



Food and Drug Administration  
10903 New Hampshire Avenue  
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Silver Spring, MD 20993-0002

Life Spine, Incorporated  
Mr. Randy Lewis  
General Manager  
13951 South Quality Drive  
Huntley, Illinois 60142

April 7, 2015

Re: K143249  
Trade/Device Name: SOLSTICE<sup>®</sup> OCT System  
Regulation Number: 21 CFR 888.3050  
Regulation Name: Spinal interlaminar fixation orthosis  
Regulatory Class: Class II  
Product Code: KWP  
Dated: February 27, 2015  
Received: March 2, 2015

Dear Mr. Lewis:

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. 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); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

<http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>. 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 <http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

<http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,

**Mark N. Melkerson -S**

Mark N. Melkerson  
Director  
Division of Orthopedic Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known)  
K143249

Device Name  
Solstice OCT System

### Indications for Use (Describe)

When intended to promote fusion of the cervical spine and occipito-cervico-thoracic junction (Occiput – T3), the SOLSTICE OCT System, when properly used, is intended for: Degenerative Disc Disease (as defined by neck pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies); spondylolisthesis; spinal stenosis; fracture/dislocation; Atlanto/axial fracture with instability; occipitocervical dislocation; revision of previous cervical spine surgery; and tumors.

When used with occipital plate, the bone screws are limited to occipital fixation only. The bone screws are not intended to be used in the cervical spine.

The use of thoracic screws is limited to placement in T1-T3 for anchoring the construct only. They are not intended to be placed in the cervical spine.

The hooks and rods are also intended to provide stabilization to promote fusion following reduction of fracture/dislocation or trauma in the cervical/upper thoracic (C1-T3) spine.

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.

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**510(k) Summary**  
**SOLSTICE® OCT System**

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**510(k) Contact:** Randy Lewis  
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**Date Prepared:** February 27<sup>th</sup>, 2015

**Trade Name:** SOLSTICE OCT System

**Common Name:** Spinal interlaminar fixation orthosis

**Classification:** KWP, CFR 888.3050, Class II

**Primary Predicate:** Sentinel Spinal System (K090343)

**Additional Predicate:** Globus Protex CT (K081906)

**Device Description:**

The SOLSTICE OCT System is a temporary, titanium alloy (6AL-4V-ELI per ASTM F 136), multiple component system comprised of a variety of non-sterile, single use implantable components. The system consists of an assortment of occipital plates, occipital bone screws, polyaxial screws, hooks, rods, locking caps and breakaways.

**Intended Use of the Device:**

When intended to promote fusion of the cervical spine and occipito-cervico-thoracic junction (Occiput – T3), the SOLSTICE OCT System, when properly used, is intended for: Degenerative Disc Disease (as defined by neck pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies); spondylolisthesis; spinal stenosis; fracture/dislocation; Atlanto/axial fracture with instability; occipitocervical dislocation; revision of previous cervical spine surgery; and tumors.

When used with occipital plate, the bone screws are limited to occipital fixation only. The bone screws are not intended to be used in the cervical spine.

The use of thoracic screws is limited to placement in T1-T3 for anchoring the construct only. They are not intended to be placed in the cervical spine.

The hooks and rods are also intended to provide stabilization to promote fusion following reduction of fracture/dislocation or trauma in the cervical/upper thoracic (C1-T3) spine.

**Technological Characteristics:**

The SOLSTICE OCT System is substantially equivalent to the predicate system in terms of design, materials, indications for use and sizing.

**Material:**

The SOLSTICE OCT System is 6AL-4V-ELI titanium manufactured according to ASTM F136. The device is comprised of a variety of non-sterile titanium, single use components.

**Performance Data:**

Mechanical Testing consisting of static and dynamic compression as well as static torsion was conducted in accordance with ASTM F1717. In addition, axial grip, torsional grip and cantilever bending to ASTM F1798 was presented to show the substantial equivalence of the SOLSTICE OCT System.

**Conclusion:**

The information presented demonstrates the substantial equivalency of The SOLSTICE OCT System.