



Food and Drug Administration
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November 6, 2015

Merit Medical Systems, Inc.
David Thomas
Principal Regulatory Affairs Specialist
1600 West Merit Parkway
South Jordan, UT 84095

Re: K151925
Trade/Device Name: Elation™ Wireguided Balloon Dilation Catheter
Regulation Number: 21 CFR§ 876.5010
Regulation Name: Biliary catheter and accessories
Regulatory Class: II
Product Code: FGE
Dated: October 1, 2015
Received: October 2, 2015

Dear David Thomas,

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 [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 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" (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 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,

 Herbert P. Lerner -S

for Benjamin R. Fisher, Ph.D.
Director
Division of Reproductive, Gastro-Renal,
and Urological Devices
Office of Device Evaluation
Center for Devices and Radiological Health

Enclosure

Indications for Use

510(k) Number (if known)

K151925

Device Name

Elation™ Wireguided Balloon Dilation Catheter

Indications for Use (Describe)

The Elation™ Wireguided Balloon Dilation Catheters are intended for use in adult and adolescent populations to endoscopically dilate strictures of the alimentary tract. Also indicated in adults for endoscopic dilatation of the Sphincter of Oddi with or without prior sphincterotomy.

Type of Use (Select one or both, as applicable)

☒ Prescription Use (Part 21 CFR 801 Subpart D)

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

CONTINUE ON A SEPARATE PAGE IF NEEDED.

This section applies only to requirements of the Paperwork Reduction Act of 1995.

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5. 510(k) Summary

General Provisions	Submitter Name:	Merit Medical Systems, Inc.
	Address:	1600 West Merit Parkway South Jordan, UT 84095
	Telephone Number:	(801) 316-4956
	Fax Number:	(801) 253-6982
	Contact Person:	David Thomas
	Date of Preparation:	July 10, 2015
	Registration Number:	1721504

Subject Device	Trade Name:	Elation™ Wireguided Balloon Dilation Catheter
	Common/Usual Name:	Wireguided Balloon Dilation Catheter
	Classification Name:	Biliary catheter and accessories

Predicate Device	Trade Name:	CRE™ Wireguided Balloon Dilatation Catheter
	Classification Name:	Biliary catheter and accessories
	Premarket Notification:	K112994
	Manufacturer:	Boston Scientific Corporation

Classification	Class II 21 CFR § 876.5010 FDA Product Code: FGE Review Panel: Gastroenterology/Urology
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Intended Use	The Elation™ Wireguided Balloon Dilation Catheters are intended for use in adult and adolescent populations to endoscopically dilate strictures of the alimentary tract. Also indicated in adults for endoscopic dilation of the Sphincter of Oddi with or without prior sphincterotomy.
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	<p>The Elation™ Wireguided Balloon Catheters are multi-lumen 7.5F catheters with a dilation balloon on the distal tip. The catheter is designed to pass through the working channel of an endoscope and accept a guidewire through its guidewire lumen. This catheter comes packaged with a floppy tip guidewire preloaded in the guidewire lumen. A guidewire locking device, packaged in the unlocked position, is attached to the guidewire hub of the catheter.</p>
Device Description	<p>The dilation balloon will be available in catheter lengths of 180 cm and 240 cm, balloon length of 5.5 cm and in six balloon sizes. Each balloon size will inflate to at least three different diameters for the specified inflation pressures. The balloon will be identifiable with both endoscopic and radiopaque marker bands. A glow-in-the-dark tag that can be read in low light conditions is attached to the catheter shaft. The tag indicates diameter and corresponding pressure of the balloon.</p> <p>The balloon will be available in twelve configurations of multiple lengths and diameters – six are for the Esophageal Pyloric Biliary dilation and six for the Esophageal Pyloric Biliary Colonic dilation.</p>
Comparison to Predicate Device	<p>The Elation™ Wireguided Balloon Dilation Catheter has the same technological features as the CRE™ Wireguided Balloon Dilatation Catheter by Boston Scientific Co.(K112994). Both balloons are multistage that come in three distinct diameters ranging from 6 to 20 mm for six balloon sizes. Both catheters pass through a working channel endoscope of an equivalent size. Both systems utilize a floppy tip guidewire of an equivalent size. Both catheters are 180 cm and 240 cm in length and use a 7.5F catheter. The balloons for the CRE™ Balloon and the Elation™ Wireguided Balloon Dilation Catheter are both manufactured from Pebax material.</p>

**Safety &
Performance
Tests**

No performance standards have been established under Section 514 of the Food, Drug and Cosmetic Act for these devices. Performance testing of the subject Elation™ Wireguided Balloon Dilation Catheter was conducted based on the risk analysis and based on the requirements of the following international standards and guidance documents:

ISO 594-1: 1986 (E) Conical fittings with a 6% (Luer) taper for syringes, needles, and certain other medical equipment – Part 1: General Requirements

ISO 594-2: 1998 (E) Conical fittings with a 6% (Luer) taper for syringes, needles, and certain other medical equipment – Part 2: Lock fittings

ISO 10555-1: 2013 – Intravascular catheters – Sterile and single use catheters – Part 1: General Requirements

ISO 10555-4: 2013 - Intravascular catheters – Sterile and single use catheters - Part 4: Balloon dilatation catheters

ASTM F 640 – 12 Standard Test Methods for Determining Radiopacity for Medical Use

Class II Special Controls Guidance Document for Certain Percutaneous Transluminal Coronary Angioplasty (PTCA) Catheters, September 8, 2010.

ISO 11135:2014, Sterilization of health care products – Ethylene oxide-Requirements for the development, validation and routine control of a sterilization process for medical devices

ISO 10993-1:2009, Biological Evaluation of Medical Devices Part 1: Evaluation and Testing within a risk management process.

FDA guidance Required Biocompatibility Training and Toxicology Profiles for Evaluation of Medical Devices, May 1, 1995

ISO 10993-5:2009, Biological evaluation of medical devices – Part 5: Tests for in vitro cytotoxicity

ISO 10993-7:2008, Biological Evaluation of Medical Devices – Part 7 Ethylene Oxide sterilization residuals

ISO 10993-10:2010, Biological evaluation of medical devices – Part 10: Tests for irritation and skin sensitization.

AAMI/ANSI/ISO 11607-1:2006, Packaging for terminally sterilized medical devices – Part 1 – Requirements for materials, sterile barrier systems and packaging systems (Sterility)

ASTM D4169-09, Standards Practice for Performance Testing of Shipping Containers and Systems (Sterility)

ISO 2233 (2000), Packaging – Complete, filled transport packages and unit loads – conditions for testing

Performance Testing-Bench

Safety & Performance Tests cont.

- Radiopacity
- Catheter Length
- Tip Perforation
- Guidewire Insertion
- Endoscope Catheter Insertion and Withdrawal
- Radiopaque Marker Band Location
- Balloon Diameter
- Balloon Deflation Time
- Balloon Burst / Freedom from Leakage
- Distal Catheter Joints Tensile
- Proximal Catheter Joints Tensile
- Catheter Pushability
- Catheter Kink
- Kink Recovery

Biocompatibility

The biocompatibility evaluation for the Elation™ Fixed Wire Balloon Dilation Catheter was conducted in accordance with the FDA Blue Book Memorandum #G95-1 “Use of International Standard ISO-10993, ‘Biological Evaluation of Medical Devices Part 1: Evaluation and Testing,’” May 1, 1995, and International Standard ISO 10993-1 “Biological Evaluation of Medical Devices – Part 1: Evaluation and Testing Within a Risk Management Process,” as recognized by FDA. The battery of testing included the following tests:

- Cytotoxicity
 - Sensitization
 - Irritation
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**Summary of
Substantial
Equivalence**

Based on the indications for use, design, safety and performance testing, the subject Elation™ Wireguided Balloon Dilation Catheter meets the requirements that are considered essential for its intended use and is substantially equivalent to the predicate device, the CRE™ Wireguided Balloon Dilatation Catheter, K112994.
