screws will be machined from Ti-6Al-4V ELI per ASTM F136. A cover plate which is attached to the lateral plate after insertion of the bone screws is manufactured from Ti-6Al-4V ELI per ASTM F136.

### INDICATIONS FOR USE

The Interwedge® Standalone Lateral is a standalone lateral lumbar interbody fusion device intended for use in patients with degenerative disc disease (DDD) at one or two contiguous levels of the lumbosacral spine (L1-S1). DDD is defined as discogenic back pain with degeneration of the disc confirmed by history and radiographic studies. These patients should be skeletally mature and have had at least six (6) months of non-operative treatment. In addition, these patients may have up to Grade 1 spondylolisthesis or retrolisthesis at the involved level(s).

The Interwedge® Standalone Lateral is to be filled with autogenous bone graft and/or allogeneic bone graft composed of cancellous, cortical, and/or corticocancellous bone, and is to be used with the two titanium alloy screws which accompany the implant. Should a physician choose to use fewer than these two screws, additional supplemental fixation must be used to augment stability.

### TECHNOLOGICAL CHARACTERISTICS

The predicates included in this submission were selected based on the best practices described in the FDA Draft Guidance document *Best Practices for Selecting a Predicate Device to Support a Premarket Notification [510(k)] Submission*. 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 the same between the subject and predicates:

- Indications for Use
- Principle of Operation
- Structural Support Mechanism
- Materials of manufacture
- Range of Sizes

The differences between the subject device and the predicates, which include larger maximum AP width, maximum plate length, and the use of a contralateral staple for additional fixation, do not raise questions concerning safety and efficacy of the subject device since the subject device met performance testing requirements and the staple component is not a novel feature in FDA cleared lumbar spacers.

#### Predicate Devices

| 510k #  | Trade or Proprietary or Model Name                | Manufacturer                      | Product Code  | Predicate Type |
|---------|---------------------------------------------------|-----------------------------------|---------------|----------------|
| K231743 | F3D Lateral Lumbar Interbody System and Oro Plate | CoreLink, LLC                     | MAX, OVD      | Primary        |
| K152277 | PIVOX™ Oblique Lateral Spine System               | Medtronic Sofamor Danek USA, Inc. | MAX, OVD      | Additional     |
| K203714 | NuVasive CoRoent Thoracolumbar System             | NuVasive                          | MAX, PHM, OVD | Additional     |

#### PERFORMANCE DATA

The Interwedge® Standalone Lateral has been tested in the following test modes:

- Static and Dynamic Axial Compression per ASTM F2207
- Static and Dynamic Compression Shear per ASTM F2207
- Subsidence per ASTM F2267
- Expulsion testing
- Staple pull-apart testing
- Plate pull-apart testing
- Screw back-out testing
- ASTM F1877 particulate analysis of F2077 dynamic runouts

The results of this non-clinical testing show that the strength of the Interwedge® Standalone Lateral 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 Interwedge® Standalone Lateral is substantially equivalent to the predicate device.