



April 4, 2018

Vascular Solutions, Inc.  
Beka Vite  
Sr. Regulatory Product Specialist  
6464 Sycamore Court North  
Minneapolis, Minnesota 55369

Re: K180088

Trade/Device Name: TrapLiner catheter  
Regulation Number: 21 CFR 870.1250  
Regulation Name: Percutaneous Catheter  
Regulatory Class: Class II  
Product Code: DQY  
Dated: March 5, 2018  
Received: March 6, 2018

Dear Beka Vite:

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.

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.

For comprehensive regulatory information about medical devices and radiation-emitting products, including information about labeling regulations, please see Device Advice (<https://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/>) and CDRH Learn (<http://www.fda.gov/Training/CDRHLearn>). Additionally, you may contact the Division of Industry and Consumer Education (DICE) to ask a question about a specific regulatory topic. See the DICE website (<http://www.fda.gov/DICE>) for more information or contact DICE by email ([DICE@fda.hhs.gov](mailto:DICE@fda.hhs.gov)) or phone (1-800-638-2041 or 301-796-7100).

Sincerely,

Kenneth J. Cavanaugh -S

for

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*)

K180088

Device Name  
TrapLiner catheter

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**Indications for Use (Describe)**

The TrapLiner catheter is intended for use in conjunction with guide catheters to access discrete regions of the coronary and/or peripheral vasculature, to facilitate placement of interventional devices, and to facilitate the exchange of an interventional device while maintaining the position of a guidewire within the vasculature.

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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)

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**CONTINUE ON A SEPARATE PAGE IF NEEDED.**

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

**\*DO NOT SEND YOUR COMPLETED FORM TO THE PRA STAFF EMAIL ADDRESS BELOW.\***

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## **510(K) SUMMARY**

[As required by 21 CFR 807.92]

**Date Prepared:** Apr 3, 2018

**510(k) Number:** K180088

### **Submitter's Name / Contact Person**

#### **Manufacturer**

Vascular Solutions, Inc.  
6464 Sycamore Court North  
Minneapolis, MN 55369 USA  
Establishment Registration # 2134812

#### **Contact Person**

Beka Vite  
Sr. Regulatory Product Specialist  
Tel: 763-656-4300  
Fax: 763-656-4253

### **General Information**

**Trade Name** TrapLiner catheter

**Common / Usual Name** Catheter

**Product Code** DQY

**Classification Name** 21 CFR 870.1250 – percutaneous catheter

**Predicate Device** K161901, TrapLiner Catheter (Vascular Solutions, Inc. – cleared February 3, 2017)

### **Device Description**

The TrapLiner catheter is a rapid-exchange guide extension catheter with a trapping balloon on the distal end of the pushrod. The stainless steel pushrod is covered on the distal end by a semi-circular polymer ('half-pipe') and transitions to a hydrophilic coated full-round polymer guide extension section. There are two radiopaque marker bands on the guide extension segment, one on the distal tip and one on the collar. The trapping balloon is located proximal to the half-pipe and has a single radiopaque gold marker under the proximal end of the balloon.

### **Intended Use**

The TrapLiner catheter is intended for use in conjunction with guide catheters to access discrete regions of the coronary and/or peripheral vasculature, to facilitate placement of interventional devices, and to facilitate the exchange of an interventional device while maintaining the position of a guidewire within the vasculature.

### **Technological Characteristics Comparison**

The subject TrapLiner catheter is similar in design and identical in intended use to the predicate TrapLiner device. Compared to the predicate device, the design difference is a geometry improvement at the distal end of the pushrod.

The technological differences between the subject and predicate devices have been evaluated through bench tests to provide evidence that the TrapLiner catheter is substantially equivalent to the predicate device. The device design has been verified through the following tests:

- Track Force
- Guide Catheter Backup Support
- Balloon Fatigue
- Pushwire-to-Shaft Tensile
- Liquid Leak
- Backbone Weld Bend

**Substantial Equivalence Conclusion**

The subject TrapLiner catheter is substantially equivalent to the specified predicate device based on comparisons of the device functionality, technological characteristics, and indications for use. The design change and results of subsequent design verification tests do not raise new or different questions of safety or effectiveness; therefore, the TrapLiner catheter is substantially equivalent to the predicate device.