

JAN 22 2014

**510(k) SUMMARY**

A summary of 510(k) safety and effectiveness information in accordance with the requirements of 21 CFR 807.92

SUBMITTER INFORMATION		
<b>Name</b>	Biomet Manufacturing Corp.	
<b>Address</b>	56 East Bell Drive Warsaw, IN 46582	
<b>Phone number</b>	(574) 371-3024	
<b>Fax number</b>	(574) 371-1027	
<b>Establishment Registration Number</b>	1825034	
<b>Name of contact person</b>	Carmen Albany, DVM Senior Regulatory Specialist Biomet Manufacturing Corp.	
<b>Date prepared</b>	April 19, 2013	
NAME OF DEVICE		
<b>Trade name</b>	StageOne™ Disposable Cement Spacer Molds for Temporary Hemi-Shoulder Prosthesis	
<b>Common name</b>	Bone Cement shoulder spacer mold; Disposable Cement Spacer Molds for Temporary Hemi-Shoulder Prosthesis; StageOne™ Shoulder Spacer Mold	
<b>Classification name</b>	<b>Regulation</b>	<b>Product Code</b>
Shoulder joint humeral (hemi-shoulder) metallic uncemented prosthesis	21 CFR 888.3690	HSD
Shoulder joint metal/polymer semi-constrained cemented prosthesis	21 CFR 888.3660	KWS
Polymethylmethacrylate (PMMA) bone cement	21 CFR 888.3027	MBB
<b>Classification panel</b>	Orthopedics	
<b>Legally marketed device(s) to which equivalence is claimed</b>	Comprehensive Total Shoulder Standard Stem (K060692) StageOne™ Disposable Cement Spacer Mold For Temporary Hip Prosthesis with Reinforcement Stem (K052990) Tecres InterSpace® Shoulder (K112983)	
<b>Reason for 510(k) submission</b>	New device	
<b>Device description</b>	The single-use cement spacer molds are sterile disposables made of medical grade silicone. They are designed to be filled with Cobalt™ HV with Gentamicin bone cement by injecting with a dispenser/gun into the mold. After the cement cures, the hemi-shoulder prosthesis is to be removed from the mold and placed into the joint space. The hemi-shoulder prosthesis remains in place (180 days or less) until the second stage of the two-stage procedure is performed to implant a conventional shoulder joint prosthesis.	

<p><b>Indications for use</b></p>		<p>Disposable cement spacer molds are indicated for use to mold a temporary hemi-shoulder replacement for skeletally mature patients undergoing a two-stage revision procedure due to a septic process. The temporary prosthesis is molded using Cobalt™ HV with Gentamicin Bone Cement and inserted into the humeral medullary canal and glenoidal cavity following removal of the existing total shoulder replacement implants and debridement. The device is intended for use in conjunction with systemic antimicrobial antibiotic therapy (standard treatment approach to an infection).</p> <p>The hemi-shoulder prosthesis made from the StageOne™ disposable cement molds is not intended for use more than 180 days, at which time it must be explanted and permanent devices implanted or another appropriate treatment performed (e.g. resection arthroplasty, fusion, etc.)</p> <p>Due to the inherent mechanical limitations of the hemi-shoulder prosthesis material (Cobalt™ HV with Gentamicin Bone Cement), the temporary hemi-shoulder prosthesis is only indicated for patients who will consistently follow activity limitations throughout the implant period.</p>
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**SUMMARY OF THE TECHNOLOGICAL CHARACTERISTICS COMPARED TO THE PREDICATES**

The StageOne™ Shoulder Spacer Molds materials, design and sizing configurations are the same when compared to the named predicates. The sizing configurations of the StageOne™ Shoulder Spacer Molds are based on the Comprehensive Total Shoulder Standard Stem (K060692). The StageOne™ Shoulder Spacer Molds utilize the same silicone as used in the StageOne™ Hip Spacer molds (K052990). The StageOne™ shoulder spacers are made of the same material (polymethylmethacrylate/gentamicin bone cement) as the InterSpace® shoulder spacer (K112983) with the exception that the InterSpace® spacer contains a reinforcement structure made of stainless steel and the StageOne™ shoulder spacers do not.

**PERFORMANCE DATA**

**Non-Clinical Tests Conducted For Determination Of Substantial Equivalence**

Comparative mechanical (fatigue and static strength) was performed on the temporary shoulder prosthesis made with the StageOne™ shoulder spacer molds and the predicate Tecres InterSpace® Shoulder (K112983). Antibiotic (gentamicin) elution testing was performed on both the temporary shoulder prosthesis made with the StageOne™ shoulder spacer molds and the predicate Tecres InterSpace® Shoulder (K112983). The temporary shoulder prostheses were found to be substantially equivalent in fatigue and static strength characteristics. The percentage of total gentamicin eluted from the spacer made from a StageOne™ shoulder spacer mold and Cobalt™ HV with Gentamicin bone cement was substantially equivalent to the percentage of gentamicin eluted from the predicate Tecres InterSpace® Shoulder (K112983).

**Clinical Tests Conducted for Determination of Substantial Equivalence and/or of Clinical Information**

No clinical data submitted

**Conclusions Drawn From Non-Clinical and Clinical Data**

No clinical data was necessary for a determination of substantial equivalence. The results of testing indicated the devices performed within the intended use, did not raise any new safety and efficacy issues and were found to be substantially equivalent to the predicate devices.



Food and Drug Administration  
10903 New Hampshire Avenue  
Document Control Center - WO66-G609  
Silver Spring, MD 20993-0002

January 22, 2014

Biomet Manufacturing Corporation  
Carmen Albany, DVM  
Senior Regulatory Affairs Specialist  
P.O. Box 587  
Warsaw, Indiana 46581-0587

Re: K131135

Trade/Device Name: StageOne™ Disposable Cement Spacer Molds for Temporary Hemi-Shoulder Prosthesis

Regulation Number: 21 CFR 888.3027

Regulation Name: Polymethylmethacrylate (PMMA) bone cement

Regulatory Class: Class II

Product Code: MBB, HSD, KWS

Dated: December 5, 2013

Received: December 9, 2013

Dear Dr. Albany:

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 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/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 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/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,

**Lori A. Wiggins**

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): K131135

Device Name: StageOne™ Disposable Cement Spacer Molds for Temporary Hemi-Shoulder Prosthesis     

### Indications For Use:

Disposable cement spacer molds are indicated for use to mold a temporary hemi-shoulder replacement for skeletally mature patients undergoing a two-stage revision procedure due to a septic process. The temporary prosthesis is molded using Cobalt™ HV with Gentamicin Bone Cement and inserted into the humeral medullary canal and glenoidal cavity following removal of the existing total shoulder replacement implants and debridement. The device is intended for use in conjunction with systemic antimicrobial antibiotic therapy (standard treatment approach to an infection).

The hemi-shoulder prosthesis made from the StageOne™ disposable cement molds is not intended for use more than 180 days, at which time it must be explanted and permanent devices implanted or another appropriate treatment performed (e.g. resection arthroplasty, fusion, etc.)

Due to the inherent mechanical limitations of the hemi-shoulder prosthesis material (Cobalt™ HV with Gentamicin Bone Cement), the temporary hemi-shoulder prosthesis is only indicated for patients who will consistently follow activity limitations throughout the implant period.

Prescription Use   X    
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use   NO    
(21 CFR 807 Subpart C)

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

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Concurrence of CDRH, Office of Device Evaluation (ODE)

Laurence D. Coyne -S

(Division Sign-Off)

Division of Orthopedic Devices

510(k) Number: K131135

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