



Food and Drug Administration  
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January 5, 2017

Medyssey USA, Inc.  
% Rich Jansen, Pharm.D.  
Consultant  
Silver Pine Consulting, LLC  
11821 Bramble Cove Drive  
Fort Myers, Florida 33905

Re: K161637

Trade/Device Name: Poseidon OCT Spinal Fixation System  
Regulatory Class: Unclassified  
Product Code: NKG, KWP  
Dated: December 2, 2016  
Received: December 5, 2016

Dear Dr. Jansen:

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,

**Lori A. Wiggins -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)

K161637

Device Name

Poseidon OCT Spinal Fixation System

Indications for Use (Describe)

The Poseidon OCT Spinal Fixation System is intended to provide immobilization and stabilization of spinal segments as an adjunct to fusion for the following acute and chronic instabilities of the craniocervical junction, the cervical spine (C1 to C7) and the thoracic spine (T1 to T3): traumatic spinal fractures and/or traumatic dislocations; instability or deformity; failed previous fusions (e.g., pseudoarthrosis); tumors involving the cervical/thoracic spine; and degenerative disease, including intractable radiculopathy and/or myelopathy, neck and/or arm pain of discogenic origin as confirmed by radiographic studies, and degenerative disease of the facets with instability.

The Poseidon OCT Spinal Fixation System is also intended to restore the integrity of the spinal column even in the absence of fusion for a limited time period in patients with advanced stage tumors involving the cervical spine in whom life expectancy is of insufficient duration to permit achievement of fusion.

In order to achieve additional levels of fixation, the Poseidon OCT Spinal Fixation System may be connected to the Medyssey Zenius, Iliad or Kora Spinal Systems using parallel connectors and taper rods.

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

**Date Prepared:** January 4, 2016  
**Submitter:** Shawn Kim  
 Medyssey USA, Inc.  
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 Skokie, IL 60077  
 847-427-0200  
 888-518-9070 (fax)

**Regulatory Contact:** Rich Jansen, Pharm. D.  
 Silver Pine Consulting, LLC

### Product

Trade Names: Poseidon OCT Spinal Fixation System  
 Product Class: Unclassified  
 Classification: Unclassified  
 Common Name: Posterior, Cervical Pedicle Screw System  
 Product Codes: NKG, KWP  
 Panel Code: 87

### Device Description:

The Poseidon OCT Spinal Fixation System is a posterior fixation system designed for occipito-cervical-thoracic use for single and/or multilevel rigid fixation to treat occipital and/or cervical conditions of the spine.

### Indications for Use:

The Poseidon OCT Spinal Fixation System is intended to provide immobilization and stabilization of spinal segments as an adjunct to fusion for the following acute and chronic instabilities of the craniocervical junction, the cervical spine (C1 to C7) and the thoracic spine (T1 to T3): traumatic spinal fractures and/or traumatic dislocations; instability or deformity; failed previous fusions (e.g., pseudoarthrosis); tumors involving the cervical/thoracic spine; and degenerative disease, including intractable radiculopathy and/or myelopathy, neck and/or arm pain of discogenic origin as confirmed by radiographic studies, and degenerative disease of the facets with instability.

The Poseidon OCT Spinal Fixation System is also intended to restore the integrity of the spinal column even in the absence of fusion for a limited time period in patients with advanced stage tumors involving the cervical spine in whom life expectancy is of insufficient duration to permit achievement of fusion.

In order to achieve additional levels of fixation, the Poseidon OCT Spinal Fixation System may be connected to the Medyssey Zenius, Iliad or Kora Spinal Systems using parallel connectors and taper rods.

### Predicate Device(s):

Medyssey believes these devices are substantially equivalent to a predicate device previously cleared by FDA. The primary predicate device is the Synapse OCT System from DePuy/Synthes (K142838). One additional predicate device is the Vertex Reconstruction System from Medtronic (K143471).

### Performance Standards:

The pre-clinical testing was conducted per ASTM F2706 and ASTM F1798. Testing included:

- Static and dynamic axial compression, static torsion and static tension per ASTM F2706.
- Static and dynamic interconnection mechanism and subassemblies per ASTM F1798.

**Technological Characteristics:**

Medyssey has compared the Poseidon OCT Spinal Fixation System to the predicate devices in regards to indications for use, materials, function, sizes and mechanical test results. These comparisons demonstrate substantial equivalence to the predicate devices.

**Conclusion:**

Medyssey concludes that the Poseidon OCT Spinal Fixation System is substantially equivalent to the predicate devices and raise no new questions of safety or effectiveness.