



U&I Corporation  
Jee Ae Bang  
RA Assistant Manager  
20, Sandan-ro 76beon-gil(Rd)  
Uijeongbu-si, 11781 Korea

December 13, 2017

Re: K173524

Trade/Device Name: ANAX 5.5™ Spinal System  
Regulation Number: 21 CFR 888.3070  
Regulation Name: Thoracolumbosacral Pedicle Screw Systems  
Regulatory Class: Class II  
Product Code: NKB  
Dated: November 13, 2017  
Received: November 14, 2017

Dear Jee Ae Bang:

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,

Katherine D. Kavlock -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)

K173524

Device Name

ANAX™ 5.5 Spinal System

Indications for Use (Describe)

The ANAX™ 5.5 Spinal System is a posterior, noncervical pedicle fixation system intended to provide immobilization and stabilization of spinal segments in skeletally-mature patients as an adjunct to fusion by autogenous bone graft in the treatment of the following acute and chronic instabilities or deformities of thoracic, lumbar and sacral spine:

- Spondylolisthesis (Grade 3 and 4)
- Degenerative spondylolisthesis with objective evidence of neurological impairment
- Trauma (i.e., fracture or dislocation)
- Spinal stenosis
- Deformities or curvatures (i.e., scoliosis, kyphosis, and/or lordosis)
- Tumor
- Pseudoarthrosis
- Failed previous fusion

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

**Manufacturer:** U & I Corporation  
20, Sandan-ro 76beon-gil(Rd), Uijeongbu-si, Gyeonggi-do,  
Korea, 11781

**Sponsor:** U & I Corporation  
20, Sandan-ro 76beon-gil(Rd), Uijeongbu-si, Gyeonggi-do,  
Korea, 11781

**Sponsor Contact:** Jee Ae Bang, RA Assistant Manager  
+82-31-860-6846  
bbangzhi@youic.com

**Date Prepared:** November 13, 2017

**Device Name:** Trade Name: ANAX™ 5.5 Spinal System

**Classification Name:** Thoracolumbosacral Pedicle Screw System,  
Class II per 21 CFR 888.3070

**Common Name:** Thoracolumbosacral Pedicle Screw System

**Product Code:** NKB

**Predicate Device:** ANAX™ 5.5 Spinal System (K162189) [Primary]  
ANAX™ 5.5 Spinal System (K143417, K132101)

### Description of Device:

The ANAX™ 5.5 Spinal System is manufactured by U&I corporation. The ANAX™ 5.5 Spinal System is a top-loading multiple component, posterior spinal fixation system and minimally invasive surgery system which consist of pedicle screws, rods, set screws, connectors and a transverse (cross) linking mechanism. The ANAX™ 5.5 Spinal System allows surgeons to build a spinal implant construct to stabilize and promote spinal fusion. The ANAX™ 5.5 Spinal System components are supplied non-sterile, single use and are fabricated from medical grade titanium alloy (ASTM F136) and medical grade cobalt-chromium-molybdenum alloy (ASTM F1537). All pedicle screws have self-tapping function in ANAX™ 5.5 spinal System. The double lead thread is applied to the all pedicle screws to shorten the operation time. ANAX™

**ANAX™ 5.5 Spinal System**



5.5 Spinal System with CoCr rods may be used to provide immobilization and stabilization of spinal segment when the rigid system is need. (Recommendation: trauma or deformities) The product life time of ANAX™ 5.5 SPINAL SYSTEM is 2 years based on mechanical test result.

**Indications for Use:**

ANAX™ 5.5 Spinal System is a posterior, noncervical pedicle fixation system intended to provide immobilization and stabilization of spinal segments in skeletally-mature patients as an adjunct to fusion by autogenous bone graft in the treatment of the following acute and chronic instabilities or deformities of thoracic, lumbar and sacral spine:

- Spondylolisthesis (Grade 3 and 4)
- Degenerative spondylolisthesis with objective evidence of neurological impairment
- Trauma (i.e., fracture or dislocation)
- Spinal stenosis
- Deformities or curvatures (i.e., scoliosis, kyphosis, and/or lordosis)
- Tumor
- Pseudoarthrosis
- Failed previous fusion

**Substantial Equivalence:**

ANAX™ 5.5 Spinal System is substantially equivalent to the ANAX™ 5.5 Spinal System (K162189, K143417, K132101) in design, material, mechanical performance, function and intended use.

The mechanical performance of ANAX™ 5.5 Spinal System met the acceptance criteria which have been established from the predicate device.

1. Comparison Technological Characteristics

The predicate and proposed device has the similar intended use and basic fundamental scientific technology and shares the following similarities;

- Same indications for use
- Similar design features
- Same materials
- Equivalent mechanical performance

## 2. Performance Justification

No mechanical testing was conducted on the subject device because no new worst case is being introduced. However, the mechanical strength was evaluated theoretically by comparing data of the subject device to the ANAX™ 5.5 Spinal System (K162189, K143417, K132101) to verify there are no new safety and effectiveness issues were not raised by the subject device.

The data met all acceptance criteria and verifies that performance of the ANAX™ 5.5 Spinal System is substantially equivalent to the predicate device.

## 3. Conclusion

The data and information provided in this submission support the conclusion that the ANAX™ 5.5 Spinal System is substantially equivalent to its predicate device with respect to indications for use and technological characteristics.