

OCT - 6 2000

K002998

**SUMMARY OF SAFETY AND EFFECTIVENESS**

**Sponsor:** Biomet Inc.  
Airport Industrial Park  
P.O. Box 587  
Warsaw, IN 46581-0587

**Contact Person:** Tracy J. Bickel  
(219) 372-1761

**Device(s):** Biomet® Bi-Polar Shoulder System

**Classification:** Prosthesis, shoulder, non-constrained, metal/polymer, cemented

**Device Product Code:** 87 KWT (21 CFR 888.3650)  
87 MBF (Unknown, recently down classified)

**Intended Use:**

- 1) Non-inflammatory degenerative joint disease including osteoarthritis and avascular necrosis
- 2) Rheumatoid arthritis
- 3) Revision where other devices or treatments have failed
- 4) Correction of functional deformity
- 5) Treatment of acute fracture of the humeral head unmanageable using other treatment methods
- 6) Cuff tear arthroplasty

**Device Description:**

- The Biomet® Bi-Polar Shoulder Prosthesis is a self-retaining humeral shell that can be used with either the Bi-Angular® humeral prosthesis or the Bio-Modular® humeral prosthesis.
- In assembling, the liner is place over a modular inner head that is already impacted to an implanted humeral stem. The shell is then placed over the liner and the Ring-Loc® lock ring snaps into the outer groove of the liner, which completes assembly of the prosthesis.
- The shell is available in six spherical diameters, 40 mm, 44 mm, 48 mm, 52 mm, 56 mm and 60 mm. The liner and Ring-Loc® locking ring are modular, i.e. there is only one size of each, and each is used with all six shell sizes.

**Potential Risks:** The potential risks associated with this device are the same as with any joint replacement device. These include, but are not limited to:

Reaction to bone cement	Blood vessel damage	Bone fracture
Deformity of the joint	Soft tissue imbalance	Infection
Cardiovascular disease	Delayed wound healing	Hematoma

**000171**

Fracture of the cement  
Implant loosening/migration  
Tissue growth failure

Metal sensitivity  
Fracture of the components  
Nerve damage

Dislocation  
Excessive wear

**Predicate Device(s):**

Biomet® Bi-Polar Shoulder, K991585

000172



OCT - 6 2000

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Ms. Tracy J. Bickel  
Regulatory Specialist  
Biomet Inc.  
P.O. Box 587  
Warsaw, Indiana 46581-0587

Re: K002998  
Trade Name: Biomet® Bi-Polar Shoulder  
Regulatory Class: II  
Product Code: KWT and MBF  
Dated: September 18, 2000  
Received: September 26, 2000

Dear Ms. Bickel:

We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to 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). You may, therefore, market the device, subject to the general control provisions of the Act. The general control provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

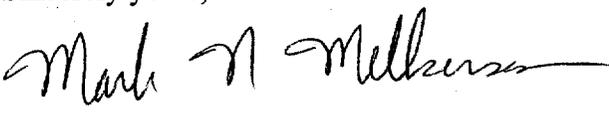
If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. A substantially equivalent determination assumes compliance with the current Good Manufacturing Practice requirement, as set forth in the Quality System Regulation (QS) for Medical Devices: General regulation (21 CFR Part 820) and that, through periodic (QS) inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result in regulatory action. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

This letter will allow you to begin marketing your device as described in your 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.

Page 2 - Ms. Tracy J. Bickel

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4659. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address "<http://www.fda.gov/cdrh/dsmamain.html>".

Sincerely yours,

*for* 

Celia M. Witten, Ph.D., M.D.  
Director  
Division of General, Restorative and  
Neurological Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

510(k) Number (if known): K002998  
Device Name: Biomet® Bi-Polar Shoulder System  
Indications for Use:

The Biomet® Bi-Polar Shoulder System is indicated for use in:

- 1) Non-inflammatory degenerative joint disease including osteoarthritis and avascular necrosis
- 2) Rheumatoid arthritis
- 3) Revision where other devices or treatments have failed
- 4) Correction of functional deformity
- 5) Treatment of acute fracture of the humeral head unmanageable using other treatment methods
- 6) Cuff tear arthroplasty

This is a single use implant for use with cemented or uncemented humeral components. It is intended for use with Biomet's humeral components previously cleared by the FDA.

*for Mark N. Melkerson*  
\_\_\_\_\_  
(Division Sign-Off)  
Division of General Restorative Devices  
510(k) Number K002998

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

Concurrence of CDRH, Office of Device Evaluation (ODE)

Prescription Use X  
(Per 21 CFR 801.109)

OR

Over-The-Counter Use \_\_\_\_\_  
(Optional Format 1-2-96)

000008