March 9, 2023

Filmecc CO., LTD
℅ Candace Cederman
Principal Consultant
CardioMed Device Consultants LLC
1783 Forest Drive, Suite 254
Annapolis, Maryland 21401

Re: K223432
Trade/Device Name: Vassallo GT 018 Hybrid
Regulation Number: 21 CFR 870.1330
Regulation Name: Catheter Guide Wire
Regulatory Class: Class II
Product Code: DQX
Dated: November 10, 2022
Received: November 14, 2022

Dear Candace Cederman:

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) or phone (1-800-638-2041 or 301-796-7100).

Sincerely,

Lydia S. Glaw -S

Digitally signed by Lydia S. Glaw -S
Date: 2023.03.09 14:38:28 -05'00'

Lydia Glaw
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

DEPARTMENT OF HEALTH AND HUMAN SERVICES
Food and Drug Administration

Indications for Use

Form Approved: OMB No. 0910-0120
Expiration Date: 06/30/2020
See PRA Statement below.

510(k) Number *(if known)*
K223432

Device Name
VASSALLO® GT 018 Hybrid

Indications for Use *(Describe)*
This product is intended to facilitate the placement and exchange of diagnostic and therapeutic devices during intravascular procedures. This device is intended for peripheral vascular use only.

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
PRAStaff@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
(as required by 21 CFR 807.92)

PERIPHERAL GUIDE WIRES
VASSALLO® GT 018 Hybrid

510(k) K223432

Date Prepared:	January 30, 2023
Applicant:	FILMECC CO., LTD. 1703 Wakita-cho, Moriyama-ku Nagoya-shi, Aichi 463-0024 Japan TEL : +81-52-768-1212, FAX : +81-52-768-1222
Contact:	Takahiro Kuroiwa Regulatory Affairs FILMECC CO., LTD. 1703 Wakita-cho, Moriyama-ku Nagoya-shi, Aichi 463-0024 Japan TEL : +81-52-768-1212, FAX : +81-52-768-1222 e-mail: takahiro.kuroiwa@filmecc.com
Trade Name:	VASSALLO® GT 018 Hybrid
Device Classification:	Class 2 per 21 CFR §870.1330
Classification Name:	Catheter, Guide, Wire
Product Code:	DQX – Catheter Guide Wire
Predicate Devices:	VASSALLO GT Hybrid Guide Wire, K203529
Reference Devices:	VASSALLO GT, K203533 VASSALLO GT 018 Floppy, K213949

INTENDED USE/INDICATIONS FOR USE:

VASSALLO® GT 018 Hybrid

This product is intended to facilitate the placement and exchange of diagnostic and therapeutic devices during intravascular procedures. This device is intended for peripheral vascular use only.

DEVICE DESCRIPTION:

The VASSALLO GT 018 Hybrid consists of a hybrid NiTi alloy and stainless-steel core wire and a coil assembly on the distal end of the device. The coil assembly is soldered to the NiTi alloy portion of the core. The coil is radiopaque to facilitate selection of the blood vessel and confirmation of the position of the guide wire's distal end by fluoroscopy. Coatings are applied

on the surface of the VASSALLO GT 018 Hybrid. The proximal portion is coated with PTFE. The distal section is coated with a hydrophilic coating and polyurethane coating. When wet, the hydrophilic coating increases the lubricity of the guidewire surface. The middle portion of the device is coated with PFA and silicone coatings. The VASSALLO GT 018 Hybrid has an outer diameter of 0.018 inches (0.45 mm) and is available in 190cm and 300cm lengths.

About 2cm of the distal end can be shaped. A detachable extension wire (hereafter "extension wire") is available to connect with the proximal end of the guide wire with a length of less than 300 cm. A Torque device is included in the same package.

COMPARISON WITH PREDICATE DEVICES:

Comparisons of the VASSALLO GT 018 Hybrid and predicate / reference devices show that the technological characteristics of the subject device such as the components, design, materials, sterilization method, shelf life and operating principle are similar to the currently marketed predicate and reference devices. The intended use of the subject device and its predicates are the same.

Name of Devices	**FILMECC Peripheral Guidewire VASSALLO GT 018 Hybrid**	**FILMECC Peripheral Guidewire VASSALLO GT Hybrid**	**FILMECC Peripheral Guidewire VASSALLO GT**	**FILMECC Peripheral Guidewire VASSALLO GT 018 Floppy**
	Subject	**Predicate**	**Reference**	**Reference**
510(k)	K223432	K203529	K203533	K213949
Intended Use and Indications	This product is intended to facilitate the placement and exchange of diagnostic and therapeutic devices during intravascular procedures. This device is intended for peripheral vascular use only.	This product is intended to facilitate the placement and exchange of diagnostic and therapeutic devices during intravascular procedures. This device is intended for peripheral vascular use only.	This product is intended to facilitate the placement and exchange of diagnostic and therapeutic devices during intravascular procedures. This device is intended for peripheral vascular use only.	This product is intended to facilitate the placement and exchange of diagnostic and therapeutic devices during intravascular procedures. This device is intended for peripheral vascular use only.
Nominal OD	0.45 mm (0.018 in)	0.36 mm (0.014 in)	0.36 mm (0.014 in)	0.45 mm (0.018 in)
Overall Length	190cm 300cm	190cm 300cm	190cm 300cm	190cm 300cm
Outer Coil	Platinum-Nickel	Platinum-Nickel	Platinum-Nickel or Platinum-Nickel and Stainless Steel	Platinum-Nickel
Tapered Core Wire	Hybrid Nitinol and Stainless Steel	Hybrid Nitinol and Stainless Steel	Stainless Steel	Stainless Steel
Inner Structure	Stainless Steel Coil	Stainless Steel Coil	-	Stainless Steel
Tip Shape	Straight (shapeable)	Straight (shapeable)	Straight (shapeable)	Straight (shapeable)
Coating	Hydrophilic Hydrophobic	Hydrophilic Hydrophobic	Hydrophilic Hydrophobic	Hydrophilic Hydrophobic
Sterilization	Ethylene Oxide	Ethylene Oxide	Ethylene Oxide	Ethylene Oxide

NON-CLINICAL TESTING/PERFORMANCE DATA:

Non-clinical laboratory testing was performed on the VASSALLO® GT 018 Hybrid to determine substantial equivalence. The following testing/assessments were performed:

- Dimensional Verification
- Visual Inspection
- Tensile Strength / Tip Pull
- Torque Strength
- Torqueability
- Coating Adhesion
- Catheter Compatibility / Lubricity
- Corrosion Resistance
- Kink Resistance
- Tip Flexibility
- Radiopacity

The *in vitro* bench tests demonstrated that the VASSALLO GT 018 Hybrid met all acceptance criteria and performed similarly to the predicate and reference devices. Performance data demonstrate that the device functions as intended and has a safety and effectiveness profile that is similar to the predicate devices.

BIOCOMPATIBILITY:

Testing was performed to assess biocompatibility of the VASSALLO GT 018 Hybrid. The following tests were performed:

- Cytotoxicity
- Sensitization
- Intracutaneous Irritation
- Systemic Toxicity
- Hemolysis
- Partial Thromboplastin Time
- In Vivo Thromboresistance
- SC5b-9 Complement Activation
- Material Mediated Pyrogenicity

The results from the testing performed showed the VASSALLO GT 018 Hybrid to be biocompatible.

CONCLUSION:

The VASSALLO GT 018 Hybrid has the same intended use and the same, or similar, technological characteristics such as components, design, materials, sterilization method, shelf life and operating principles as the predicate and reference devices. Performance data demonstrates that the device functions as intended. The conclusions drawn from the nonclinical and clinical tests demonstrate that the VASSALLO GT 018 Hybrid is as safe, as effective, and performs as well as or better than the legally marketed predicate device.

Therefore, the VASSALLO GT 018 Hybrid is substantially equivalent to the predicate devices.