



December 4, 2020

Inari Medical  
Eben Gordon  
Vice President, RA/QA  
9 Parker, Suite 100  
Irvine, California 92618

Re: K201541

Trade/Device Name: FlowTrieve Retrieval/Aspiration System  
Regulation Number: 21 CFR 870.5150  
Regulation Name: Embolectomy Catheter  
Regulatory Class: Class II  
Product Code: QEW, KRA  
Dated: November 2, 2020  
Received: November 3, 2020

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. Although this letter refers to your product as a device, please be aware that some cleared products may instead be combination products. The 510(k) Premarket Notification Database located at <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm> identifies combination product submissions. 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) for devices or postmarketing safety reporting (21 CFR 4, Subpart B) for combination products (see <https://www.fda.gov/combination-products/guidance-regulatory-information/postmarketing-safety-reporting-combination-products>); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820) for devices or current good manufacturing practices (21 CFR 4, Subpart A) for combination products; 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 <https://www.fda.gov/medical-devices/medical-device-safety/medical-device-reporting-mdr-how-report-medical-device-problems>.

For comprehensive regulatory information about medical devices and radiation-emitting products, including information about labeling regulations, please see Device Advice (<https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance>) and CDRH Learn (<https://www.fda.gov/training-and-continuing-education/cdrh-learn>). 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 (<https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance/contact-us-division-industry-and-consumer-education-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,

Gregory O'Connell  
Assistant Director  
DHT2C: Division of Coronary  
and Peripheral Intervention Devices  
OHT2: Office of Cardiovascular Devices  
Office of Product Evaluation and Quality  
Center for Devices and Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known)  
K201541

Device Name  
FlowTrieve Retrieval/Aspiration System

### Indications for Use (Describe)

The FlowTrieve2 Catheter is indicated for:

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

The FlowTrieve2 Catheter 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.

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**510(k) SUMMARY**

Date prepared	December 2, 2020
Name	Inari Medical, Inc. 9 Parker, Suite 100 Irvine, CA 92618 949.418.4095
Contact person	Eben Gordon Vice President, Regulatory Affairs & Quality Assurance
Trade name	FlowTrieve Retrieval/Aspiration System
Common name	Embolectomy catheter
Regulation name	Embolectomy catheter
Classification number	21 CFR 870.5150
Product code	QEW
Secondary Product code	KRA
Regulatory class	II
Predicate device	Inari FlowTrieve Retrieval/Aspiration System (K143563)
Description	<p>The FlowTrieve Retrieval/Aspiration System is a single-use over-the-wire catheter-based system for the minimally invasive treatment of thromboemboli in the peripheral vasculature. The system is comprised of two main components packaged separately:</p> <ul style="list-style-type: none"> <li>• Trieve Catheters (available in 3 sizes: 16, 20, and 24 Fr)</li> <li>• FlowTrieve2 Catheter</li> </ul> <p>The FlowTrieve2 Catheter is inserted through the Trieve Catheter and advanced to the thrombus. Self-expanding disk(s) are deployed to engage thrombus by retracting the outer delivery catheter. The FlowTrieve2 Catheter is retracted into the Trieve Catheter to capture the targeted thrombus. Additional clot may be removed by aspiration with the provided 60 cc VacLok Vacuum syringe. After the procedure is complete, the Trieve Catheter and FlowTrieve2 Catheter are removed from the patient.</p>

Indications for Use	<p>The FlowTrievers2 Catheter is indicated for:</p> <ul style="list-style-type: none"> <li>• The non-surgical removal of emboli and thrombi from peripheral 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 FlowTrievers2 Catheter is intended for use in the peripheral vasculature.</p>
Explanation of differences in indications for use	<p>The indications for use of the FlowTrievers2 Catheter is the same as the predicate device, i.e., use in the peripheral vasculature.</p>
Device modifications	<p>The reason for this submission is to introduce a FlowTrievers Catheter variant with these changes:</p> <ul style="list-style-type: none"> <li>• Redesign of the FlowTrievers Catheter disk geometry</li> <li>• Reduction of FlowTrievers Catheter disks from 3 to 1</li> <li>• FlowTrievers Catheter disk changed from formed nitinol wire to laser cut nitinol</li> <li>• FlowTrievers Catheter inner shaft material change to Polyimide/braid/Polyimide-PTFE composite</li> <li>• FlowTrievers Delivery Catheter length increased by 5 cm to 120 cm</li> <li>• FlowTrievers Delivery Catheter proximal Luer material changed to polycarbonate</li> <li>• Non-patient contacting proximal stop feature added to alert user when the device is deployed</li> </ul>
Technological characteristics comparison	<p>The proposed modifications to the FlowTrievers Catheter principally involve the optimizing the disk geometry and reducing the number of disks from 3 to 1. The FlowTrievers2's single disk shortens the treatment segment affording less risk of vessel damage while maintaining thrombus removal performance. The remaining incremental changes either improve manufacturability (laser cut nitinol disk, polyimide/braid/Polyimide-PTFE composite inner catheter material, polycarbonate Luer) or improve usability (5 cm longer Delivery Catheter, proximal stop feature).</p>

Summary of substantial equivalence	<p>There is no change of intended use or fundamental scientific technology between the proposed and predicate device. The FlowTrieve Retrieval/Aspiration System has the same indication for use as the predicate.</p> <p><u>Non-Clinical Testing</u></p> <p>In accordance with the Design Failure Modes and Effects Analysis, verification and validation testing were identified to support the substantial equivalence of the modified FlowTrieve Retrieval/Aspiration System. This testing demonstrated compliance with relevant product specifications. These tests included:</p> <ul style="list-style-type: none"><li>• Visual &amp; Dimensional Inspection</li><li>• Guidewire Compatibility Verification</li><li>• Radial Expansion Force</li><li>• Deployment Force</li><li>• Retraction Force</li><li>• Element Visual Inspection; Post Retraction Cycles</li><li>• Leak and Vacuum Test; Post Retraction Cycles</li><li>• Kink Resistance</li><li>• Clot Analog Burden Removal Validation</li><li>• Chronic Clot Analog Burden Removal Validation</li><li>• Simulated Use, Track and Tensile</li><li>• Liquid Leakage under Pressure</li><li>• Burst Pressure</li><li>• Simulated Use, Torque</li><li>• Corrosion Resistance Particulate testing</li></ul> <p>Animal testing met predetermined acceptance criteria. Clinical testing was not required for the determination of substantial equivalence.</p> <p>Test results demonstrated that all acceptance criteria were met; therefore, the device conforms to established product specifications.</p> <p><u>Conclusion</u></p> <p>The proposed device modifications to the FlowTrieve Retrieval/Aspiration System do not change its intended use or raise new or different questions of safety and effectiveness. With consideration of the results of the testing, it can be concluded that the proposed FlowTrieve Retrieval/Aspiration System is substantially equivalent to the predicate device.</p>
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