



December 17, 2020

Life Spine, Inc.  
Ms. Angela Batker  
RA/QA Manager  
13951 S. Quality Drive  
Huntley, Illinois 60142

Re: K203163

Trade/Device Name: ARx Illiac Spinal Screw System  
Regulation Number: 21 CFR 888.3070  
Regulation Name: Thoracolumbosacral Pedicle Screw System  
Regulatory Class: Class II  
Product Code: NKB  
Dated: October 21, 2020  
Received: October 23, 2020

Dear Ms. Batker:

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, 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)

K203163

Device Name

ARx Iliac Spinal Screw System

Indications for Use (Describe)

The ARx Iliac Spinal Screw System, is intended for posterior pedicle screw fixation of the non-cervical posterior spine (T1 to S2/ilium) in skeletally mature patients and for pediatric patients to treat adolescent idiopathic scoliosis . It provides stabilization and immobilization of spinal segments as an adjunct to fusion in the treatment of acute and chronic instabilities or deformities of the posterior thoracic, lumbar, and sacral spine. These devices are to be used with autograft and/or allograft. Pediatric pedicle screw fixation is limited to a posterior approach.

When used as a posterior spine thoracic/lumbar system, the ARx Iliac Spinal Screw System is 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 and spinal deformity (scoliosis, kyphosis, and/or lordosis), (4) spinal tumor, (5) failed previous fusion (pseudarthrosis), (6) spinal stenosis, (7) spondylolisthesis.

In order to achieve additional levels of fixation in skeletally mature patients, the ARx Iliac Spinal Screw System 5.5/6.0 rod system may be connected to the Solstice OccipitoCervicoThoracic Fixation System's 3.5mm rod.

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**  
**ARx Illiac Spinal Screw System**

**Submitted By:** Life Spine, Inc.  
13951 S. Quality Drive  
Huntley, IL 60142  
Telephone: 847-884-6117  
Fax: 847-884-6118

**510(k) Contact:** Angela Batker  
Life Spine, Inc.  
13951 S. Quality Drive  
Huntley, IL 60142  
Telephone: 847-884-6117  
Fax: 847-884-6118

**Date Prepared:** October 22nd, 2020

**Trade Name:** ARx Illiac Spinal Screw System

**Common Name:** Thoracolumbosacral Pedicle Screw System

**Classification:** CFR 888.3070 - Thoracolumbosacral Pedicle Screw System, Class II, NKB

**Primary Predicate:** Life Spine Arx (K200070)

**Additional Predicate:** Orthofix Firebird Deformity Correction System (K180179)

**Device Description:**

The ARx Illiac Spinal Screw System consists of screws and longitudinal rods intended to provide temporary stabilization and immobilization following surgery to fuse a portion of the thoracic, lumbar, and/or sacral spine. The ARx Illiac Spinal Screw System consists of an assortment of rods and screws. The bone screw, head, and taper lock are assembled together during manufacturing to create the ARX Illiac Spinal Screw System screw assembly component. The ARx Illiac Spinal Screw System implant components are made from titanium alloy (Ti-6Al-4V ELI) as described by ASTM F136 and Cobalt Chrome (Co-28Cr-6Mo) as described by ASTM F1537. Do not use any of the ARx Illiac Spinal Screw System components with the components from any other system or manufacturer.

**Intended Use of the Device:**

The ARx Illiac Spinal Screw System, is intended for posterior pedicle screw fixation of the non-cervical posterior spine (T1 to S2/ilium) in skeletally mature patients and for pediatric patients to treat adolescent idiopathic scoliosis . It provides stabilization and immobilization of spinal segments as an adjunct to fusion in the treatment of acute and chronic instabilities or

deformities of the posterior thoracic, lumbar, and sacral spine. These devices are to be used with autograft and/or allograft. Pediatric pedicle screw fixation is limited to a posterior approach.

When used as a posterior spine thoracic/lumbar system, the ARx Illiac Spinal Screw System is 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 and spinal deformity (scoliosis, kyphosis, and/or lordosis), (4) spinal tumor, (5) failed previous fusion (pseudarthrosis), (6) spinal stenosis, (7) spondylolisthesis.

In order to achieve additional levels of fixation in skeletally mature patients, the ARx Illiac Spinal Screw System 5.5/6.0 rod system may be connected to the Solstice OccipitoCervicoThoracic Fixation System's 3.5mm rod.

**Material:**

This submission seeks clearance of a device made from titanium alloy (Ti-6Al-4V ELI) as described by ASTM F136 and cobalt chrome (Co-28Cr-6Mo) as described in ASTM F1537. These are the same materials used in the predicate devices.

**Performance Data:**

The ARx Illiac Spinal Screw System was tested according to ASTM F1717 & F1798 including: Static Axial Grip, Static Torsional Grip, and Static Flexion-Extension Moment Testing per ASTM F1798, and Static Compression Bending, Static Torsion, and Dynamic Compression Bending Testing per ASTM F1717. These tests were presented to demonstrate substantially equivalent mechanical performance as compared to the Life Spine Arx (K200070).

**Substantial Equivalence:**

The ARx Illiac Spinal Screw System was shown to be substantially equivalent to the predicate devices in indications for use, design, function, materials used and mechanical performance.

**Conclusion:**

The information presented demonstrates the substantial equivalency of the ARx Illiac Spinal Screw System.