



Food and Drug Administration
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Silver Spring, MD 20993-0002

Suzhou Gemmed Medical Instrument Company, Limited
% Ms. Alice Gong
Shanghai Yarui Consulting Company, Limited
503 Room, 8 Building, 600 Liu Zhou Road
Shanghai, China 200233

September 24, 2015

Re: K151592

Trade/Device Name: Gemmed[®] pedicle screw spinal system

Regulation Number: 21 CFR 888.3070

Regulation Name: Pedicle screw spinal system

Regulatory Class: Class II

Product Code: MNI, MNH

Dated: June 22, 2015

Received: June 29, 2015

Dear Ms. Gong:

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 Parts 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)

K151592

Device Name

Gemmed® Pedicle screw spinal system

Indications for Use (Describe)

Gemmed® pedicle screw spinal system is intended for posterior, non-cervical, pedicle fixation for the following indications: severe spondylolisthesis (grade 3 or 4) of the L5-S1 vertebrae; trauma (i.e. fracture or dislocation), spinal stenosis, curvatures (i.e. scoliosis, kyphosis, and/or lordosis); tumor; pseudoarthrosis; and failed previous fusion. The device is to be used in skeletally mature patients, and for stabilization and immobilization of the spine as an adjunct to fusion with bone graft. The levels of fixation are T8 – S1.

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)

PLEASE DO NOT WRITE BELOW THIS LINE – CONTINUE ON A SEPARATE PAGE IF NEEDED.

FOR FDA USE ONLY

Concurrence of Center for Devices and Radiological Health (CDRH) (Signature)

This section applies only to requirements of the Paperwork Reduction Act of 1995.

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Section 5 of Traditional 510(K) Submission:

510 (K) Summary

This 510(K) Summary of safety and effectiveness information is being submitted in accordance with requirement of 21 CFR807.92

1. Date of Submission: Feb. 28, 2015
2. Submitter / 510(K) Holder

Suzhou Gemmed Medical Instrument Co., Ltd.
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Jinnan Rd., Jinfeng Town
Zhangjiagang City,
Jiangsu Province,
China 215625

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3. Proposed Device Name

Trade name: Gemmed[®] pedicle screw spinal system
Common name: Pedicle screw spinal system

Classification Name: Pedicle screw spinal system
Device Class: Class II
Classification Panel: Orthopedic Panel
Product Code: MNI, MNH
Regulation Number: 21 CFR part 888.3070

4. Primary Predicate Device

510 (k) Number: K140053
Product Name: Kangli[®] pedicle screw spinal system
Submitter: Suzhou Kangli Orthopaedics Instrument Co., Ltd.,

5. Device Description

The spinal system consists of pedicle screws, fixed screws, bars and crosslink rod etc.

It is made of titanium alloy (Ti6Al4V ELI), which meets ASTM F136, Standard Specification for Wrought Titanium-6 Aluminum-4 Vanadium ELI (Extra Low Interstitial) Alloy for Surgical Implant Applications, which are widely used for surgical implants with well-known biocompatibility.

The proposed devices are provided non-sterile. It is required to be sterilized via autoclave method to reach a SAL of 10^{-6} by the hospital prior to surgery. The recommended sterilization method was validated per ISO 17665-1 Sterilization of health care products -- Moist heat -- Part 1: Requirements for the development, validation, and routine control of a sterilization process for medical devices.

6. Indication for Use/Intended Use

Gemmed[®] pedicle screw spinal system is intended for posterior, non-cervical, pedicle fixation for the following indications: severe spondylolisthesis (grade 3 or 4) of the L5-S1 vertebrae; trauma (i.e. fracture or dislocation), spinal stenosis, curvatures (i.e. scoliosis, kyphosis, and/or lordosis); tumor; pseudoarthrosis; and failed previous fusion. The device is to be used in skeletally mature patients, and for stabilization and immobilization of the spine as an adjunct to fusion with bone graft. The levels of fixation are T8 – S1.

7. Non-Clinical Testing

Bench tests were conducted to verify that proposed device meet all design specifications as was Substantially Equivalent (SE) to the predicate device. The test results demonstrated that proposed device complies with the following standards:

ASTM F1717-13, Standard Test Methods for Spinal Implant Constructs in a Vertebrectomy Model, including the following items:

- * Static compression bending test;
- * Dynamic compression bending test;
- * Static torsion test.

8. Substantially Equivalent Conclusion

The Gemmed[®] pedicle screw spinal system has same intended use than the predicate device and similar technological characteristics as the predicate device. The proposed device, the Gemmed[®] pedicle screw spinal system, is determined to be Substantially Equivalent (SE) to the predicate device, K140053 Kangli[®] pedicle screw spinal system.