

K072297

Boomerang™ Catalyst II System  
Special 510(k) Notification

SEP 12 2007

**Section II.**  
**510(k) Summary**

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**GENERAL INFORMATION**

**Manufacturer:** Cardiva Medical, Inc.  
2585 Leghorn Street  
Mountain View, CA 94043  
Phone: 650-964-8900  
Facsimile: 650-964-8911  
Establishment Registration Number: 3004182619  
(Glenn Foy, President)

**Contact Person:** Kit Cariquitan  
Regulatory Consultant  
Experien Group, LLC  
Phone: 408-400-0856  
Facsimile: 408-400-0865

**Date Prepared:** August 16, 2007

**DEVICE INFORMATION**

**Trade Name:** Cardiva Medical Boomerang™ Catalyst II System

**Classification Name:** Vascular Clamp (21 CFR §870.4450)

**Classification:** Class II

**PREDICATE DEVICES**

Cardiva Medical Boomerang™ Catalyst System (K070485), formerly referred to as the Cardiva Medical Boomerang™ PlusWire System.

Information regarding the predicate devices can be found in Appendix A.

**INTENDED USE/INDICATIONS FOR USE**

The Boomerang™ Catalyst/Catalyst II System is intended to promote hemostasis at arteriotomy sites as an adjunct to manual compression. The Boomerang™ Catalyst/Catalyst II System is indicated for use in patients undergoing diagnostic and/or interventional femoral artery catheterization procedures using 5F, 6F or 7F introducer sheaths.

## **DEVICE DESCRIPTION**

The Boomerang™ Catalyst II System is intended to promote hemostasis at arteriotomy sites as an adjunct to manual compression. The Boomerang Catalyst II System includes design modifications to minimize ooze from the tissue tract and promote the hemostasis process. The Boomerang Catalyst II System maintains the same indication for use as the Boomerang Catalyst System family of devices, formerly referred to as the Boomerang PlusWire System.

The Boomerang Catalyst II System consists of a sterile disposable Boomerang Catalyst II wire and a sterile disposable Boomerang Clip. In conjunction with manual compression, the Boomerang Catalyst II System provides temporary hemostasis at a femoral access site after femoral arterial catheterization while allowing continued distal perfusion. After completion of catheterization, the Boomerang Catalyst II wire is inserted into the artery through the existing introducer sheath. After insertion, the distal tip of the Boomerang Catalyst II wire is deployed, which opens the flat, low-profile Boomerang Disc within the lumen of the femoral artery. The introducer sheath is then removed from the vessel over the Boomerang Catalyst II wire and the low-profile Boomerang Disc conforms to the contours of the vessel and secures it against the intima, sealing the arteriotomy. As gentle tension is applied to the Boomerang Catalyst II wire, the sleeve covering the tensioning coil is gently retracted until the distal tip appears at the skin surface to expose the coated tensioning coil to the tissue tract. The applied tension is maintained by the external Boomerang Clip at the surface of the skin at the puncture site. The tension between the Boomerang Disc and the Boomerang Clip creates a site-specific compression of the arteriotomy and tract and establishes temporary hemostasis. This allows natural recoil of the smooth muscle of the vessel wall to occur at the arteriotomy site while the body's natural clotting process begins. Following the procedure, the Boomerang Disc is collapsed and the Boomerang Catalyst II wire is completely removed from the artery. No part of the device is left behind. Final closure of the arteriotomy occurs by applying gentle manual or mechanical compression after removal of the Boomerang Catalyst II System.

## **SUBSTANTIAL EQUIVALENCE**

The Boomerang Catalyst II System is substantially equivalent to the predicate device with regard to function, intended use, physical characteristics and performance testing.

## **PERFORMANCE TESTING**

Various testing which included bench and biocompatibility was performed on the Boomerang Catalyst II System to insure the product and the product materials were adequately tested and evaluated to demonstrate the product meets or exceeds the performance requirements and is safe for the intended use of the device.

**Boomerang™ Catalyst II System**  
**Special 510(k) Notification**

**CONCLUSION**

The Boomerang Catalyst II System was properly designed, tested and shown to be substantially equivalent to the identified predicate device.



NOV 27 2007

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Experien Group LLC  
c/o Mr. Kit Cariquitan  
Regulatory Consultant for Cardiva Medical  
155 Moffett Park Drive, Suite A-210  
Sunnyvale, CA 94089

Re: K072297  
Boomerang™ Catalyst II System  
Regulation Number: 21 CFR 870.4450  
Regulation Name: Vascular Clamp  
Regulatory Class: Class II  
Product Code: DXC  
Dated: August 16, 2007  
Received: August 17, 2007

Dear Mr. Cariquitan:

This letter corrects our substantially equivalent letter of September 12, 2007.

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 (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.

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.

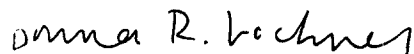
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Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other 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); 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.

This letter will allow you to continue marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). 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 (240) 276-3150 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,



 Bram D. Zuckerman, M.D.  
Director  
Division of Cardiovascular Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

## Statement of Indications for Use

510(k) Number (if known): **K072297**

Device Name: Cardiva Medical Boomerang™ Catalyst II System

### Indications for Use:

The Boomerang™ Catalyst/Catalyst II System is intended to promote hemostasis at arteriotomy sites as an adjunct to manual compression. The Boomerang™ Catalyst/Catalyst II System is indicated for use in patients undergoing diagnostic and/or interventional femoral artery catheterization procedures using 5F, 6F or 7F introducer sheaths.

Prescription Use  X   
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 801 Subpart C)

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

Concurrence of CDRH, Office of Device Evaluation (ODE)

  
\_\_\_\_\_  
(Division Sign-Off)

Division of Cardiovascular Devices  
510(k) Number K072297

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