



May 2, 2022

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

Re: K220341

Trade/Device Name: ARx Modular Spinal System
Regulation Number: 21 CFR 888.3070
Regulation Name: Thoracolumbosacral pedicle screw system
Regulatory Class: Class II
Product Code: NKB
Dated: April 5, 2022
Received: April 11, 2022

Dear Angela 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) 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
Office of Product Evaluation and Quality
Center for Devices and Radiological Health

Enclosure

Indications for Use

510(k) Number (if known)
K220341

Device Name
ARx Modular Spinal System

Indications for Use (Describe)

The ARx Modular Spinal 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 Modular Spinal 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 Modular Spinal 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.

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.

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:

Department of Health and Human Services
Food and Drug Administration
Office of Chief Information Officer
Paperwork Reduction Act (PRA) Staff
PRASStaff@fda.hhs.gov

"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."

510(k) Summary
ARx® Modular Spinal 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: May 2nd, 2022

Trade Name: ARx Modular Spinal System

Regulation Name: Thoracolumbosacral Pedicle Screw System

Classification: NKB CFR 888.3070, Class II

Primary Predicate: Life Spine Centerline Modular Spinal System K183430

Additional Predicate: Life Spine ARx Spinal CoCr Pedicle Screw System K200070
Life Spine ARx BL CoCr Spinal Pedicle Screw System K203163
Life Spine Conquest Spinal System K080767

Device Description:

The ARx Modular Spinal System consists of an assortment of rods, modular screws, modular tulips, and offset connectors. The tulip head and taper lock are assembled during manufacturing to create the modular tulip assembly. The ARx Modular Spinal System implant components are made from titanium alloy (Ti- 6Al-4V ELI) as described by ASTM F136 and Cobalt Chrome (Co-28Cr-6Mo) per ASTM F1537.

All implants are intended for single use only and should not be reused under any circumstances. Do not use any of the ARx Modular Spinal System components with components from any other system or manufacturer.

Indications for Use:

The ARx Modular Spinal 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 Modular Spinal 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 Modular Spinal 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) per ASTM 1537. This is the same material used in the predicate devices.

Performance Data:

The ARx Modular Spinal System was tested according to ASTM F1717, F1798 & F5436-01 includes: Static Axial Compression Bending Testing, Static Torsion, Dynamic Compression Bending Testing, Axial and Torsional Grip, Flexion-Extension and Tulip Head Dissociation was presented to demonstrate the substantial equivalency of the Life Spine Conquest Spinal System K080767.

Substantial Equivalence:

The ARx Modular Spinal 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 Modular Spinal System.