



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

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

February 25, 2015

Re: K143350  
Trade/Device Name: Nile Alternative Fixation  
Regulation Number: 21 CFR 888.3010  
Regulation Name: Bone fixation cerclage  
Regulatory Class: Class II  
Product Code: OWI  
Dated: January 26, 2015  
Received: January 27, 2015

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,

**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)  
K143350

Device Name  
Nile Alternative Fixation

### Indications for Use (Describe)

The NILE Alternative Fixation Spinal System is a temporary implant for use in orthopedic surgery. The system is intended to provide temporary stabilization as a bone anchor during the development of solid bony fusion and aid in the repair of bone fractures.

The indications for use include the following applications:

1. Spinal trauma surgery, used in sublaminar, interspinous, or facet wiring techniques;
2. Spinal reconstructive surgery, incorporated into constructs for the purpose of correction of spinal deformities such as idiopathic and neuromuscular scoliosis in patients 8 years of age and older, adult scoliosis, kyphosis, and spondylolisthesis;
3. Spinal degenerative surgery, as an adjunct to spinal fusions.

The NILE Alternative Fixation Spinal System may also be used in conjunction with other medical implants made of similar metals whenever 'wiring' may help secure the attachment of other implants.

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.

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.\***

The burden time for this collection of information is estimated to average 79 hours per response, including the time to review instructions, search existing data sources, gather and maintain the data needed and complete and review the collection of information. Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing this burden, to:

Department of Health and Human Services  
Food and Drug Administration  
Office of Chief Information Officer  
Paperwork Reduction Act (PRA) Staff  
PRAStaff@fda.hhs.gov

*"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**  
**Nile Alternative Fixation**

**Submitter**

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

Contact Person: Nancy Giezen  
Telephone: 703-777-3155  
Date Prepared: 1/26/2015

**Classification**

Trade Name: Nile Alternative Fixation  
Common Name: Bone Fixation Cerclage  
Regulatory Class: Class II

Classification Name(s):  
Bone Fixation Cerclage (21 CFR 888.3010, Product Code OWI)

**Predicate Device(s)**

Primary Predicate:

- Universal Clamp Spinal Fixation System (K110348, K091190, K081622, K060009)

Additional Predicates:

- SILC Fixation System (K133482)
- LigaPASS (K132395, K112736)
- Jazz System (K121541)
- Range/Mesa/Denali Spinal System (K120099)

**Device Description**

The Nile Alternative Fixation System implants are comprised of bands, clamps and set screws designed to attach to titanium or cobalt chrome rods. The band is manufactured from polyethylene terephthalate (PET) and the clamps and set screws are made from titanium alloy in accordance with ASTM F136. Once the bands are secured the stainless steel tips are detached and are not intended to be implanted.

Function: The Nile Alternative Fixation system is a band (tether) and clamp device that is designed to be used in conjunction with spinal rods for attachment to the posterior vertebral structures.

### **Intended Use**

The NILE Alternative Fixation Spinal System is a temporary implant for use in orthopedic surgery. The system is intended to provide temporary stabilization as a bone anchor during the development of solid bony fusion and aid in the repair of bone fractures.

The indications for use include the following applications:

1. Spinal trauma surgery, used in sublaminar, interspinous, or facet wiring techniques;
2. Spinal reconstructive surgery, incorporated into constructs for the purpose of correction of spinal deformities such as idiopathic and neuromuscular scoliosis in patients 8 years of age and older, adult scoliosis, kyphosis, and spondylolisthesis;
3. Spinal degenerative surgery, as an adjunct to spinal fusions.

The NILE Alternative Fixation Spinal System may also be used in conjunction with other medical implants made of similar metals whenever 'wiring' may help secure the attachment of other implants.

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

The Nile Alternative Fixation system implants were compared to predicate systems and the design features, materials and intended uses were found to be substantially the same as these systems.

### **Non-clinical Performance Evaluation**

The Nile Alternative Fixation system implants were mechanically tested and compared to predicate devices. The Nile Alternative Fixation system implants performed equally to or better than these systems in static tensile strength, static and dynamic compression, dynamic tension/band pull-through, static band pull-through, axial gripping capacity and rotational gripping capacity.

### **Conclusion**

There are no significant differences between the Nile Alternative Fixation system implants and other systems currently being marketed which would adversely affect the use of the product. It is substantially equivalent to these other devices in design, function, material and performance.