February 17, 2021

Vascular Graft Solutions, Ltd.
% Janice Hogan
Partner
Hogan Lovells US LLP
1735 Market Street, 23rd Floor
Philadelphia, Pennsylvania 19103

Re: K203307
Trade/Device Name: Viola
Regulation Number: 21 CFR 870.4450
Regulation Name: Vascular Clamp
Regulatory Class: Class II
Product Code: DXC
Dated: February 5, 2021
Received: February 5, 2021

Dear Janice Hogan:

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,

Rachel Neubrander
Assistant Director
DHT2B: Division of Circulatory Support,
Structural and Vascular 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)*
K203307

Device Name
VIOLA

Indications for Use *(Describe)*
VIOLA clampless proximal anastomosis sealing system is indicated for use by cardiac surgeons during coronary artery bypass grafting procedures to maintain hemostasis and facilitate the completion of proximal anastomoses to the aorta without application of an aortic clamp.

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
Vascular Graft Solutions, Ltd.'s VIOLA

Submitter's Name, Address, Telephone Number, Contact Person and Date Prepared

Vascular Graft Solutions, Ltd.
24 Raoul Wallenberg Street
Tel-Aviv, Israel 6971921
Phone: +972-54-3073050
Contact Person: Orit Yarden

Date Prepared: November 9, 2020

Name of Device

VIOLA

Common or Usual Name

Vascular Clamp

Classification Name

21 CFR 870.4450, Class II, Product Code DXC

Predicate Devices

MAQUET Cardiovascular LLC's HEARTSTRING III Proximal Seal (K130382)

Intended Use / Indications for Use

VIOLA clampless proximal anastomosis sealing system is indicated for use by cardiac surgeons during coronary artery bypass grafting procedures to maintain hemostasis and facilitate the completion of proximal anastomoses to the aorta without application of an aortic clamp.

Technological Characteristics

The VIOLA is a sterile, single-use device designed to maintain hemostasis and facilitate the completion of multiple proximal anastomoses during a coronary artery bypass grafting procedure, without application of an aortic clamp. The VIOLA system can be used to create up to 4 anastomoses within the same patient.

The VIOLA is comprised of:

1. A concentric 4 mm aortic punch with a detachable handle.
2. A sealing assembly comprising of a sealing element (which is available in two diameters), a catheter, fixation strap and a handle.
3. A silicone boundary marker stencil for marking the maximal suture line around the aortic incision.

The steps to create a sealed anastomosis hole that enables the surgeon to perform a clampless anastomosis include (1) the creation of a small "needle hole" (performed in the

center of the boundary marker), (2) insertion and deployment of the sealing element, (3) creation of an anastomosis hole using the VIOLA's punch, and (4) performing the anastomosis.

Performance Data

- Sterilization Validation per ISO 11135-1:2014 and ISO 10993-7:2008.
- Packaging validation for the sterile barrier and labeling after transit simulation and accelerated aging.
- Biocompatibility testing (material mediated pyrogenicity, cytotoxicity, intracutaneous reactivity, sensitization, acute systemic toxicity, partial thromboplastin time, SC5b-9 complement activation, hemolysis, and thrombogenicity) in accordance with ISO 10993-1.
- Design verification testing including Bond Strength Testing, Sealing Element Crush Resistance Testing, Punch Performance Testing, Simulated Use Testing, and Corrosion Resistance Testing.
- Animal testing to evaluate the safety, performance, and usability of the device conducted in compliance with Good Laboratory Practice (GLP) requirements (21 CFR 58).

Substantial Equivalence

The VIOLA is substantially equivalent to the MAQUET Cardiovascular LLC HEARTSTRING III Proximal Seal System (K130382). The VIOLA has the same intended uses and similar indications, technological characteristics, and principles of operation as its predicate device. The minor technological differences between the VIOLA and its predicate devices raise no new issues of safety or effectiveness. Performance data demonstrate that the VIOLA is as safe and effective as the predicate device.

Conclusions

The VIOLA is substantially equivalent to its predicate device.