



Food and Drug Administration  
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January 21, 2015

K2M, Incorporated  
Ms. Nancy Giezen  
Manager, Regulatory Affairs  
751 Miller Drive Southeast  
Leesburg, Virginia 20175

Re: K142360  
Trade/Device Name: Everest Spinal System  
Regulation Number: 21 CFR 888.3070  
Regulation Name: Pedicle screw spinal system  
Regulatory Class: Class III  
Product Code: NKB, OSH, MNH, MNI, KWQ, KWP  
Dated: December 9, 2014  
Received: December 10, 2014

Dear Ms. Giezen:

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 yours,

**Vincent J. Devlin -S**

for

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)  
K142360

Device Name  
Everest Spinal System

### Indications for Use (Describe)

The EVEREST Spinal System may be used in conjunction with the RANGE® (MESA® and DENALI®) Spinal Systems, all of which are cleared for the following indications:

Posterior non-cervical fixation 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/or failed previous fusion.

Except for hooks, when used as an anterolateral thoracic/lumbar system the Everest Spinal System may also be used for the same indications as an adjunct to fusion.

When used for posterior non-cervical pedicle screw fixation in pediatric patients the Everest Spinal System implants are indicated as an adjunct to fusion to treat adolescent idiopathic scoliosis. These devices are to be used with autograft and/or allograft. Pediatric pedicle screw fixation is limited to a posterior approach.

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  
for the  
Everest Spinal System: Additional Connectors**

This 510(k) summary for the Everest Spinal System is provided as required per 21 CFR 807.92

**1. Submitter :**

K2M, Inc.  
751 Miller Drive SE,  
Leesburg, VA 20175

**Contact Person :**

Nancy Giezen  
K2M, Inc.  
Telephone: 703-777-3155

Date Prepared: 12/9/2014

**2. Tradename:**

Everest Spinal System

**Common Name:**

Spinal Fixation System

**Regulatory Class:**

Class II, Class III (NKB)

Pedicle Screw Spinal System	(21 CFR 888.3070)	(NKB, OSH, MNH, MNI)
Spinal Intervertebral body fixation Orthosis	(21 CFR 888.3060)	(KWQ)
Spinal Interlaminar fixation Orthosis	(21 CFR 888.3050)	(KWP)

**3. Predicate or legally marketed devices which are substantially equivalent :**Primary Predicate

Everest Spinal System (K140529)

Additional Predicates

- Medtronic CD Horizon (K132328)

**4. Description of the device:**

The Everest Spinal System is a top-loading, multiple component, posterior (thoracic-lumbar) spinal fixation system which consists of pedicle screws, rods, hooks and rod connectors.

**Materials:** The proposed implants are manufactured from Titanium per ASTM standards.

**Function:** The system functions as an adjunct to fusion to provide immobilization and stabilization of the posterior thoracic and lumbar spine.

**Purpose of Submission:** Additional connectors

**5. Indications For Use:**

The EVEREST Spinal System may be used in conjunction with the RANGE<sup>®</sup> (MESA<sup>®</sup> and DENALI<sup>®</sup>) Spinal Systems, all of which are cleared for the following indications:

Posterior non-cervical fixation 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/or failed previous fusion.

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When used for posterior non-cervical pedicle screw fixation in pediatric patients the Everest Spinal System implants are indicated as an adjunct to fusion to treat adolescent idiopathic scoliosis. These devices are to be used with autograft and/or allograft. Pediatric pedicle screw fixation is limited to a posterior approach.

#### **6. Technological Comparison to Predicate(s)**

The proposed Everest implants were compared to predicate systems and the design features, materials and sizes were found to be substantially equivalent to these systems.

#### **7. Comparison to predicate and legally marketed devices:**

Mechanical testing was conducted in accordance with ASTM F1798 and ASTM F1717 (including static torsion, static compression, and dynamic compression bending). The Everest Spinal System was found to be substantially equivalent to the predicate devices. The proposed implants were determined not to represent a new worst case.

#### **8. Conclusion:**

There are no significant differences between the Everest Spinal System and the predicate devices which would adversely affect the use of the product.