

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

November 25, 2014

Lake Region Medical Mathew Pexa Regulatory Specialist II 340 Lake Hazeltine Drive Chaska, MN 55318

Re: K142393

Trade/Device Name: Predicate III Guidewire Regulation Number: 21 CFR 870.1330 Regulation Name: Catheter guide wire

Regulatory Class: Class II Product Code: DQX Dated: October 28, 2014 Received: October 30, 2014

Dear Mr. Pexa:

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. We remind you, however, 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 <u>Federal Register</u>.

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 contact the Division of Industry and Consumer Education 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. 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 Industry and Consumer Education 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,

# Melissa A. Torres -S

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

Enclosure



## **INDICATIONS FOR USE STATEMENT**

510(k) NUMBER (IF KNOWN):	K142393	
DEVICE NAME: PREDICATE™	III GUIDEWIRE	
INDICATIONS FOR USE:		
		giographic procedures to introduce and e coronary and peripheral vasculature.
PRESCRIPTION X USE	AND/OR	OVER-THE-COUNTER USE
(Part 21 CFR 801 Subpart D)	_	(21 CFR 807 Subpart C)
		NUE ON ANOTHER PAGE IF NEEDED)
Concurre	nce of CDRH, Office of Dev	ice Evaluation (ODE)
		PAGE 1 of 1



PRODUCT: PREDICATE™ III GUIDEWIRE – Vascular Use

SUBMISSION DATE: August 26<sup>th</sup>, 2014 SUBMISSION TYPE: SPECIAL 510(k)

## 510(k) SUMMARY

November 25, 2014

This summary is being included in the submission in lieu of a statement of availability.

### 2.1 MANUFACTURER / REGISTRATION INFORMATION

Lake Region MedicalTelephone:952-448-5111340 Lake Hazeltine Dr.Fax:952-448-3441Chaska, Mn 55318Contact Person:Sze Yuen TanFDA REGISTRATION NUMBER:Title:Regulatory Intern

## 2.2 DEVICE TRADE NAME / PROPRIETARY NAME

PREDICATE™ III GUIDEWIRE

## 2.3 DEVICE COMMON NAMES / USUAL NAMES / CLASSIFICATION NAMES

CATHETER GUIDEWIRE (DQX)

#### 2.4 CLASS OF DEVICE

These devices are commonly known as guides, guidewires, or spring guidewires. The current classification name and product code is Catheter Guidewire (DQX) and is considered a Class II device per 21 CFR Part 870.1330.

## 2.5 IDENTIFICATION OF PREDICATE DEVICE(s)

K140485 Mandrel Guidewires (Lake Region Medical)

#### 2.6 DEVICE DESCRIPTION

The guidewire is made of an uncoated Nitinol or Stainless Steel core wire that is tapered at the distal tip where a coil is secured over the core. The wire can have a distal coil or a full length coil that is made of Stainless Steel. The guidewire may contain proximal markers. The Guidewire family is bound by the following parameters:

Core Material	Stainless Steel or Nitinol
Coil Material	Stainless Steel
Coil Length	Full length
Joining Agents	Weld
Tip Type	Straight, Shaped
Tip Flexibilities	Various
Overall Lengths	30cm to 500cm
Outside Diameters	0.018" to 0.038"
Sterilization Method	ETO

## 2.7 COMPLIANCE WITH APPLICABLE STANDARDS

LRM has determined that no mandatory standards, performance standards, or special controls have been established for these devices under Section 514 of the Medical Device Amendments to Federal Food, Drug, and Cosmetic or by any subsequent regulatory action. However, the following standards are referenced within this filing: ISO 10993, ISO 11070, ISO 11135, ISO 11138.

### 2.8 INTENDED USE STATEMENT

PREDICATE™ III GUIDEWIRES are intended for use in angiographic procedures to introduce and position catheters and interventional devices within the coronary and peripheral vasculature.

NOTE: This modification does not alter its intended use.

PRODUCT: PREDICATE™ III GUIDEWIRE - Vascular Use

SUBMISSION DATE: August 26<sup>th</sup>, 2014 SUBMISSION TYPE: SPECIAL 510(k) K142393 Page 2 of 3

## 2.9 CONTRAINDICATIONS

There are no contraindications listed.

#### 2.10 TECHNOLOGICAL CHARACTERISTICS

The design specifications are substantially equivalent to the existing Mandrel Guidewires.

### 2.11 QUALITY SYSTEM CONTROL

#### **DESIGN CONTROLS**

LRM is in conformance with the design control procedure requirements as specified in 21 CFR Part 820.30. Risk analysis was completed by means of a Failure Mode and Effects Analysis and all verification and validation activities resulted in the ability to demonstrate that the predetermined acceptance criteria were met.

## MATERIALS / SUPPLIER / PRODUCT / PROCESS CONTROLS

LRM has formal quality systems in placed to assure that each product manufactured remains equivalent to the predicate products, and that the changes will not have an adverse effect on safety or effective use of the product. The quality systems include Engineering Change Order Review, Material Qualification, Supplier Qualification, Product Qualification, and Process Qualification. These controls are applied to each product size / group.

#### 2.12 QUALIFICATION TESTING

The conclusions drawn from bench testing and biocompatibility testing demonstrate compliance with the design input summary which shows the device is at least as safe and effective as the current legally marketed device.

#### **BENCH TESTING**

In order to demonstrate equivalence of the guidewire, Lake Region Medical performed bench testing to establish requirements. Test devices were manufactured and inspected according to established requirements for visual/tactile, dimensional and mechanical attributes. The devices were then subjected to the following test methods to show the devices comply with the design input summary:

- Dimensional
- Guidewire Pull Test
- Camber Resistance
- Visual Inspection
- Wire Fracture Test

- Corrosion
- Wire Flex Test
- ISO Strength of Union
- Particulate Residue Test

### **BIOCOMPATIBILITY TESTING**

Biocompatibility testing per the design input summary requirements show the addition of full length coil to the device does not affect the biocompatibility of the device and the device is still in compliance with pre-defined acceptance criteria outlined in the product Design Input Summary. A biocompatibility risk assessment determined the following biocompatibility tests are required:

- Cytotoxicity
- Hemolysis

Chemical Characterization



PRODUCT: PREDICATE™ III GUIDEWIRE - Vascular Use

SUBMISSION DATE: August 26<sup>th</sup>, 2014 SUBMISSION TYPE: SPECIAL 510(k) K142393 Page 3 of 3

## 2.13 CHANGES FROM PREDICATE DEVICE

- Include a Stainless Steel Coil only option as opposed to Stainless Steel, Platinum/Tungsten, Palladium, and Tungsten
- Weld as a joining option as opposed to options for Braze, Solder, Epoxy and Weld
- Full length coil as opposed to 2cm to 30cm distal tip coil
- Min. Diameter goes to 0.018" as opposed to 0.014"
- Max. Diameter goes to 0.035" as opposed to 0.038"
- No coating options as opposed to PTFE coating

## 2.14 SUBSTANTIAL EQUIVALENCE DATA

The changes included in this 510(k) for the Mandrel guidewire family does not change the indications for use of the Mandrel guidewires and is not a change to the fundamental scientific technology. The information summarized above shows the device will perform as well as the previously marketed device.