510(k) Summary
for the Vertecem Bone Cement

In accordance with 21 CFR 807.92 of the Federal Code of Regulations
the following 510(k) summary is submitted for the Vertecem Bone Cement

Date Prepared: February 16, 2009

1. **Submitter:**
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   France
   Contact Person:
   J.D. Webb
   The OrthoMedix Group, Inc.
   1001 Oakwood Blvd
   Round Rock, TX 78681
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2. **Trade name:** Vertecem Bone Cement
   **Common Name:** Polymethylmethacrylate (PMMA) bone cement
   **Classification Name:** Cement, Bone, Vertebroplasty
   Class II per 21 CFR section 888.3027
   NDN

3. **Predicate or legally marketed devices which are substantially equivalent:**
   Vertecem Bone Cement is substantially equivalent to similar previously cleared bone cements.

4. **Description of the device:**
   Vertecem is a self-hardening and ready to use bone cement with a high amount of radiopaque
   agent for percutaneous vertebroplasty. It allows an excellent consolidation of the vertebral body
   and an effective and rapid pain relief. This type of cement is made of two sterile components: the
   polymer in powder and the liquid monomer. These two components are in a double sterile
   packaging. Each unit contains a sterile ampoule of liquid within a blister pack and a powder within
   a double peelable pouch, the whole being packaged in a box.

   **Materials:**
   The liquid component is mainly composed of methyl methacrylate. The major powder component
   is polymethylmethacrylate (PMMA). Benzoyl peroxide which initiates the polymerization is
   included in the polymer powder.

5. **Intended Use:**
   The Vertecem Bone Cement is used for the fixation of pathological fractures of the vertebral body
   using vertebroplasty or kyphoplasty procedures. Painful vertebral compression fractures of the
   vertebral body may result from osteoporosis, benign lesions (hemangioma), or malignant lesions
   (metastatic cancers, myeloma).

6. **Comparison of the technological characteristics of the device to predicate and legally marketed devices:**
   The modified Vertecem Bone Cement is substantially equivalent to commercially marketed
   predicate device. The modifications do not change the intended use or fundamental scientific
   technology of the device and do not raise any new issues of safety or effectiveness.

7. **Summary of Nonclinical Tests**
   Test data indicate that the final properties of Vertecem Bone Cement are stable and in
   compliance with the standard reference for bone cement: ISO 5833 "Implants for surgery - acrylic
   resin cements" and are similar to predicate devices.
Dear Mr. Webb:

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 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 go to http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm for the Center for Devices and Radiological Health’s (CDRH’s) Office of Compliance. 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/cdrh/mdr/ 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 Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address http://www.fda.gov/cdrh/industry/support/index.html.

Sincerely yours,

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

Enclosure
Indications for Use

510(k) Number (if known):

Device Name: Vertecem Bone Cement

Indications For Use:

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Prescription Use X AND/OR Over-The-Counter Use

(Please do not write below this line—continue on another page if needed)

Concurrence of CDRH, Office of Device Evaluation (ODE)

[Signature]

FOR M. MELKERN
(Division Sign-Off)
Division of Surgical, Orthopedic, and Restorative Devices

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