



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

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WARNING LETTER

Food and Drug Administration
2098 Gaither Road
Rockville MD 20850

VIA FEDERAL EXPRESS

• Michael Henson
Chairman and Chief Executive Officer
CardioVascular Dynamics, Inc.
13700 Alton Parkway
Irvine, California 92618

APR - 2 1997

Dear Mr. Henson:

The Food and Drug Administration (FDA) has reviewed promotional material distributed by CardioVascular Dynamics, Inc. (CardioVascular Dynamics) at the "Advances in Cardiovascular Radiation Therapy" conference held in Washington, DC on February 20 and 21, 1997. The material pertains to the Periflow and Bullett catheters marketed by CardioVascular Dynamics. These products are devices within the meaning of section 201(h) of the Federal Food, Drug and Cosmetic Act (the Act) because they are used to diagnose or treat a medical condition or to affect the structure or function of the body. The law requires that manufacturers of medical devices obtain marketing clearance for their products from FDA before they may offer them for sale. This helps protect the public health by ensuring that new medical devices are shown to be either safe and effective or substantially equivalent to other devices already legally marketed in this country.

The sections of the brochure pertaining to the Periflow catheters contain several inappropriate statements and claims. One is that "local delivery of low molecular weight heparin at the time of predilatation permits stenting with reduced systemic anticoagulation and early ambulation. Impact on late loss may make this strategy an optimal, cost effective approach." There are two problems with this paragraph. The reference for this paragraph is an article concerning intracoronary stent deployment. Such a reference implies coronary artery use of the catheter. The Periflow catheter is not approved for use in the coronary arteries, as you note in the starred paragraph at the bottom of the last page of the brochure. To use a reference to an article that discusses an unapproved use as the basis for a claim is inappropriate because it changes the intended use of the product, as described more fully below. In addition, coronary use would require the submission by CardioVascular Dynamics of a premarket approval application.

The other problem is that the catheter was not cleared for the delivery of low molecular weight heparin. The catheter was cleared specifically for the delivery of heparinized saline and contrast media. We have been advised by the Center for Devices and Radiological Health's Office of Device Evaluation (ODE) that the company was informed that claims for use of the catheter with specific drugs would have to be supported and cleared on an

individual basis. Thus, the reference to the heparin also changes the intended use as approved in the product's labeling.

The reference for the second inappropriate statement in the brochure, "Regulation of antithrombotic and antiproliferative process by local delivery of low molecular weight heparin may favorably impact on late restenosis" is to an article describing a study in rabbits. No human clinical data have been referenced to support the favorable effect of local infusion of low molecular weight heparin with regard to restenosis. And further, as noted above, the catheter has not been cleared to deliver the heparin.

The statement "treatment of no-reflow with verapamil in degenerated vein grafts is associated with normalization of TIMI flow in 95% of cases" also references intracoronary infusion of verapamil and nitroglycerin. The implied use of the catheter in the coronary artery is again inappropriate because it changes the intended use of the device, and the reference to use of the device to deliver verapamil changes the intended use as well.

In addition, the average burst pressure of 11 atmospheres is presented on the back page of the brochure. ODE has indicated that the statement of average burst pressure for PTA and PTCA catheters in labeling and promotional material is not permitted.

FDA's regulations at 21 CFR 801.4 define the intended use of a device to refer to the objective intent of the persons legally responsible for the labeling of the device. The intent is determined by such persons' expressions or may be shown by the circumstances surrounding the distribution of the article. This objective intent may, for example, be shown by labeling claims, advertising matter, or oral or written statements by such persons or their representatives. It may be shown by the circumstances that the article is, with the knowledge of such persons or their representatives, offered and used for a purpose for which it is neither labeled nor advertised. In your brochure, the claims and the references to articles that discuss uses that have not been cleared for the device change the intended use of the catheter. Pursuant to section 510(k) of the act and as explained in 21 CFR 807.81(a)(3)(ii), claims that establish major changes or modifications in the intended use of a marketed device require the submission of premarket notification.

Because you do not have marketing clearance for the uses claimed, marketing your device is a violation of the Act. In legal terms, the product is misbranded under section 502(o) of the Act and adulterated under section 501(f)(1)(B). As discussed above, your product is misbranded because you did not submit information that shows that your device is substantially equivalent to other devices that are legally marketed. It is adulterated because you did not obtain premarket approval pursuant to section 513(f) of the act based on information developed by you that shows that your device is safe and effective for the uses you are claiming. The device is a class III device without an approved premarket approval application and without an approved application for an investigational device exemption under section 520(g) of the Act.

The note at the bottom of the promotional brochure says, "See Instructions for Use packaged with each catheter for FDA approved indications." FDA's regulations at 21 CFR 807.97 prohibit any reference to FDA clearance or approval because the submission of a premarket notification and a subsequent determination by FDA that the device is substantially equivalent to a legally marketed device does not denote official approval of a device. Any representation that creates an impression of official approval of a device because of complying with the premarket notification regulations is misleading and constitutes misbranding. The reference to FDA-approved indications should be removed.

Finally, you should be aware that the agency expects that claims for cost effectiveness, such as the one made in your brochure, are supported by relevant data and that you maintain that data on file.

You should know that these serious violations of the law may result in FDA taking regulatory action without further notice to you. These actions include, but are not limited to, seizing your product inventory, obtaining a court injunction against further marketing of the product, or assessing civil money penalties. Also, other Federal agencies are informed about the warning letters we issue, such as this one, so that they may consider this information when awarding government contracts.

It is necessary for you to take action on this matter now. Please let this office know in writing within fifteen (15) working days from the date you received this letter what steps you are taking to correct the problem. We also ask that you explain how you plan to prevent this from happening again. If you need more time, let us know why and when you expect to complete your correction. Please direct your response and any questions to Deborah Wolf, Regulatory Counsel, Promotion and Advertising Policy Staff (HFZ-302), Office of Compliance, Center for Devices and Radiological Health, 2098 Gaither Road, Rockville, Maryland 20850.

Finally, you should understand that there are many FDA requirements pertaining to the manufacture and marketing of medical devices. This letter pertains only to the issues of premarket clearance and approval for your device and the appropriate promotion of the device and does not necessarily address other obligations you have under the law. You may obtain general information about all of FDA's requirements for manufacturers of medical devices by contacting our Division of Small Manufacturers Assistance at (800) 638-2041 or through the Internet at <http://www.fda.gov>.

A copy of this warning letter is being sent to FDA's Los Angeles District Office. Please send a copy of your response to District Director, Food and Drug Administration (HFR-PA240), 19900 MacArthur Blvd., Suite 300, Irvine, California 92612-2445.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Lillian Gill".

Lillian Gill
Director
Office of Compliance
Center for Devices and
Radiological Health