

K110842

JUL 13 2011

Atlas Spine, Inc.  
**Special 510(k)** Premarket Notification: Apelo™ Pedicle Screw System

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**510(k) SUMMARY**

Manufacturer: Atlas Spine, Inc.  
Address: 1555 Jupiter Park Drive, Suite #4  
Jupiter, FL 33458  
Telephone: 561-741-1108  
Fax: 561-741-1870

Establishment Reg. No. 3003855635

Official Correspondent: Thomas G. Smith  
Title: Manager, Regulatory Affairs & Quality Assurance  
Telephone: 561-354-4318

Date Prepared: March 23, 2011

Device Classification  
Name: Spinal pedicle fixation orthosis

Trade/Proprietary Name: Apelo™ Pedicle Screw System

Common Name: Pedicle screw spinal system

Classification: Class III per 21 CFR §888.3070

Product Code: MNI, MNH, and NKB

Classification Panel: Orthopedic and Rehabilitation Devices Panel

Predicate Devices: Atlas Spine Pedicle Screw System  
Atlas Spine, Inc.  
K072426

Expedium™ MIS Spine System  
DePuy AcroMed, Inc.  
K041801

XIA® Spinal System  
Stryker Spine  
K043473

XIA® 4.5 Spinal System  
Stryker Spine  
K092605

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Intended Use:

The Apelo™ Pedicle Screw System is intended for noncervical pedicle fixation in skeletally mature patients as an adjunct to fusion for the following indications: 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; pseudarthrosis; and failed previous fusion.

Description of Device Modification:

Being proposed in this **Special 510(k)** is the introduction of line extensions to the existing Apelo™ Pedicle Screw System. The proposed line extensions consist of new sizes of solid monoaxial and polyaxial pedicle screws and cannulated monoaxial and polyaxial pedicle screws without fenestrations. The new design and sizes of pedicle screws will be offered in order to provide surgeons a variety of screws from which to choose for open and minimally invasive procedures based on patients' anatomies.

Equivalence to Marketed Product

Atlas Spine, Inc. has submitted information to demonstrate that, for the purpose of FDA's regulation of medical devices, the Apelo™ Pedicle Screws are substantially equivalent in the intended use, design, materials mechanical, and functional characteristics compared to the predicate devices. The new 4.5mm solid (non-cannulated) diameter screw is identical in terms of intended use, material, and manufacturing processes to the solid monoaxial and polyaxial pedicle screws described more fully in the reference premarket notification, K072426. Dynamic compression bending testing according to ASTM F1717 was conducted to generate two runout samples. Results showed that the proposed screws do not create a new worst case construct. The 4.5mm to and including 8.5mm diameter cannulated pedicle screws are similar in terms of intended use, material and manufacturing processes to the referenced predicate devices [ref. K041801, K043473 and K092605].

Conclusion

Provided documentation demonstrates that the proposed Apelo™ Pedicle Screws are substantially equivalent to the aforementioned predicate devices. This conclusion is based on the devices' similarities in indications for use, design, function, materials and mechanical function.



Food and Drug Administration  
10903 New Hampshire Avenue  
Document Control Room -WO66-G609  
Silver Spring, MD 20993-0002

JUL 13 2011

Atlas Spine, Inc.  
% Mr. Thomas G. Smith  
Manager, Regulatory Affairs and  
Quality Assurance  
1555 Jupiter Park Drive, Suite 4  
Jupiter, Florida 33458

Re: K110842

Trade/Device Name: Apelo™ Pedicle Screw System

Regulation Number: 21 CFR 888.3070

Regulation Name: Pedicle screw spinal system

Regulatory Class: Class III

Product Code: NKB, MNI, MNH

Dated: June 10, 2011

Received: June 13, 2011

Dear Mr. Smith:

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 go to <http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR 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 Small Manufacturers, International and Consumer Assistance 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,



for Mark N. Melkerson  
Director  
Division of Surgical, Orthopedic  
And Restorative Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

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### Indications for Use

510(k) Number (if known): K110842

Device Name: Apelo™ Pedicle Screw System

Indications for Use:

The Apelo™ Pedicle Screw System is intended for noncervical pedicle fixation in skeletally mature patients as an adjunct to fusion for the following indications: 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; pseudarthrosis; and failed previous fusion.

Prescription Use X AND/OR Over-The-Counter Use \_\_\_\_\_  
(Part 21 CFR 801 Subpart D) (21 CFR 801 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

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Concurrence of CDRH, Office of Device Evaluation (ODE)

  
\_\_\_\_\_  
(Division Sign-Off)  
Division of Surgical, Orthopedic,  
and Restorative Devices

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