



April 5, 2018

K2M, Inc.  
Ms. Nancy Giezen  
Manager, Regulatory Affairs  
600 Hope Parkway Southeast  
Leesburg, Virginia 20175

Re: K180376  
Trade/Device Name: K2M Patient Specific Rods  
Regulation Number: 21 CFR 888.3070  
Regulation Name: Thoracolumbosacral pedicle screw system  
Regulatory Class: Class II  
Product Code: NKB, KWP, KWQ  
Dated: February 9, 2018  
Received: February 12, 2018

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.

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.

For comprehensive regulatory information about medical devices and radiation-emitting products, including information about labeling regulations, please see Device Advice (<https://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/>) and CDRH Learn (<http://www.fda.gov/Training/CDRHLearn>). Additionally, you may contact the Division of Industry and Consumer Education (DICE) to ask a question about a specific regulatory topic. See the DICE website (<http://www.fda.gov/DICE>) for more information or contact DICE by email ([DICE@fda.hhs.gov](mailto:DICE@fda.hhs.gov)) or phone (1-800-638-2041 or 301-796-7100).

Sincerely,

Ronald P. Jean -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)  
K180376

Device Name  
K2M Patient Specific Rods

### 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  
EVEREST Spinal System**

**Submitter :**

K2M, Inc.  
600 Hope Parkway SE  
Leesburg, VA 20175

Contact Person: Nancy Giezen  
Telephone: 571 919 2000  
Date Prepared: 2/9/2018

**Classification**

Tradename: K2M Patient Specific Rods  
Common Name: Spinal Fixation System  
Regulatory Class: Class II

**Classification Name(s):**

Thoracolumbosacral Pedicle Screw System (21 CFR 888.3070, Product Code NKB)  
Spinal Intervertebral body fixation Orthosis, (21 CFR 888.3060, Product Code KWQ)  
Spinal Interlaminar fixation Orthosis (21 CFR 888.3050, Product Code KWP)

**Predicate Device(s)**

Primary Predicate

Medicrea PASS LP Spinal System (K140738)

Secondary Predicates:

K2M Everest Spinal System (K173508)  
K2M RANGE /DENALI/MESA Spinal Systems (K171832)

**Device Description**

K2M Spinal Systems are top-loading, multiple component, posterior (thoracic-lumbar) spinal fixation systems consisting of pedicle screws, rods, hooks and rod connectors. The subject 510(k) offers patient specific rods.

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

**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.

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.

**Technological Comparison to Predicate(s)**

The proposed K2M implants were compared to predicate systems and the design features, materials and sizes were found to be substantially the same as these systems.

**Non-clinical Performance Evaluation**

Mechanical testing was performed in accordance with ASTM F1717 (including static torsion, static compression, and dynamic compression bending) and the results were comparable to previously cleared devices.

**Conclusion:**

There are no significant differences between the K2M Spinal System components and other devices currently being marketed which would adversely affect the use of the product. Therefore the subject devices are substantially equivalent to the predicate devices.