



April 9, 2018

Inari Medical  
Eben Gordon  
Vice President, RA/QA  
9272 Jeronimo Rd., Suite 124  
Irvine, California 92618

Re: K180329  
Trade/Device Name: ClotTrieve Thrombectomy System  
Regulation Number: 21 CFR 870.5150  
Regulation Name: Embolectomy Catheter  
Regulatory Class: Class II  
Product Code: DXE  
Dated: March 12, 2018  
Received: March 13, 2018

Dear Eben Gordon:

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)

K180329

Device Name

ClotTriever Thrombectomy System

Indications for Use (Describe)

The ClotTriever Thrombectomy System consists of the ClotTriever Catheter and ClotTriever Sheath. The ClotTriever Thrombectomy System is indicated for:

- The non-surgical removal of soft thrombi and emboli from blood vessels.
- Injection, infusion, and/or aspiration of contrast media and other fluids into or from a blood vessel.

The ClotTriever Thrombectomy System is intended for use in the peripheral vasculature.

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.

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

The burden time for this collection of information is estimated to average 79 hours per response, including the time to review instructions, search existing data sources, gather and maintain the data needed and complete and review the collection of information. Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing this burden, to:

Department of Health and Human Services  
Food and Drug Administration  
Office of Chief Information Officer  
Paperwork Reduction Act (PRA) Staff  
PRASStaff@fda.hhs.gov

*"An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB number."*

**510(k) SUMMARY**

Date prepared	February 5, 2018
Name	Inari Medical, Inc. 9272 Jeronimo Road, Suite 124 Irvine, CA 92618 949.600.8433 x114
Contact person	Eben Gordon Vice President, Regulatory Affairs & Quality Assurance
Trade name	ClotTrierer Thrombectomy System
Common name	Embolectomy catheter
Regulation name	Embolectomy catheter
Classification number	21 CFR 870.5150
Product code	DXE
Regulatory class	II
Predicate device	Inari Medical's ClotTrierer Thrombectomy System (K173470)
Reference devices	Inari Medical's FlowTrierer Retrieval/Aspiration System (K173672) Inari Medical's Infusion Aspiration Catheter System (K143563) Merit Medical Systems' VacLok Vacuum Syringe (K163597)
Description	The ClotTrierer Thrombectomy System is a single-use, sterile medical device system designed for use in the peripheral vasculature. The ClotTrierer Thrombectomy System consists of the ClotTrierer Sheath and the ClotTrierer Catheter. The ClotTrierer Sheath consists of a polymeric sheath equipped with a self-expanding distal mesh funnel, a flush/aspiration port, and a proximal hemostatic valve. A dilator is provided to aid insertion. Other provided accessories include a clot reservoir, a funnel loading tool, and a 60 cc syringe. The ClotTrierer Catheter consists of four pre- assembled polymeric coaxial catheters terminating in an expandable coring element and thrombus collection bag. At the proximal end of the catheter is a handle used to enable tensioning of the coring element. Two ports terminating in stopcocks are provided for de-airing the catheter shafts. To aid in fluoroscopic visualization, the dilator and ClotTrierer Catheter distal tips are radiopaque.
Indications for Use	The ClotTrierer Thrombectomy System consists of the ClotTrierer Catheter and ClotTrierer Sheath. The ClotTrierer Thrombectomy System is indicated for: <ul style="list-style-type: none"> <li>• The non-surgical removal of soft thrombi and emboli from blood vessels.</li> <li>• Injection, infusion, and/or aspiration of contrast media and other fluids into or from a blood vessel.</li> </ul> <p>The ClotTrierer Thrombectomy System is intended for use in the peripheral vasculature.</p>

Device  
modifications

The changes to the ClotTrievers Thrombectomy System are:

- Reduction in the length of the ClotTrievers Sheath from 26 cm to 15 cm.
- Reduction in the length of the Dilator to match the Sheath change.
- An outer shaft has been added to the Dilator to aid in its removal from the ClotTrievers Sheath after the funnel has been deployed.
- Decrease in the Dilator tip taper and hardness.
- Pre-loading of the Dilator into ClotTrievers Sheath prior to final packaging.
- Replacement of the hemostasis valve with a user actuated hemostasis valve in the ClotTrievers Sheath's proximal hub.
- Addition of a stopcock in the sideport tubing.
- Elimination of the Valve Dilator, Aspiration Insert, Flush Port Adapter, and tubing clamp components.
- Replacement of the 60 cc Monoject Syringe with the 60 cc VacLok Vacuum Syringe.

Summary of  
substantial  
equivalence

There is no change of intended use or fundamental scientific technology between the modified and predicate devices.

#### **Non-Clinical Testing**

In accordance with the Design Failure Modes and Effects Analysis, verification and validation testing were identified to support the substantial equivalence of the modified ClotTrievers Thrombectomy System to the predicate device. This testing demonstrated compliance with relevant product specifications. These tests included:

- Pouch Seal Inspection
- Dye Penetration Inspection
- Pouch Peel Test
- Visual & Dimensional Inspections: ClotTrievers Sheath, Dilator, Clot Reservoir & Loading Tool
- Guidewire Compatibility Verification
- Insertion Force – ClotTrievers Dilator Handle into Sheath Hub
- Retraction Force – Dilator Handle from Sheath Hub
- Deployment Force – ClotTrievers Sheath from Dilator
- Engagement Force – Dilator Handle
- Retraction Force – Dilator Thru ClotTrievers Sheath
- Retraction Force – Dilator Handle
- Insertion Verification – ClotTrievers Delivery Catheter thru Sheath
- Retraction of the ClotTrievers Catheter Thru ClotTrievers Sheath
- Kink Resistance/ Radius Verification – ClotTrievers Sheath & Dilator
- Leakage Verification, ClotTrievers Sheath
- Leakage Verification, ClotTrievers Dilator
- Leakage Verification, Clot Reservoir
- Air Leakage, ClotTrievers Sheath
- Clot Reservoir Check Valve Cracking Pressure

- Vacuum Testing, ClotTrievers Sheath
- Vacuum Testing, ClotTrievers Clot Reservoir
- Push-Button Force Testing – Garrote Valve
- Fluid Test Thru ClotTrievers Sheath/Dilator
- Corrosion Resistance
- ClotTrievers Dilator Retraction in Clot Analog
- Simulated Use, Track and Tensile – ClotTrievers Dilator
- Simulated Use, Track and Tensile – ClotTrievers Sheath
- Simulated Use, Tensile – ClotTrievers Clot Reservoir
- Simulated Use Track and Turn-to-Failure, ClotTrievers Sheath
- Torque Testing – Dilator
- Torque Testing – Garrote Valve
- Torque Testing – Flushing Stopcock
- Burst Testing – Garrote Valve
- Burst Testing – Flushing Stopcock
- Particulate Evaluation

Clinical testing was not required for the determination of substantial equivalence.

**Conclusion**

Test results demonstrated that all acceptance criteria were met; therefore, the device conforms to established product specifications and intended use. Based upon the same intended use and principle of operation, technology, and non-clinical testing it is concluded that the modified ClotTrievers Thrombectomy System is substantially equivalent to the predicate device.