



February 2, 2018

Camber Spine Technologies  
% Mr. Justin Eggleton  
Senior Director, Spine Regulatory Affairs  
Musculoskeletal Clinical Regulatory Advisers, LLC  
1050 K Street NW, Suite 1000  
Washington, District of Columbia 20001

Re: K173800

Trade/Device Name: Camber Spine Technologies SPIRA – V™ Open Matrix Corpectomy Cage  
Regulation Number: 21 CFR 888.3060  
Regulation Name: Spinal Intervertebral Body Fixation Orthosis  
Regulatory Class: Class II  
Product Code: MQP  
Dated: December 13, 2017  
Received: December 14, 2017

Dear Mr. Eggleton:

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)

K173800

Device Name

Camber Spine Technologies SPIRA-V™ Open Matrix Corpectomy Cage

Indications for Use (Describe)

The Camber Spine Technologies SPIRA-V™ Open Matrix Corpectomy Cage is indicated for use in the Thoracolumbar Spine (T1-L5) to replace collapsed, damaged, or an unstable vertebral body due to tumor or trauma (i.e., fracture). The Camber Spine Technologies SPIRA-V™ Open Matrix Corpectomy is intended to be used with additional FDA-cleared supplementary fixation systems.

The Camber Spine Technologies SPIRA-V™ Open Matrix Corpectomy Cage system must be used with autogenous graft material.

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)

**PLEASE DO NOT WRITE BELOW THIS LINE – CONTINUE ON A SEPARATE PAGE IF NEEDED.**

### FOR FDA USE ONLY

Concurrence of Center for Devices and Radiological Health (CDRH) (Signature)

This section applies only to requirements of the Paperwork Reduction Act of 1995.

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## 510(k) Summary

**Device Trade Name:** Camber Spine Technologies SPIRA-V™ Open Matrix Corpectomy Cage

**Manufacturer:** Camber Spine Technologies  
418 E. Lancaster Ave.  
Wayne, PA 19087

**Contact:** Mr. Daniel Pontecorvo  
CEO  
Phone: (484)-427-7060

**Prepared by:** Justin Eggleton  
Musculoskeletal Clinical Regulatory Advisers, LLC  
1050 K Street NW, Suite 1000  
Washington, DC 20001  
Phone: (202) 552-5800  
[jeggleton@mcra.com](mailto:jeggleton@mcra.com)

**Date Prepared:** January 23, 2018

**Classifications:** 21 CFR §888.3060, Spinal intervertebral body fixation orthosis

**Class:** II

**Product Codes:** MQP

**Primary Predicate:** Camber Spine VERTA (K143490)

**Additional Predicates:** Osteotech VBR (K012254), Interpore Geo Structure (K010530)

**Reference Devices:** Camber Spine SPIRA-C Open Matrix Cervical Interbody (K172446), Rezaian Fixator (K841189)

### Indications for Use:

The Camber Spine Technologies SPIRA-V™ Open Matrix Corpectomy Cage is indicated for use in the Thoracolumbar Spine (T1-L5) to replace collapsed, damaged, or an unstable vertebral body due to tumor or trauma (i.e., fracture). The Camber Spine Technologies SPIRA-V™ Open Matrix Corpectomy is intended to be used with additional FDA-cleared supplementary fixation systems.

The Camber Spine Technologies SPIRA-V™ Open Matrix Corpectomy Cage system must be used with autogenous graft material.

**Device Description:**

The Camber Spine Technologies SPIRA-V™ Open Matrix Corpectomy Cage is a device that has spiral supports to allow for a hollow chamber to permit packing with autogenous bone to facilitate fusion. The superior and inferior surfaces of the device have a rough surface to help prevent movement of the device while fusion takes place.

**Predicate Device:**

The subject Camber Spine Technologies SPIRA-V™ Open Matrix Corpectomy Cage is equivalent to the primary predicate device, Camber Spine VERTA (K143490). Additional predicates were presented, including the Osteotech VBR (K012254) and Interpore Geo Structure (K010530). Comparisons were made to reference devices, including the Camber Spine SPIRA-C Open Matrix Cervical Interbody (K172446) and Rezaian Fixator (K841189).

**Performance Testing Summary:**

Testing performed indicate that the Camber Spine Technologies SPIRA-V Open Matrix Corpectomy Cage is as mechanically sound as predicate devices. Testing included static compression, static torsion, dynamic compression, dynamic torsion, subsidence, and expulsion per ASTM F2077-14 and F2267-04. A particulate analysis was performed in accordance with ASTM F1877-16. The results demonstrate that the acceptance criteria defined by predicate device performance were met.

**Substantial Equivalence:**

The subject Camber Spine Technologies SPIRA-V™ Open Matrix Corpectomy Cage is equivalent to the primary predicate device, Camber Spine VERTA (K143490) with respect to indications, design, materials, function, manufacturing, and/or performance. Additional predicates were presented, including the Osteotech VBR (K012254) and Interpore Geo Structure (K010530). Comparisons were made to reference devices, including the Camber Spine SPIRA-C Open Matrix Cervical Interbody (K172446) and Rezaian Fixator (K841189).

**Conclusion:**

Camber Spine Technologies provided sufficient information to demonstrate the Camber Spine Technologies SPIRA-V Open Matrix Corpectomy Cage is equivalent to primary predicate, Camber Spine VERTA (K143490) with respect to indications, design, materials, function, manufacturing, and/or performance. Additional predicates, Osteotech VBR (K012254) and Interpore Geo Structure (K010530), were presented for additional comparisons. Additional comparisons were made to other reference devices, including the Camber Spine SPIRA-C Open Matrix Cervical Interbody (K172446), Rezaian Fixator (K841189).