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K042624

510(k) Summary
AMPHIRION™ DEEP 0.014" OTW PTA BALLOON CATHETER

510(k) Summary	This summary of 510(k) Safety and Effectiveness information is being submitted in accordance with the requirements of 21 C.F.R § 807.92.
Applicant (Manufacturer)	Invatec Innovative Technologies, s.r.l. Via Martiri della Libertà, 7 25030 Roncadelle (BS) Italy Tel: +39 030 258 93 11 Fax: +39 030 258 93 12 www.invatec.com info@invatec.com
Submitter	**ev3** Inc. 4600 Nathan Lane North Plymouth, MN 55442 Tel: (763) 398 7000 Fax: (763) 398 7200
Contact Person	Mike Winegar Tel: (763) 398-7225 Fax: (763) 398-7200 E-mail: mwinegar@ev3.net
Date Prepared	September 24th, 2004
Device Trade Name	AMPHIRION™ DEEP 0.014" OTW PTA BALLOON CATHETER
Device Common Name	Peripheral Transluminal Angioplasty (PTA) Catheter
Classification Name	21 CFR 870.1250 Percutaneous Catheter
Device Classification	Regulatory Class: Class II Product Code: LIT
Classification Panel	Cardiovascular
Predicate Devices	Boston Scientific SYMMETRY™ Small Vessel Balloon Dilatation Catheter Cordis AVIATOR™ Peripheral Dilatation Catheter
Intended Use	The AMPHIRION™ DEEP 0.014" OTW PTA BALLOON CATHETER is intended to dilate stenoses in the iliac, femoral, ilio-femoral, popliteal, infra-popliteal, and renal arteries, and for the treatment of obstructive lesions of native or synthetic arteriovenous dialysis fistulae.

Device Description	The AMPHIRION DEEP catheter has a semi-compliant inflatable balloon mounted at the distal tip. It has a coaxial lumen. The central lumen of the catheter, which terminates at the distal tip, is used to pass the catheter over a guidewire with a maximum outer diameter of 0.014 inch. The other lumen is the balloon inflation lumen, which is used to inflate and deflate the dilatation balloon with a mixture of contrast medium and saline solution. The catheter tapers beneath the balloon segment to achieve the lowest possible deflated profile. Radiopaque marker bands are placed under the balloon segment of the catheter shaft to provide visual reference points for balloon positioning within the vessel. The distal catheter shaft is hydrophilic coated (balloon included). The AMPHIRION DEEP catheter is available in different balloon sizes (balloon diameters of 1.5 and 2.0 mm and balloon lengths of 20, 40, 80 and 120 mm). Nominal balloon diameter and length are printed on the hub. The maximum recommended guidewire diameter is 0.014" and the usable catheter length is 120cm.
Biocompatibility	All material used in the AMPHIRION DEEP catheter are biocompatible, based on test results.
Performance Data	In-vitro testing was conducted to demonstrate the safety and effectiveness of the AMPHIRION DEEP catheter. This testing included balloon compliance, balloon burst pressure, balloon fatigue, shaft burst pressure, bond strength, catheter dimensions and guidewire and introducer compatibility.
Summary of Substantial Equivalence	The AMPHIRION DEEP catheter is similar to the predicates with respect to intended use and with respect to physical characteristics, such as catheter and balloon dimensions and catheter design and materials. The AMPHIRION DEEP catheter is therefore substantially equivalent to the predicate devices. Mechanical and biocompatibility testing data is indicative of the safety and effectiveness of the AMPHIRION DEEP catheter. Therefore, based on its own performance characteristics and the technological similarities, the AMPHIRION DEEP catheter is expected to perform similar to the predicate devices and other comparable, currently marketed PTA catheters.
Conclusion	The AMPHIRION DEEP catheter is substantially equivalent to the predicate devices and other currently marketed PTA catheters.

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration
9200 Corporate Boulevard
Rockville MD 20850

JAN 10 2005

ev3 Inc.
c/o Mr. Mike Winegar
Vice President, International Regulatory Affairs
4600 Nathan Lane North
Plymouth, MN 55442

Re: K042624
Trade Name: AMPHIRION DEEP PTA Catheter
Regulation Number: 21 CFR 870.1250
Regulation Name: Percutaneous catheter
Regulatory Class: II (two)
Product Code: DQY
Dated: September 24, 2004
Received: September 27, 2004

Dear Mr. Winegar:

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 application (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 such 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.

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 begin 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 (301) 443-6597 or at its Internet address http://www.fda.gov/cdrh/industry/support/index.html.

Sincerely yours,

Donna R. Vechner

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

Enclosure

Indications for Use

510(k) Number: K042624

Device Name: AMPHIRION™ DEEP 0.014" OTW PTA Balloon Catheter

Indications For Use:

The AMPHIRION™ DEEP 0.014" OTW PTA Balloon Catheter is intended to dilate stenoses in the iliac, femoral, ilio-femoral, popliteal, infra-popliteal, and renal arteries, and for the treatment of obstructive lesions of native or synthetic arteriovenous dialysis fistulae.

Prescription Use ✓ AND/OR Over-The-Counter Use _____
(Part 21 CFR 801 Subpart D) (21 CFR 807 Subpart C)

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

Concurrence of CDRH, Office of Device Evaluation (ODE)

Donna R. Vochmes

(Division Sign-Off)
Division of Cardiovascular Devices

510(k) Number K042624