



Food and Drug Administration  
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Silver Spring, MD 20993-0002

Spine Wave, Inc.  
Amy Noccioli  
Regulatory Affairs Specialist  
3 Enterprise Drive, Suite 210  
Shelton, Connecticut 06484

August 16, 2017

Re: K172175  
Trade/Device Name: CapSure® PS System  
Regulation Number: 21 CFR 888.3070  
Regulation Name: Thoracolumbar Pedicle Screw System  
Regulatory Class: Class II  
Product Code: NKB  
Dated: July 18, 2017  
Received: July 19, 2017

Dear Amy Noccioli:

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)

K172175

Device Name

CapSure® PS System

### Indications for Use (Describe)

The CapSure® PS System is a non-cervical spinal fixation system intended for posterior pedicle screw fixation (T1-S2/ilium) in skeletally mature patients. The CapSure® PS System is indicated for degenerative spondylolisthesis with objective evidence of neurologic impairment, fracture, dislocation, scoliosis, kyphosis, spinal tumor, and failed previous fusion (pseudoarthrosis).

The CapSure® PS System is also indicated for pedicle screw fixation in skeletally mature patients with severe spondylolisthesis (Grades 3 and 4) at the L5-S1 vertebral joint, having fusions with autogenous bone graft, with the device fixed or attached to the lumbar and sacral spine (levels of pedicle screw fixation are L3-S2/ilium), and for whom the device is intended to be removed after solid fusion is attained.

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 CapSure® PS System

### 1. Submitter Information

Submitter: Spine Wave, Inc.  
Address: Three Enterprise Drive  
Suite 210  
Shelton, CT 06484  
Telephone: 203-712-1842  
Telefax: 203-944-9493

Contact: Amy Noccioli

Date Prepared: August 11, 2017

### 2. Device Information

*Trade Name:* CapSure® PS System  
*Common Name:* Pedicle Screw Spinal System  
*Classification:* Class II per 21 CFR 888.3070  
*Classification Name:* Thoracolumbosacral Pedicle Screw System  
*Product Code:* NKB

### 3. Purpose of Submission

The purpose of this submission is to gain clearance for the 4.75 mm diameter cobalt-chrome straight rod and dual-diameter titanium rod additions to the previously cleared CapSure® PS System.

### 4. Predicate Device Information

The CapSure® PS System described in this submission is substantially equivalent to the following predicate:

Predicate Device	Manufacturer	510(k) No.
CapSure® PS System	Spine Wave, Inc.	K132154

### 5. Device Description

The CapSure® PS System consists of a selection of non-sterile, single-use, titanium alloy screw and connector components and titanium alloy and cobalt-chrome rod components that are assembled to create a rigid spinal construct. The components of the CapSure® PS System are attached to the non-cervical spine of skeletally mature patients to stabilize the spine during fusion of vertebral bodies and are intended to be removed after spinal fusion is achieved.

## **6. Indications for Use**

The CapSure® PS System is a non-cervical spinal fixation system intended for posterior pedicle screw fixation (T1-S2/ilium) in skeletally mature patients. The CapSure® PS System is indicated for degenerative spondylolisthesis with objective evidence of neurologic impairment, fracture, dislocation, scoliosis, kyphosis, spinal tumor, and failed previous fusion (pseudoarthrosis).

The CapSure® PS System is also indicated for pedicle screw fixation in skeletally mature patients with severe spondylolisthesis (Grades 3 and 4) at the L5-S1 vertebral joint, having fusions with autogenous bone graft, with the device fixed or attached to the lumbar and sacral spine (levels of pedicle screw fixation are L3-S2/ilium), and for whom the device is intended to be removed after solid fusion is attained.

## **7. Comparison of Technological Characteristics**

The subject CapSure® PS System has technological characteristics similar to the predicate device, including intended use and indications for use, performance, design, and material composition. The only difference between the subject device and the predicate device is the addition of 4.75 mm diameter cobalt-chrome straight rods and dual-diameter titanium rods.

## **8. Performance Data**

Spine Wave, Inc. performed dynamic axial compression bend testing on the worst-case samples of the modified implants in accordance with ASTM F1717. The results of this testing show that the modified implants do not represent a new worst case for the system and are therefore substantially equivalent to the predicate device.

## **9. Conclusion**

The indications for use, technological characteristics, and comparison to the predicate show that the subject CapSure® PS System is substantially equivalent to the predicate device identified in this submission, and does not present any new issues of safety or effectiveness.