



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service
Food and Drug Administration

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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

19900 MacArthur Blvd., Ste 300
Irvine, California 92612-2445
Telephone (949) 798-7600

WARNING LETTER

April 13, 2001

William R. Schilt
President and CEO
Cardiomedics, Inc.,
18872 Bardeen Avenue
Irvine, CA 92612

WL-33-01

Dear Mr. Schilt:

During an inspection of your firm located in Irvine, California, on March 7 to 16, 2001, our investigators determined that your firm manufactures counter pulsation devices. Counter pulsation devices are medical devices as defined by Section 201(h) of the Federal Food, Drug, and Cosmetic Act.

Our inspection disclosed that these devices are adulterated within the meaning of Section 510(h) of the Act, in that the methods used in, or the facilities or controls used for manufacturing, packing, and storage are not in conformance with the Good Manufacturing Practice (GMP) requirements for the Quality System Regulation, as specified in Title 21, Code of Federal Regulations (CFR), Part 820, as follows:

1. Failure to implement and control a quality system that is appropriate for the specific devices manufactured by your company. [21 CFR 820.20]. For example,
 - Management with executive responsibilities has not ensured that quality system requirements are effectively established and effectively maintained.
 - Management with executive responsibility has not established a policy and objectives for, and commitment to, quality for specific devices manufactured.
 - No quality plan defining the quality practices, resources, and activities relevant to devices that are designed and manufactured has been established or implemented.
 - The quality system procedures and instructions where appropriate have not been implemented.

- Procedures for management review were implemented and no documented evidence that any management reviews have been conducted to ensure that quality system requirements are met.
2. Failure to control procedures and to conduct quality audits to assure that the quality system is in compliance with established quality system requirements and to determine the effectiveness of the quality system [21 CFR 820.22]. For example,
- Quality audits did not verify that the quality system is effective in fulfilling the quality system requirement.
 - No documented evidence that reaudit(s) when deemed necessary are conducted to ensure that corrective actions of deficient matters were undertaken when necessary.
 - Appropriate management representatives do not review audit/reaudit reports.
3. Failure to implement procedures to control the design process of the specific devices manufactured by your company [21 CFR 820.30]. For example,
- No design and development plan has been established.
 - Procedures for planning and conducting reviews of the design results at appropriate stages of a device's design development was not implemented.
 - Procedure for verifying that design output meet design input was not implemented.
 - No documented evidence to support the validation of design changes made to the CardiAssist CounterPulsation System despite changes made to this device.
 - No procedures for the development of software used to control devices.
 - The software used for the operation of the CardiAssist CounterPulsation system was not properly validated. Problems with this software have been identified and corrective measures have been undertaken to replace this software version.
4. Production processes are not controlled or monitored to ensure that a device conforms to its specifications [820.70]. For example,
- Modifications made to devices to correct non-conformities after final assembly are not documented.

- Electro Static Discharge controls in the electronic assembly have not been implemented as specified by written procedures.
 - Non-conformances found in production are not documented in the device history record.
5. Failure to establish and control appropriate procedures for implementing corrective and preventive actions [21 CFR 820.100]. For example,
- There are no corrective and preventive action procedures for addressing the analysis of sources of quality data to identify existing and potential causes of non-conforming product or other quality problems.
 - The corrective and preventive action procedures do not address the investigation of the cause of non-conformities relating to product, processes, and the quality system.
 - No documentation to support changes made to device in response of complaints and field failures.
 - Information on identified quality problems and corrective actions are not submitted to management for review and evaluation.
6. Failure to establish, implement and control appropriate procedures for handling complaints [21 CFR 820.198]. For example,
- A formally designated unit for handling complaints has not been established.
 - Complaints involving the possible failure of a device to meet its specifications were not documented.

We acknowledge that you have submitted to this office a response dated March 21, 2001 concerning our investigators observations noted on the form FDA 483. We have reviewed your response and consider it inadequate. Specifically, your letter does not describe any corrective measures undertaken by your firm to ensure compliance with the requirements of the Quality System Regulation it only indicates that your firm is currently evaluating the observations and implementing a corrective action plan to address the problems noted during our inspection.

Additionally, our office has serious concerns regarding your premarket notification submission for your counter pulsation device. Design control requirements are now in effect and require the manufacturer to conduct verification and validation studies of a type that have traditionally been included in 510(k) submissions.

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Under the new 510(k) paradigm your firm submitted a "Declaration of Conformity" indicating that your firm was in compliance with the design control requirements. Because our investigation disclosed several significant deficiencies from the design control requirements of the Quality System Regulation we were unable to reconcile the design activities undertaken by your company with respect to your counter pulsation device and is our reason for serious concerns.

Due to the District's serious concerns, we wish to meet with you and your representatives to discuss these concerns. Please contact Thomas L. Sawyer, Director of Compliance Branch at (949) 798-7755 to make the necessary arrangements for the meeting.

This letter is not intended to be an all-inclusive list of deficiencies at your facility. It is your responsibility to ensure adherence to each requirement of the Act and regulations. The specific violations noted in this letter and in the Form FDA 483 issued at the conclusion of the inspection may be symptomatic of serious underlying problems in your firm's manufacturing and quality assurance system. You are responsible for investigating and determining the causes of the violations identified by the FDA. If the causes are determined to be systems problems, you must promptly initiate permanent corrective actions.

Federal Agencies are advised of the issuance of all Warning Letters about devices so that they may take this information into account when considering the award of contracts. Additionally, no premarket submissions for devices to which the GMP deficiencies are reasonably related will be cleared until the violations have been corrected. Also, no requests for Certificates For Exportability will be approved until the violations related to the subject devices have been corrected.

You should take prompt action to correct these deviations. Failure to promptly correct These deviations may result in regulatory action being initiated by the Food and Drug Administration without further notice. These actions include, but are not limited to, seizure, injunction, and/or civil penalties.

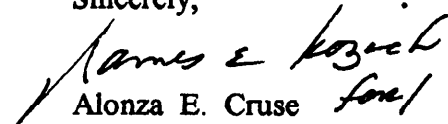
Please notify this office in writing within 15 working days of receipt of this letter, of the specific steps you have taken to correct the noted violations, including an explanation of each step being taken to identify and make corrections to any underlying systems problems necessary to assure that similar violations will not recur. If corrective action cannot be completed within 15 working days, state the reason for the delay and the time within which the corrections will be completed.

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Please submit your response to:

Thomas L. Sawyer
Director, Compliance Branch
Food and Drug Administration
1990 MacArthur Boulevard, Suite 300
Irvine, CA 92612-2445

Sincerely,


Alonza E. Cruse
District Director
Los Angeles District Office

cc: State Department of Public Health
Environmental Health Services
Attn: Chief, Food and Drug Branch
601 North 7th Street, MS-35
Sacramento, CA 94234-7320