



Food and Drug Administration  
10903 New Hampshire Avenue  
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Silver Spring, MD 20993-0002

Shandong Weigao Orthopaedic Device Co., Ltd.  
% Mr. Justin Eggleton  
Senior Director, Spine Regulatory Affairs  
Musculoskeletal Clinical Regulatory Advisers, LLC  
1050 K Street NW, Suite 1000  
Washington, District of Columbia 20001

August 4, 2017

Re: K170861  
Trade/Device Name: Premier  
Regulation Number: 21 CFR 888.3070  
Regulation Name: Thoracolumbosacral pedicle screw system  
Regulatory Class: Class II  
Product Code: NKB, KWP  
Dated: July 5, 2017  
Received: July 6, 2017

Dear Mr. Eggleton:

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 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,

**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)

K170861

Device Name

Premier

Indications for Use (Describe)

The Premier is intended to provide immobilization and stabilization of spinal segments in skeletally mature patients as an adjunct to fusion in the following acute and chronic instabilities or deformities of the thoracic, lumbar, and sacral spine (T1-S1): degenerative disc disease (defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies); spondylolisthesis; trauma (i.e., fracture or dislocation); spinal stenosis; curvatures (i.e., scoliosis, kyphosis, and/or lordosis); tumor; and failed previous fusion (pseudoarthrosis).

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.

**\*DO NOT SEND YOUR COMPLETED FORM TO THE PRA STAFF EMAIL ADDRESS BELOW.\***

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*“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

**Device Trade Name:** Premier

**Manufacturer:** Shandong Weigao Orthopaedic Device Co., Ltd.  
No. 26 Xiangjiang Road, Tourist Resorts  
Weihai, Shandong China 264203  
+86-631-5788966

**Contact:** Han Wang  
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**Prepared by:** Mr. Justin Eggleton  
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**Date Prepared:** July 5, 2017

**Classification:** 21 CFR §888.3070, Thoracolumbosacral pedicle screw system

**Class:** II

**Product Codes:** NKB, KWP

**Predicate Device:** Weigao Orthopaedic Premier (K160320)

**Additional Predicate Devices:** EXPEDIUM® Spine System (K101070)  
Vitality® Spinal Fixation System (K150896)

### Indications for Use:

The Premier is intended to provide immobilization and stabilization of spinal segments in skeletally mature patients as an adjunct to fusion in the following acute and chronic instabilities or deformities of the thoracic, lumbar, and sacral spine (T1-S1): degenerative disc disease (defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies); spondylolisthesis; trauma (i.e., fracture or dislocation); spinal stenosis; curvatures (i.e., scoliosis, kyphosis, and/or lordosis); tumor; and failed previous fusion (pseudoarthrosis).

**Device Description:**

The purpose of this 510(k) is to make modifications to the previously cleared Premier Spinal System (K160320). The changes include modifications to the implants, surgical instruments, indications and labeling. The Premier consists of fixed-angle screws, fix-angle reduction screws, multi-axial screws, multi-axial reduction screws, rods, crosslink plates, set screws, planar screw, iliac screw, domino connector, lateral connector and hooks.

It is made of Titanium Alloy (Ti6Al4V), which meets ASTM F136-13, Standard Specification for Wrought Titanium-6 Aluminum-4 Vanadium (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: 2006 Sterilization of health care products -- Moist heat -- Part 1: Requirements for the development, validation, and routine control of a sterilization process for medical devices.

**Predicate Device:**

The subject Premier is substantially equivalent to the primary predicate device Premier (K160320) and additional predicate devices EXPEDIUM® Spine System (K101070) and Vitality® Spinal Fixation System (K150896) with respect to indications, design, materials, function, and performance.

**Performance Testing:**

The performance of the subject Premier System was determined based on a series of engineering rationales compared to the predicate devices cited in the previous section

**Substantial Equivalence:**

The subject Premier System is substantially equivalent to the primary predicate device Premier (K160320) and additional predicate devices EXPEDIUM® Spine System (K101070) and Vitality® Spinal Fixation System (K150896) with respect to indications, design, materials, function, and performance.