Food and Drug Administration, HHS

§ 888.3640 Shoulder joint metal/metal or metal/polymer constrained cemented prosthesis.

(a) Identification. A shoulder joint metal/metal or metal/polymer constrained cemented prosthesis is a device intended to be implanted to replace a shoulder joint. The device prevents dislocation in more than one anatomic plane and has components that are linked together. This generic type of device includes prostheses that have a humeral component made of alloys, such as cobalt-chromium-molybdenum, and a Glenoid component made of this alloy or a combination of this alloy and ultra-high molecular weight polyethylene.

(b) Classification. Class II when intended for treatment of degenerative and posttraumatic patellar arthritis.

(c) Date PMA or notice of completion of a PDP is required. A PMA or a notice of completion of a PDP is required to be filed with the Food and Drug Administration on or before December 26, 1996 for any knee joint patellar (hemi-knee) metallic resurfacing uncemented prosthesis described in paragraph (b)(2) of this section that was in commercial distribution before May 28, 1976, or that has, on or before December 26, 1996 been found to be substantially equivalent to a knee joint patellar (hemi-knee) metallic resurfacing uncemented prosthesis that was in commercial distribution before May 28, 1976. Any other knee joint patellar (hemi-knee) metallic resurfacing uncemented prosthesis shall have an approved PMA or a declared completed PDP in effect before being placed in commercial distribution.

§ 888.3650 Shoulder joint metal/polymer non-constrained cemented prosthesis.

(a) Identification. A shoulder joint metal/polymer non-constrained cemented prosthesis is a device intended to be implanted to replace a shoulder joint. The device limits minimally (less than normal anatomic constraints) translation in one or more planes. It has no linkage across-the-joint. This generic type of device includes prostheses that have a humeral component made of alloys, such as cobalt-chromium-molybdenum, and a glenoid resurfacing component made of ultrahigh molecular weight polyethylene, and is limited to those prostheses intended for use with bone cement.

(b) Classification. Class II. The special controls for this device are:

(1) FDA’s:


(ii) “510(k) Sterility Review Guidance of 212/90 (K30–1),”

(iii) “Guidance Document for Testing Orthopedic Implants with Modified Metallic Surfaces Apposing Bone or Bone Cement,”

(iv) “Guidance Document for the Preparation of Premarket Notification (510(k)) Application for Orthopedic Devices,” and


(2) International Organization for Standardization’s (ISO):


(vi) ISO 6018:1987 “Orthopaedic Implants—General Requirements for Marking, Packaging, and Labeling,” and


(3) American Society for Testing and Materials:

(i) F 75–92 “Specification for Cast Cobalt-28 Chromium-6 Molybdenum Alloy for Surgical Implant Material,”


(iii) F 799–96 “Specification for Cobalt-28 Chromium-6 Molybdenum Alloy Forgings for Surgical Implants,”

(iv) F 1044–95 “Test Method for Shear Testing of Porous Metal Coatings,”

(v) F 1108-97 “Titanium-6 Aluminum-4 Vanadium Alloy Castings for Surgical Implants.”