May 16, 2001

Dear Mr. Ferguson:

The Food and Drug Administration has completed its review of the Boston Scientific Corporation (BSC) request for designation, filed by this office on April 2, 2001.

The request for designation is for a coated cardiovascular stent, the “paclitaxel-eluting stent.” According to the BSC request, the coating, which consists of a polymer/drug matrix, will be “applied to a standard stainless steel stent using a simple process.” The polymer forming the coating matrix is a triblock copolymer. The drug incorporated into the matrix is paclitaxel, the active ingredient in several new drug products approved for certain oncologic uses. According to the request, paclitaxel exhibits certain properties that induce “cellular modifications that result in reduced proliferation, migration, and signal transduction.” Paclitaxel is being investigated as a stent coating as a means. A fuller description of the product is contained in the request for designation, incorporated here by reference.

BSC recommended that the Center for Devices and Radiological Health (CDRH) have primary jurisdictional responsibility for the paclitaxel-eluting stent, noting that “the action of the drug component, paclitaxel, is ancillary to the stent’s mechanical effect in physically maintaining the patency of the coronary artery.”

We have reviewed the information in the request, and discussed the issues raised with staff in CDRH and the Center for Drug Evaluation and Research (CDER). Because the paclitaxel-eluting stent combines drug and device components and is a combination product within the meaning of section 503(g) of the Federal Food, Drug and Cosmetic Act (21 U.S.C. § 353(g)), review responsibility is assigned based on the agency’s
determination of the product's "primary mode of action." We agree with BSC that the paclitaxel-eluting stent primarily fulfills a device function, i.e., physically maintaining vessel lumen patency. We also agree with BSC that the paclitaxel-eluting properties of the stent in preventing restenosis play a secondary role, augmenting the safety and effectiveness of the bare stent. Therefore, we conclude that the primary mode of action of the product is that of the device component, and assign CDRH primary responsibility for premarket review and regulation.

The assignment of primary review responsibility to CDRH is consistent with the Intercenter Agreement between CDER and CDRH (ICA), which assigns CDRH review responsibility for any device incorporating a drug component with the combination product having the primary intended purpose of fulfilling a device function. See ICA Sections V. A. 2 and VIII. A. 5.

BSC's paclitaxel-eluting stent will be subject to premarket review and approval under the medical device provisions of the Federal Food, Drug, and Cosmetic Act. See 21 U.S.C. § 360c et seq. Moreover, we have been advised that the product will be subject to premarket application (PMA) submission requirements.

Although the BSC paclitaxel-eluting stent will be subject to PMA and other medical device regulatory requirements, the paclitaxel component of the combination product may be subject to certain drug requirements, including human drug current good manufacturing practices requirements. The review staff in CDRH and CDER will provide guidance on which specific drug requirements are applicable to the drug component.

The Division of Cardiovascular, Respiratory, and Neurological Devices (DCRND) in the Office of Device Evaluation, CDRH, will be the primary review group. The Division will conduct its review in consultation with CDER. For further information, contact Stuart Portnoy, M.D., Acting Branch Chief, Interventional Cardiology Group, DCRND, Office of Device Evaluation, CDRH, 9200 Corporate Boulevard, (HFZ-452), Rockville, MD 20850, or by telephone at 301-443-8453. Please include a copy of this letter with your initial submission.

If you have any questions concerning this matter, please contact Tracey Forfa, of this office, at 301-427-3390.

Sincerely yours,

Steven H. Unger
Ombudsman

cc: S. Portnoy, M.D.