**510(k) Summary**

The 510(k) Summary is submitted in accordance with 21 CFR §807.92 and the requirements of the Safe Medical Device Act (SMDA) of 1990.

1. **SUBMITTER'S NAME**
   - Abbott Vascular Inc.

2. **SUBMITTER'S ADDRESS**
   - 26531 Ynez Road, Temecula, CA 92591

3. **TELEPHONE**
   - (951) 914-3243

4. **FAX**
   - (951) 914-0339

5. **CONTACT PERSON**
   - Suzanne Redman

6. **DATE PREPARED**
   - November 9, 2010

7. **DEVICE TRADE NAME**
   - TREK™ RX Coronary Dilatation Catheter
   - MINI TREK™ RX Coronary Dilatation Catheter
   - TREK™ OTW Coronary Dilatation Catheter
   - MINI TREK™ OTW Coronary Dilatation Catheter

8. **DEVICE COMMON NAME**
   - Coronary Dilatation Catheter
   - Percutaneous Transluminal Coronary Angioplasty (PTCA) Catheter

9. **DEVICE CLASSIFICATION NAME**
   - PTCA Catheter (LOX)

10. **PREDICATE DEVICE NAME**
    - VOYAGER® RX Coronary Dilatation Catheter
    - VOYAGER® NC Coronary Dilatation Catheter
    - VOYAGER® OTW Coronary Dilatation Catheter
11. DEVICE DESCRIPTION

11.1 TREK RX and MINI TREK RX Coronary Dilatation Catheter

The TREK RX and MINI TREK RX Coronary Dilatation Catheters are a rapid exchange co-axial design with a balloon at the distal tip. Table 1 provides a matrix of the balloon diameters and lengths available.

Table 1  
<table>
<thead>
<tr>
<th>Balloon Diameter (mm)</th>
<th>TREK RX and MINI TREK RX Balloon Sizes</th>
<th>Balloon Length</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>6mm</td>
</tr>
<tr>
<td>MINI TREK RX</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>1.50</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>2.00</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>TREK RX</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>2.25</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>2.50</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>2.75</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3.00</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3.25</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3.50</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3.75</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>4.00</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>4.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The balloon segment expands to a known diameter and length at a specific inflation pressure and has radiopaque marker(s) under the balloon to aid in positioning the balloon in a stenosis. The coaxial shaft consists of a tubular inner and outer member. The inner member permits the use of a guide wire to facilitate advancement of the catheter to and through the stenosis to be dilated. The outer lumen provides for inflation and deflation of the balloon with contrast fluid. The proximal shaft consists of a hypotube with a hub on the proximal end, a tapered distal section ending distal to the guide wire notch junction, along with brachial and femoral markers.

11.2 TREK OTW and MINI TREK OTW Coronary Dilatation Catheter

The TREK OTW and MINI TREK OTW Coronary Dilatation Catheters are an over-the-wire co-axial design with a balloon at the distal tip. Table 2 provides a matrix of the balloon diameters and lengths available.
Table 2  
TREK OTW and MINI TREK OTW Balloon Sizes

<table>
<thead>
<tr>
<th>Balloon Diameter (mm)</th>
<th>6mm</th>
<th>8mm</th>
<th>12mm</th>
<th>15mm</th>
<th>20mm</th>
<th>25mm</th>
<th>30mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>MINI TREK OTW</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>1.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.00</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>TREK OTW</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.25</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2.50</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2.75</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>3.00</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>3.25</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>3.50</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>3.75</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>4.00</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>4.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.00</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The balloon segment expands to a known diameter and length at a specific inflation pressure and has radiopaque marker(s) under the balloon to aid in positioning the balloon in a stenosis. The coaxial shaft consists of a tubular inner and outer member. The inner lumen permits the use of a guide wire to facilitate advancement of the catheter to and through the stenosis to be dilated. The outer lumen provides for inflation and deflation of the balloon with contrast fluid. Along the proximal portion of the shaft are brachial and femoral markers to aid in gauging the catheter’s position relative to the guiding catheter tip when introducing the catheter through the guiding catheter. An adaption arm is located at the proximal end to provide access to the inflation lumen and guide wire lumen and allows connection with an inflation device.

12. INDICATIONS FOR USE

The TREK™ RX, MINI TREK™ RX, TREK™ OTW, and MINI TREK™ OTW are indicated for:

a) balloon dilatation of the stenotic portion of a coronary artery or bypass graft stenosis for the purpose of improving myocardial perfusion;

b) balloon dilatation of a coronary artery occlusion of the purpose of restoring coronary flow in patients with ST-segment elevation myocardial infarction;

c) balloon dilatation of a stent after implantation (balloon models 2.0 mm – 5.0 mm only).

13. TECHNOLOGICAL CHARACTERISTICS
Comparisons of the new and predicate devices show that the technological characteristics such as product performance, design and intended use are substantially equivalent to the current marketed predicate devices.

14. PERFORMANCE DATA

The TREK RX, MINI TREK RX, TREK OTW and MINI TREK OTW Coronary Dilatation Catheters were subjected to the following in vitro bench tests according to the requirements of Guidance for Industry and FDA Staff – Class II Special Controls for Certain Percutaneous Transluminal Coronary Angioplasty (PTCA) Catheters, September 8, 2010:

- Catheter Preparation
- Catheter Profile (crossing and refolded)
- Balloon Inflation and Deflation
- Balloon Fatigue and Balloon Fatigue Within a Stent
- Balloon Rupture and Balloon Rupture Within a Stent
- Balloon Compliance
- Catheter Bond Tensile Strength
- Catheter Coating Particulate
- Kink and Flexibility
- Torque
- Radiopacity

Biocompatibility testing included cytotoxicity, sensitization, intracutaneous reactivity, acute systemic toxicity, hemolysis, pyrogen, and complement activation.

These in vitro bench and biocompatibility tests demonstrated that the TREK RX, MINI TREK RX, TREK OTW and MINI TREK OTW Coronary Dilatation Catheters met all acceptance criteria and performed similarly to the predicate devices. No new safety or effectiveness issues were raised during the testing program and therefore, these devices may be considered substantially equivalent to the predicate devices.
Abbott Vascular, Inc  
c/o Ms. Suzanne Redman  
Principal regulatory Affairs Associates  
26531 Ynez Road  
Temecula, CA 92591

Re: K103110  
Trade/Device Name: TREK™ RX Coronary Dilatation Catheter  
MINI TREK™ RX Coronary Dilatation Catheter  
TREK™ OTW Coronary Dilatation Catheter  
MINI TREK™ OTW Coronary Dilatation Catheter

Regulation Number: 21 CFR 870.5100  
Regulation Name: PTCA Catheters  
Regulatory Class: Class II (two)  
Product Code: LOX  
Dated: December 29, 2010  
Received: December 30, 2010

Dear Ms. Redman:

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 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” (21 CFR 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 (240) 276-3150 or at its Internet address http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm.

Sincerely yours,

[Signature]

Dr. 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 (if known): K103110

Device Names: TREK™ RX Coronary Dilatation Catheter
               MINI TREK™ RX Coronary Dilatation Catheter
               TREK™ OTW Coronary Dilatation Catheter
               MINI TREK™ OTW Coronary Dilatation Catheter

Indications for Use: The TREK™ RX, MINI TREK™ RX, TREK™ OTW, and MINI TREK™ OTW Coronary Dilatation Catheters are indicated for:

a) balloon dilatation of the stenotic portion of a coronary artery or bypass graft stenosis for the purpose of improving myocardial perfusion;

b) balloon dilatation of a coronary artery occlusion for the purpose of restoring coronary flow in patients with ST-segment elevation myocardial infarction;

c) balloon dilatation of a stent after implantation (balloon models 2.0 mm – 5.0 mm only).

Prescription Use X OR Over-The-Counter _____
(Per 21 CFR 801.109) (Optional Format 1-1-96)

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

Concurrence of CDRH, Office of Device Evaluation (ODE)

[Signature]
(Division Sign-Off)
Division of Cardiovascular Devices

510(k) Number K103110