



## 510(k) Summary

JAN 14 2009

**Preparation Date:** August 20, 2008

**Applicant/Sponsor:** Biomet Spine  
100 Interpace Parkway  
Parsippany, NJ 07054

**Contact Person:** Vivian Kelly  
Phone: 973-299-9300  
Fax: 973-257-0232

**Trade name:** Expandable PEEK-OPTIMA<sup>®</sup> Implant

**Common Name:** Non-cervical spinal implant

**Classification Name:** Intervertebral fusion device, 21 CFR §888.3080  
Spinal Intervertebral Body Fixation Orthosis, 21 CFR § 888.3060

**Device Panel /Product Code:** Orthopedic MAX & MQP

**Device Description:**

The Expandable PEEK-OPTIMA<sup>®</sup> Implant is a rectangular, expandable device constructed of medical grade Polyetheretherketone (PEEK), for spinal applications.

**Indications for Use:**

The Expandable PEEK-OPTIMA<sup>®</sup> Implant is indicated for vertebral body replacement and intervertebral fusion. When used for vertebral body replacement, The Expandable PEEK-OPTIMA<sup>®</sup> Implant is indicated for use in the thoracolumbar spine (i.e., T1 to L5) to replace a diseased vertebral body resected or excised for the treatment of tumors in order to achieve anterior decompression of the spinal cord and neural tissues, and to restore the height of a collapsed vertebral body. The Expandable PEEK-OPTIMA<sup>®</sup> Implant is also indicated for treating fractures of the thoracic and lumbar spine. The Expandable PEEK-OPTIMA<sup>®</sup> Implant is designed to restore the biomechanical integrity of the anterior, middle, and posterior spinal column even in the absence of fusion for a prolonged period.

As an intervertebral body fusion device, the Expandable PEEK-OPTIMA<sup>®</sup> Implant is indicated for intervertebral body fusion at one level or two contiguous levels in the lumbar spine from L2 to S1 in patients with degenerative disc disease (DDD) with up to Grade 1 spondylolisthesis at the involved level(s). DDD is defined as back pain of discogenic origin with degeneration of the disc confirmed by patient history and radiographic studies. These patients should be skeletally mature and have had six months of non-operative treatment.

The Expandable PEEK-OPTIMA<sup>®</sup> Implant is designed for use with autograft to facilitate fusion and is intended for use with supplemental fixation systems cleared for use in the lumbar spine.

**Summary of Technologies:**

The technological characteristics (material, design and sizing) of the Expandable PEEK-OPTIMA<sup>®</sup> Implant are the same as, or similar to, the predicate devices.

**Substantial Equivalence:**

The Expandable PEEK-OPTIMA<sup>®</sup> Implant is substantially equivalent to its predicate devices with respect to intended use and indications, technological characteristics, and principles of operation and do not present any new issues of safety or effectiveness. An example of a predicate intervertebral body fusion device distributed for the similar indications includes the PEEK-OPTIMA<sup>®</sup> ALIF Spacer (K081636) and the Expandable PEEK-OPTIMA<sup>®</sup> Implant has similar design features. Based upon the mechanical testing, the Expandable PEEK-OPTIMA<sup>®</sup> Implant is substantially equivalent for its intended use to other spacers currently on the market.



Biomet Spine  
% Ms. Vivian Kelly, MS, RAC  
Regulatory Affairs Project Manager  
100 Interpace Parkway  
Parsippany, New Jersey 07054

JAN 14 2009

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Re: K082406

Trade/Device Name: Expandable PEEK-OPTIMA<sup>®</sup> Implant  
Regulation Number: 21 CFR 888.3080  
Regulation Name: Intervertebral body fusion device  
Regulatory Class: II  
Product Code: MAX, MQP  
Dated: January 5, 2009  
Received: January 6, 2009

Dear Ms. Kelly:

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.

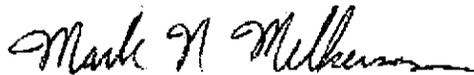
If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish 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); 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.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Center for Devices and Radiological Health's (CDRH's) Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding postmarket surveillance, please contact CDRH's Office of Surveillance and Biometric's (OSB's) Division of Postmarket Surveillance at (240) 276-3474. For questions regarding the reporting of device adverse events (Medical Device Reporting (MDR)), please contact the Division of Surveillance Systems at (240) 276-3464. You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at toll-free number (800) 638-2041 or (240) 276-3150 or the Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,



Mark N. Melkerson  
Director  
Division of General, Restorative  
and Neurological Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

## Indications for Use Statement

510(k) Number (if known): K082406

Device Name:

### Indications for Use:

The Expandable PEEK-OPTIMA<sup>®</sup> Implant is indicated for vertebral body replacement and intervertebral fusion. When used for vertebral body replacement, The Expandable PEEK-OPTIMA<sup>®</sup> Implant is indicated for use in the thoracolumbar spine (i.e., T1 to L5) to replace a diseased vertebral body resected or excised for the treatment of tumors in order to achieve anterior decompression of the spinal cord and neural tissues, and to restore the height of a collapsed vertebral body. The Expandable PEEK-OPTIMA<sup>®</sup> Implant is also indicated for treating fractures of the thoracic and lumbar spine. The Expandable PEEK-OPTIMA<sup>®</sup> Implant is designed to restore the biomechanical integrity of the anterior, middle, and posterior spinal column even in the absence of fusion for a prolonged period.

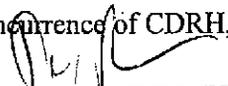
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The Expandable PEEK-OPTIMA<sup>®</sup> Implant is designed for use with autograft to facilitate fusion and is intended for use with supplemental fixation systems cleared for use in the lumbar spine.

Prescription Use  AND/OR Over-The-Counter Use   
(Part 21 CFR 801 Subpart D) (21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

  
\_\_\_\_\_  
(Division Sign-Off)

Division of General, Restorative,  
and Neurological Devices

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