

**SECTION 5.0: 510(K) SUMMARY OF SAFETY AND EFFECTIVENESS**

K102482  
FEB 25 2011

**A. Submitter Information**

Submitter's Name: Ostial Corporation  
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Contact Person: Eric Ankerud  
Executive Vice President Clinical, Regulatory, Quality  
Date of Preparation: August 25, 2010

**B. Subject Device**

Trade Name: Flash PTA Balloon Dilatation Catheter  
Common/Usual Name: Balloon Catheter  
Classification Name: Catheter, Angioplasty, Peripheral, Transluminal  
(21 CFR 870.1250, Product Code LIT)

**C. Predicate Device Name(s)**

Trade Name(s): Sterling PTA Balloon Dilation Catheter, K053118  
Classification Name: Catheter, Percutaneous (21 CFR 870.1250, Product Code DQY)

**D. Device Description:**

The proposed Flash PTA Balloon Dilatation Catheter is designed for dilation of aorto-ostial lesions of peripheral vessels in the arterial system. The Flash PTA Balloon Dilatation Catheter is a .014" guidewire-compatible, rapid exchange (RX) angioplasty balloon catheter with proximal anchoring. The Flash PTA Balloon Dilatation Catheter uses a dual balloon design that features a compliant anchoring balloon that enables the operator to precisely position the catheter at aorto-ostial anatomies and prevent distal migration of the balloon during angioplasty. The second semi-compliant high pressure balloon allows for luminal dilatation.

**E. Intended Use:**

The Flash PTA Balloon Dilatation Catheter is indicated for use in Percutaneous Transluminal Angioplasty in the peripheral vasculature at aorto-ostial locations, including iliac, renal and carotid arteries. This catheter is not intended for use in coronary arteries.

**F. Summary of Similarities and Differences in Technological Characteristics, Performance and Intended Use:**

The proposed Flash PTA Balloon Dilatation Catheter and the predicate Sterling PTA Balloon Dilatation Catheter have the same intended use. Both are indicated for treatment of obstructive lesions by high pressure dilation in the arterial system. The indication statement for the Flash PTA Balloon Dilatation Catheter is a subset of the broader indication statement of the Sterling PTA Balloon Dilatation Catheter.

The proposed Flash PTA Balloon Dilatation Catheter and the Sterling PTA Balloon Dilatation Catheter contain an inflatable semi-compliant balloon for dilation of obstructive lesions. The proposed Flash PTA Balloon Dilatation Catheter includes a second compliant balloon for locating and anchoring the device at ostial vessel locations.

The usable length of the proposed Flash PTA Balloon Dilatation Catheter is 135 cm which is the same usable length as the predicate Sterling Balloon Dilatation Catheter. Both the proposed and predicate devices are offered in 5mm and 6mm balloon diameter sizes and approximately 20mm balloon lengths.

The proposed device and predicate device are substantially equivalent in terms of intended use, fundamental scientific technology, target population, and operating principles.

#### G. Performance Data:

Biocompatibility testing on the proposed Flash PTA Balloon Dilatation Catheter has been completed. Requirements for biological evaluation of the proposed device were based on the Blue Book Memorandum issued on May 1, 1995, Use of International Standard ISO-10993, "Biological Evaluation of Medical Devices, Part 1: Evaluation and Testing." The biocompatibility test results show that the materials used in the design and manufacture of the components of the proposed device are non-toxic and non-sensitizing to biological tissues consistent with its intended use. The following biocompatibility tests were completed:

- ISO MEM Elution Assay
- ASTM Hemolysis Assay
- Complement Activation C3a and SC5b-9 Assay
- Thromboresistance Evaluation
- Materials Mediated Rabbit Pyrogen
- ISO Guinea Pig Maximization Sensitization
- ISO Acute Systemic Injection Test
- ISO Intracutaneous Reactivity Test
- Pyrogen (LAL) Chromogenic

The proposed Flash PTA Balloon Dilatation Catheter was evaluated using the following in-vitro performance bench testing to confirm the performance characteristics as compared to the predicate device:

- Balloon Crossing Profile
- Catheter Shaft Diameter
- Balloon Rated Burst Pressure (Angioplasty)
- Balloon Burst Volume (Anchoring)
- Angioplasty Balloon Compliance
- Balloon Inflation Time
- Balloon Deflation Time
- Angioplasty Balloon Fatigue
- Anchoring Balloon Fatigue
- Catheter Bond Strength
- Catheter Tip Pull Strength
- Catheter Torque Strength
- Simulated Use/Flexibility/Kink
- Radiopacity

In-vivo testing was completed using a swine model. A simulated angioplasty procedure was performed on test and control comparator groups. Post procedure animals were survived and observed for a predetermined period to assess for downstream and cognitive effects.

All test results demonstrate that the materials chosen, the manufacturing process, and the design utilized for the Flash PTA Balloon Dilatation Catheter met the established specifications necessary for consistent performance according to its intended use.

#### H. Conclusions:

The Flash PTA Balloon Dilatation Catheter met all predetermined acceptance criteria of design verification and validation as specified by applicable standards, test protocols, and/or customer inputs. The Flash PTA Balloon Dilatation Catheter is substantially equivalent to the legally marketed predicate device and does not raise any new safety or effectiveness questions.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
10903 New Hampshire Avenue  
Document Control Room -WO66-G609  
Silver Spring, MD 20993-0002

FEB 25 2011

Ostial Corporation  
c/o Mr. Mark Smutka  
Clinical, Regulatory, and Quality Consultant  
510 Clyde Avenue  
Mountain View, CA 94043

Re: K102482  
Trade/Device Name: Flash PTA Balloon Dilatation Catheter  
Regulation Number: 21 CFR 870.1250  
Regulation Name: Percutaneous Catheter  
Regulatory Class: Class II  
Product Code: LIT, DQY  
Dated: February 15, 2011  
Received: February 16, 2011

Dear Mr. Smutka:

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. Please note: CDRH does not evaluate information related to contract liability warranties. However, we remind you that device labeling must be truthful and not misleading.

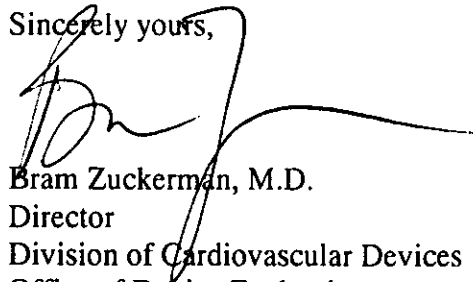
If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

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); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); 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.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

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) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Bram', with a long horizontal flourish extending to the right.

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

Enclosure

**SECTION 4.0: INDICATIONS FOR USE STATEMENT**

510(k) Number:           K102482          

Device Name: Flash PTA Balloon Dilatation Catheter

Indication For Use: The Flash PTA Balloon Dilatation Catheter is indicated for use in Percutaneous Transluminal Angioplasty in the peripheral vasculature at aorto-ostial locations, including iliac, renal and carotid arteries. This catheter is not intended for use in coronary arteries.


Prescription Use   X    
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(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)

  
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Division Sign-Off  
Division of Cardiovascular Devices  
510(k) Number           K102482