K113157
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MAR 1 3 2012

**510(k) Summary**
**Aileron Interspinous Fixation System**

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| **Submitted By:** | Life Spine, Inc.<br>2401 W. Hassell Road, Suite 1535<br>Hoffman Estates, IL 60169<br>Telephone: 847-884-6117<br>Fax: 847-884-6118 |
| **510(k) Contact:** | Randy Lewis<br>Life Spine<br>2401 W. Hassell Road, Suite 1535<br>Hoffman Estates, IL 60169<br>Telephone: 847-884-6117<br>Fax: 847-884-6118 |
| **Date Prepared:** | December 5th, 2011 |
| **Trade Name:** | Aileron Interspinous Fixation System |
| **Common Name:** | Interspinous Process Fixation System |
| **Classification:** | MNH, 888.3070, Class II, Spondylolisthesis Spinal Fixation Device System<br>MNI, 888.3070, Class II, Pedicle Screw Spinal System<br>KWP, 888.3050, Class II, Spinal Interlaminal Fixation Orthosis |
| **Predicate Device:** | Life Spine Interspinous Fixation System (K100407), Lanx Spinal Fixation System (K090252) and the CD HORIZON Spinous Process Plate (K032037) |

**Device Description:**

The Aileron Interspinous Fixation System is a posterior, non-pedicle supplemental fixation device, intended for use in the non-cervical spine (T1-S1). Implants are manufactured from titanium alloy per ASTM F136 and are available in a range of sizes to suit the individual pathology and anatomical conditions of the patient.

**Intended Use of the Device**:

Internal fixation implants are load-sharing devices intended to stabilize and maintain alignment until normal healing occurs. Implants are not intended to replace normal body structures or bear the weight of the body in the presence of incomplete bone healing.

The Aileron Interspinous Fixation System is a posterior, non-pedicle supplemental fixation device, intended for use in the non-cervical spine (T1-S1). It is intended for plate fixation/attachment to the spinous processes for the purpose of achieving, in conjunction with autogenous bone graft, single level supplemental fusion in the following conditions: (1) degenerative disc disease (is defined as back pain of discogenic origin with degeneration of the disc as confirmed by patient history and radiographic studies), (2) trauma (i.e., fracture or dislocation), (3) spinal tumor, (4) spondylolisthesis. The Aileron Interspinous Fixation System is not intended for stand-alone use.

The ARX® Spinal System, PILOT® Spinal System, PILOT Posterior Lumbar Plating System, and CONQUEST® Spinal System, when properly used, are intended for posterior pedicle screw fixation of the non-cervical posterior spine in skeletally mature patients. They provide stabilization and immobilization of spinal segments as an adjunct to fusion.

When used as posterior spine thoracic/lumbar systems, the ARX Spinal System, PILOT Spinal System, PILOT Posterior Lumbar Plating System, and CONQUEST Spinal System are indicated for one or more of the following: (1) degenerative disc disease (is defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies), (2) trauma (i.e. fracture or dislocation), (3) curvatures (scoliosis, kyphosis, and/or lordosis), (4) spinal tumor, (5) failed previous fusion, (6) pseudoarthrosis, (7) spinal stenosis, (8) spondylolisthesis.

**Technological Characteristics:**

The Aileron Interspinous Fixation System is substantially equivalent to the predicate systems in terms of design, materials, and indications for use.

**Material:**

The Aileron Interspinous Fixation 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:**

Static and Dynamic compression testing per ASTM F1717, Static Axial Grip testing per ASTM F1798, and subsequent engineering analysis was presented to demonstrate the substantial equivalency of the Aileron Interspinous Fixation System.

**Conclusion:**

The information presented demonstrates the substantial equivalency of the Aileron Interspinous Fixation System to the predicate devices.

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration
10903 New Hampshire Avenue
Document Control Room –WO66-G609
Silver Spring, MD 20993-0002

MAR 13 2012

Life Spine, Inc.
% Mr. Randy Lewis
RA/QA Manager
2401 W. Hassell Road, Suite 1535
Hoffman Estates, Illinois 60169

Re: K113157
Trade/Device Name: Aileron Interspinous Fixation System
Regulation Number: 21 CFR 888.3050
Regulation Name: Spinal interlaminal fixation orthosis
Regulatory Class: II
Product Code: KWP, MNI, MNH
Dated: February 20, 2012
Received: February 22, 2012

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.

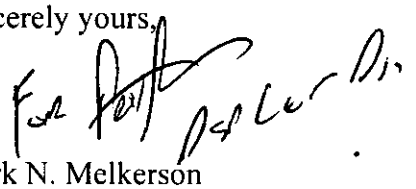
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's 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 go to http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR 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 Small Manufacturers, International and Consumer Assistance 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
Director
Division of Surgical, Orthopedic
and Restorative Devices
Office of Device Evaluation
Center for Devices and
Radiological Health

Enclosure

# Indications for Use

**510(k) number (if known):** K113157

**Device Name: Aileron Interspinous Fixation System**

Internal fixation implants are load-sharing devices intended to stabilize and maintain alignment until normal healing occurs. Implants are not intended to replace normal body structures or bear the weight of the body in the presence of incomplete bone healing.

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Prescription Use _x_ (Part 21 CFR 801 Subpart D) And/Or Over-the-Counter Use ____ (21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

(Division Sign-Off)
Division of Surgical, Orthopedic, and Restorative Devices

510(k) Number K113157