Reliance Medical Systems
Bret Berry
Member-Manager
545 West 500 South Suite 100
Bountiful, Utah 84010

May 15, 2018

Re: K180687
Trade/Device Name: Reliance Lumber IBF System
Regulation Number: 21 CFR 888.3080
Regulation Name: Intervertebral Body Fusion Device
Regulatory Class: Class II
Product Code: MAX
Dated: April 13, 2018
Received: April 16, 2018

Dear Bret Berry:

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.

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.

For comprehensive regulatory information about medical devices and radiation-emitting products, including information about labeling regulations, please see Device Advice (https://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/) and CDRH Learn (http://www.fda.gov/Training/CDRHLearn). 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 (http://www.fda.gov/DICE) for more information or contact DICE by email (DICE@fda.hhs.gov) or phone (1-800-638-2041 or 301-796-7100).

Sincerely,

Mark N. Melkerson -S

Mark N. Melkerson
Director
Division of Orthopedic Devices
Office of Device Evaluation
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: 06/30/2020
See PRA Statement below.

510(k) Number *(if known)*
K180687

Device Name
Reliance Lumbar IBF System

Indications for Use *(Describe)*
The Reliance LUMBAR IBF System is indicated for intervertebral body fusion of the spine in skeletally mature patients. The device systems are designed for use with autogenous bone graft to facilitate fusion. One device may be used per intervertebral space. The implants are intended to be used with legally cleared supplemental spinal fixation cleared for the implanted level.

The Reliance LUMBAR IBF System, when used as an Intervertebral Body Fusion device is also intended for use at either one level or two contiguous levels int he lumbar spine, from L2 to S1, for the treatment of degenerative disc disease (DDD) with up to Grade 1 spondylolisthesis. DDD is defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies. The lumbar device is to be used in patients who have had six months of non-operative treatment.

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

Bret M. Berry
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Bountiful, UT 84010
Telephone: 801-388-0700
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Contact: Bret M. Berry
Member-Manager

Common or Usual Name:	Intervertebral Body Fusion Device
Proposed Proprietary or Trade Name:	Reliance Lumbar IBF System
Classification Name:	Class II, Intervertebral Body Fusion Device 21 CFR 888.3080
Product Code:	MAX
Date:	05/09/2018

Substantial Equivalence

The Reliance Lumbar IBF is substantially equivalent to the legally marketed, primary predicate device, Reliance Lumbar IBF System (K113540, K160463 & K173283). The subject devices have same size & configurations as the predicate devices. Subject devices differ in terms of material used and method of sterilization.
It's also substantially equivalent to the legally marketed, secondary predicate device, Globus Patriot TransContinental System (K093242, K102313).The Reliance Lumbar IBF is equivalent to these commercially available devices in terms of material, intended use, levels of attachment, size range, and use with supplemental fixation.

Device Description

The Reliance Lumbar IBF System is comprised of implant and instrument components. The implant component, the Reliance Lumbar IBF device, is a spacer, which inserts between vertebral bodies in the anterior column of the lumbar spine. The spacer is either made of PEEK OPTIMA LT1 with Tantalum markers or with PEEK OPTIMA LT1-HA with Tantalum markers.

Intended Use/Indications for Use

The Reliance Lumbar IBF System is indicated for intervertebral body fusion of the spine in skeletally mature patients. The device systems are designed for use with autogenous bone graft to facilitate fusion. One device may be used per intervertebral space. The implants are intended to be used with legally cleared supplemental spinal fixation cleared for the implanted level.

The Reliance Lumbar IBF System, when used as an Intervertebral Body Fusion device is also intended for use at either one level or two contiguous levels in the lumbar spine, from L2 to S1, for the treatment of degenerative disc disease (DDD) with up to Grade 1

spondylolisthesis. DDD is defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies. The lumbar device is to be used in patients who have had six months of non-operative treatment.

Non-Clinical Testing

The RELIANCE Lumbar IBF System (K113540) has undergone Non-Clinical Testing using various ASTM Standard tests at a third party facility. The subject Reliance Lumbar IBF System has the same design, sizes, indication of use & biocompatibility as the predicate devices.

Finite Element Analysis has been carried out to access the effect of new material on the structural properties of the implant. Test results show the new components are not the new worst case when compared to the approved Reliance Lumbar IBF component, 1-04-XXX, per K113540.

Technological Modifications

The subject Reliance Lumbar IBF system offers additional components. These new components differ in terms of material & sterilization method. LAL testing to test the pyrogen levels have been performed & the specifications have been met.

The Reliance Lumbar IBF System components will be sold either non-sterile or sterile.

All implants under Reliance Lumbar IBF System made out of PEEK Optima LT1 or PEEK Optima LT1-HA which are intended to be sold non-sterile, will be shipped non-sterile and can be steam sterilized. For the non-sterile components, directions for steam sterilization are provided in the package insert, which accompanies the product.

All implants under Reliance Lumbar IBF System made out of PEEK Optima LT1 or PEEK Optima LT1-HA which are intended to be sold sterile, will be sterilized using Gamma Irradiation before shipping.

The subject Reliance Lumabr IBF System will have same indication of use as the currently approved Reliance Lumbar IBF System (K113540 & 160463).

Finite Element Analysis (FEA) was performed on the subject components (Reliance Lumbar IBF-HA System) using Solidworks software and was compared to the test results of the worst case component (1-04-XXX) approved per K113540.

The design verification testing results were equivalent to the identified predicate device and results show that the subject implants do not create a new worst case condition for mechanical testing, performance testing, sterilization, biocompatibility, cleaning or packaging. Sterilization method for subject components intended to be sold sterile, was validated.