July 3, 2025

Boston Scientific Corporation
Serena Sanginthirath
Principal Specialist, Regulatory Affairs
4100 Hamline Avenue North
St. Paul, Minnesota 55112

Re: P230030/S007
Trade/Device Name: FARAPULSE™ Pulsed Field Ablation System (FARAWAVE™ Pulsed Field Ablation Catheter, FARAWAVE™ NAV Pulsed Field Ablation Catheter, FARASTAR™ Catheter Connection Cable, FARASTAR™ Pulsed Field Ablation Generator, FARASTAR™ Recording System Module, FARASTAR™ Mapping System Module, FARASTAR™ Stimulation Module Cable, FARASTAR™ EGM Cable, FARASTAR™ Stimulation Module Male Cable, FARASTAR™ Stimulation Module Female Cable, FARASTAR™ Stimulation Module Y-Cable Long, FARASTAR™ Stimulation Module Y-Cable Short, FARASTAR™ Recording System Module Catheter Pin Cable, FARASTAR™ Recording System Module ECG Trunk Cable, FARASTAR™ Recording System Module ECG Output Module (AAMI/IEC), FARASTAR™ Recording System Module EGM Input Module, FARASTAR™ SNAP CABLE R/L – (AAMI/IEC), FARASTAR™ SNAP CABLE V SET – (AAMI), FARASTAR™ SNAP CABLE C SET – (IEC), FARASTAR™ Recording System Module ECG Output to Rhythmia HDx™ ECG Input Cable, FARASTAR™ Recording System Module EGM Output to Rhythmia HDx™ EGM Input Cable, FARASTAR™ Mapping System Module Back Patch Cable, FARASTAR™ Mapping System Module Back Patch Cable Male, FARASTAR™ Mapping System Module BNC BNC-Phono Cable, FARASTAR™ Mapping System Module Rhythmia™ ABL Cable, FARASTAR™ Mapping System Module Auxiliary Cable)
Product Code: QZI
Filed: November 25, 2024
Amended: April 4, 2025

Dear Serena Sanginthirath:

The Center for Devices and Radiological Health (CDRH) of the Food and Drug Administration (FDA) has completed its review of your premarket approval application (PMA) supplement for the FARAPULSE™ Pulsed Field Ablation System (FARAWAVE™ Pulsed Field Ablation Catheter, FARAWAVE™ NAV Pulsed Field Ablation Catheter, FARASTAR™ Catheter Connection Cable, FARASTAR™ Pulsed Field Ablation Generator, FARASTAR™ Recording System Module, FARASTAR™ Mapping System Module,

FARASTAR™ Stimulation Module Cable, FARASTAR™ EGM Cable, FARASTAR™ Stimulation Module Male Cable, FARASTAR™ Stimulation Module Female Cable, FARASTAR™ Stimulation Module Y-Cable Long, FARASTAR™ Stimulation Module Y-Cable Short, FARASTAR™ Recording System Module Catheter Pin Cable, FARASTAR™ Recording System Module ECG Trunk Cable, FARASTAR™ Recording System Module ECG Output Module (AAMI/IEC), FARASTAR™ Recording System Module EGM Input Module, FARASTAR™ SNAP CABLE R/L – (AAMI/IEC), FARASTAR™ SNAP CABLE V SET – (AAMI), FARASTAR™ SNAP CABLE C SET – (IEC), FARASTAR™ Recording System Module ECG Output to Rhythmia HDx™ ECG Input Cable, FARASTAR™ Recording System Module EGM Output to Rhythmia HDx™ EGM Input Cable, FARASTAR™ Mapping System Module Back Patch Cable, FARASTAR™ Mapping System Module Back Patch Cable Male, FARASTAR™ Mapping System Module BNC BNC-Phono Cable, FARASTAR™ Mapping System Module Rhythmia™ ABL Cable, FARASTAR™ Mapping System Module Auxiliary Cable) for expanding the indications to include the isolation of pulmonary veins and the posterior wall in the treatment of drug-refractory, symptomatic Persistent Atrial Fibrillation (episode duration less than one year). This device is indicated for:

FARAWAVE™ and FARAWAVE™ NAV Pulsed Field Ablation catheters
The FARAWAVE Catheter is indicated for:

- the isolation of pulmonary veins in the treatment of drug-refractory, recurrent, symptomatic Paroxysmal Atrial Fibrillation (PAF).
- the isolation of pulmonary veins and the posterior wall in the treatment of drug-refractory, symptomatic Persistent Atrial Fibrillation (episode duration less than one year).

FARASTAR™ Pulsed Field Ablation Generator
The FARASTAR PFA Generator is intended for use with a compatible Boston Scientific PFA catheter in cardiac ablation procedures.

FARASTAR™ Recording System Module
The FARASTAR Recording System Module (RSM) is indicated for use in an electrophysiology lab environment, as a filtering/protection unit to be connected between the patient and any attached recording systems and/or ECG systems, and as an interface for cardiac stimulation output.

FARASTAR™ Catheter Connection Cable
The FARASTAR Connection Cable is intended to be used with a FARAPULSE Catheter during an Electrophysiology procedure for cardiac tissue ablation.

Based upon the information submitted, the PMA supplement is approved. You may begin commercial distribution of the device in accordance with the conditions of approval described below. Although this letter refers to your product as a device, please be aware that some approved products may instead be combination products. The Premarket Approval Database available at https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfPMA/pma.cfm identifies combination product submissions.

The sale and distribution of this device are restricted to prescription use in accordance with 21 CFR 801.109 and under section 515(d)(1)(B)(ii) of the Federal Food, Drug, and Cosmetic Act (the act). The device is further restricted under section 515(d)(1)(B)(ii) of the act insofar as the labeling must specify the specific training or experience practitioners need in order to use the device.

FDA has determined that these restrictions on sale and distribution are necessary to provide reasonable assurance of the safety and effectiveness of the device. Your device is therefore a restricted device subject to the requirements in sections 502(q) and (r) of the act, in addition to all other applicable requirements, including those governing the manufacture, distribution, and marketing of devices.

Expiration dating for this device has been established and approved at 12 months. This is to advise you that the protocol you used to establish this expiration dating is considered an approved protocol for the purpose of extending the expiration dating as provided by 21 CFR 814.39(a)(7).

Continued approval of the PMA is contingent upon the submission of periodic reports, required under 21 CFR 814.84, at intervals of one year (unless otherwise specified) from the date of approval of the original PMA. This report, identified as "Annual Report" and bearing the applicable PMA reference number, should be submitted to the address below. The Annual Report should indicate the beginning and ending date of the period covered by the report and must include the information required by 21 CFR 814.84.

In addition to the above, and in order to provide continued reasonable assurance of the safety and effectiveness of the PMA device, under 21 CFR 814.82(a)(9), the Annual Report must include, separately for each model number (if applicable), the number of devices sold and distributed during the reporting period, including those distributed to distributors. The distribution data will serve as a denominator and provide necessary context for FDA to ascertain the frequency and prevalence of adverse events, as FDA evaluates the continued safety and effectiveness of the device.

You must obtain approval of your post-approval study (PAS) protocol(s) within 60 days from the date of this order. Within 30 days of your receipt of this letter, you must submit a PMA supplement that includes a complete protocol of your post-approval study described below. Your PMA supplement should be clearly labeled as a "PMA Post-Approval Study Protocol" as noted below and submitted to the address below. Please reference the PMA number above to facilitate processing. If there are multiple protocols being finalized after PMA approval, please submit each protocol as a separate PMA supplement.

In addition to the Annual Report requirements, you must provide the following data in post-approval study (PAS) reports for each PAS listed below.

> The ADVANTAGE Post-Approval Study (PAS) is a prospective, multi-center, non-randomized, observational study to evaluate the long-term effectiveness and safety of the FARAPULSE Pulsed Field Ablation System and the FARAWAVE Catheter for the treatment of drug-refractory, symptomatic, persistent atrial fibrillation (PsAF). Adult patients who intend to undergo their de novo catheter ablation procedure using the FARAPULSE Pulsed Field Ablation System to treat symptomatic persistent atrial fibrillation (episode duration less than one year) refractory or intolerant to at least one Class I or III antiarrhythmic medication will be enrolled and ablated using the FARAPULSE Pulsed Field Ablation System and the FARAWAVE Catheter. The study will enroll at least 350 study subjects with all patients treated in the United States. The study will aim to include a diverse (i.e., race, ethnicity, gender) patient population. Following consent, all study subjects will complete an enrollment/baseline visit, ablation procedure, and be followed through at least 1 year post-ablation. At least 100 study subjects will be followed through 3 years post-ablation.

A 24-hour Holter or equivalent rhythm monitoring will be performed at 6- and 12-months post ablation for asymptomatic recurrence and at times needed for symptomatic recurrences, and for the extended follow-up, annually at 24- and 36-months post-ablation.

The primary objectives of the PAS will be the following:

1. Estimating the primary safety adverse event rate at 3 months following ablation procedure using the FARAWAVE Catheter and FARAPULSE Pulsed Field Ablation System.

2. Estimating the 12-month freedom from atrial fibrillation (AF)/atrial flutter (AFL)/atrial tachycardia (AT) recurrence following ablation procedure using the FARAWAVE Catheter and FARAPULSE Pulsed Field Ablation System.

Secondary/Additional objectives will include but are not limited to:

a. Estimating 36-months freedom from AF/AFL/AT recurrence following ablation procedure using the FARAWAVE Catheter and FARAPULSE Pulsed Field Ablation System.

b. Estimating the rate of procedure-related acute kidney injury through 3 months post-procedure.

c. Estimating the rate of hemolysis-related acute kidney injury requiring intervention through 3 months post-procedure.

d. Estimating the rate of procedure-related pulmonary edema or heart failure events through 3 months post-procedure.

e. Estimating the rate of serious device or serious procedure related adverse events through 12 months post-ablation using the using the FARAWAVE Catheter and FARAPULSE Pulsed Field Ablation System.

f. Estimating the rate of major procedural complications in patients of 65 years of age or older.

g. Estimating 24-months and 36-months freedom from AF/AFL/AT recurrence following ablation procedure using the FARAWAVE Catheter and FARAPULSE Pulsed Field Ablation System.

h. Estimating freedom from AF/AFL/AT recurrence and off Class I and III antiarrhythmic medications at 12-, 24-, and 36-months following ablation procedure using the FARAWAVE Catheter and FARAPULSE Pulsed Field Ablation System.

i. Characterizing procedural data that may include but are not limited to procedure time, fluoroscopy time, total number of PF applications, fluid administered intraprocedural, ablation strategy and anesthesia technique.

PAS Progress Reports must be submitted every six (6) months for the first year and annually thereafter, from the date of the PMA approval letter, unless otherwise specified by FDA. The Final PAS Report should be submitted no later than three (3) months after study completion (i.e., last subject's last follow-up date).

From the date of study protocol approval, you must meet the following timelines for the ADVANTAGE PAS:

- First subject enrolled within 6 months
- 20% of subjects enrolled within 12 months
- 50% of subjects enrolled within 18 months
- 100% of subjects enrolled within 24 months

In addition, you must submit separate periodic reports on the progress of the ADVANTAGE PAS as follows:

- PAS Progress Reports every six (6) months until subject enrollment has been completed, and annually thereafter, from the date of the PMA approval letter, unless otherwise specified by FDA.
- If any enrollment milestones are not met, you must begin submitting quarterly enrollment status reports every 3 months in addition to your periodic (6-month) PAS Progress Reports, until FDA notifies you otherwise.
- Submit the Final PAS Report three (3) months from study completion (i.e., last subject’s last follow-up date).

Each PAS report should be submitted to the address below identified as a "PMA Post-Approval Study Report" in accordance with how the study is identified above and bearing the applicable PMA reference number.

Be advised that failure to comply with any post-approval requirement constitutes grounds for FDA withdrawal of approval of the PMA in accordance with 21 CFR 814.82(c) and 814.46(a)(2).

Be advised that the failure to conduct any such study in compliance with the good clinical laboratory practices in 21 CFR part 58 (if a non-clinical study subject to part 58) or the institutional review board regulations in 21 CFR part 56 and the informed consent regulations in 21 CFR part 50 (if a clinical study involving human subjects) may be grounds for FDA withdrawal of approval of the PMA in accordance with 21 CFR 814.46(a)(3)-(4).

Be advised that protocol information, interim and final results will be published on the Post-Approval Studies Program Database Webpage, available at https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfPMA/pma_pas.cfm.

In addition, the results from any post approval study should be included in the labeling as these data become available. Under 21 CFR 814.39, any updated labeling must be submitted to FDA in the form of a PMA Supplement. For more information on post-approval studies, see the FDA guidance document entitled, "Procedures for Handling Post-Approval Studies Imposed by Premarket Approval Application Order" (https://www.fda.gov/media/71327/download).

This is a reminder that as of September 24, 2014, class III devices are subject to certain provisions of the final Unique Device Identification (UDI) rule. These provisions include the requirement to provide a UDI on the device label and packages (21 CFR 801.20), format dates on the device label in accordance with 21 CFR 801.18, and submit data to the Global Unique Device Identification Database (GUDID) (21 CFR Part 830 Subpart E). Additionally, 21 CFR 814.84 (b)(4) requires PMA annual reports submitted after September 24, 2014, to identify each device identifier currently in use for the subject device, and the device identifiers for devices that have been discontinued since the previous periodic report. It is not necessary to identify any device identifier discontinued prior to December 23, 2013. Combination Products may also be subject to UDI requirements (see 21 CFR 801.30). For more information on these requirements, please see the UDI website available at https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance/unique-device-identification-udi-system.

Before making any change affecting the safety or effectiveness of the PMA device, you must submit a PMA supplement or an alternate submission (30-day notice) in accordance with 21 CFR 814.39. All PMA supplements and alternate submissions (30-day notice) must comply with the applicable requirements in 21 CFR 814.39. Additional information about changes that may require a PMA supplement are provided in the FDA guidance document entitled, "Modifications to Devices Subject to Premarket Approval (PMA) - The PMA Supplement Decision-Making Process" https://www.fda.gov/media/81431/download.

Your device is also subject to, among other requirements, the Quality System (QS) regulation (21 CFR Part 820), which includes, but is not limited to, 21 CFR 820.30, Design controls; 21 CFR 820.90, Nonconforming product; and 21 CFR 820.100, Corrective and preventive action. Please note that regardless of whether a change requires premarket review, the QS regulation requires device manufacturers to review and approve changes to device design and production and process controls (21 CFR 820.30 and 21 CFR 820.70) and document changes and approvals in the device master record (21 CFR 820.181).

You are reminded that many FDA requirements govern the manufacture, distribution, and marketing of devices. For example, in accordance with the Medical Device Reporting (MDR) regulation, 21 CFR 803.50 and 21 CFR 803.52 for devices or post-marketing safety reporting (21 CFR Part 4, Subpart B) for combination products, you are required to report adverse events for this device. Manufacturers of medical devices, including in vitro diagnostic devices, are required to report to FDA no later than 30 calendar days after the day they receive or otherwise becomes aware of information, from any source, that reasonably suggests that one of their marketed devices:

1. May have caused or contributed to a death or serious injury; or

2. Has malfunctioned and such device or similar device marketed by the manufacturer would be likely to cause or contribute to a death or serious injury if the malfunction were to recur.

Additional information on MDR, including how, when, and where to report, is available at https://www.fda.gov/medical-devices/medical-device-safety/medical-device-reporting-mdr-how-report-medical-device-problems and on combination product post-marketing safety reporting is available at https://www.fda.gov/combination-products/guidance-regulatory-information/postmarketing-safety-reporting-combination-products.

In accordance with the recall requirements specified in 21 CFR 806.10 for devices or the post-marketing safety reporting requirements (21 CFR Part 4, Subpart B) for combination products, you are required to submit a written report to FDA of any correction or removal of this device initiated by you to: (1) reduce a risk to health posed by the device; or (2) remedy a violation of the act caused by the device which may present a risk to health, with certain exceptions specified in 21 CFR 806.10(a)(2). Additional information on recalls is available at https://www.fda.gov/safety/recalls-market-withdrawals-safety-alerts/industry-guidance-recalls.

CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading. CDRH will notify the public of its decision to approve your PMA by making available, among other information, a summary of the safety and effectiveness data upon which the approval is based. The information can be found at https://www.fda.gov/medical-devices/device-approvals-denials-and-clearances/pma-approvals. Written requests for this information can also be made to the Food and Drug Administration, Dockets Management Branch, (HFA-305), 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852. The written request should include the PMA number or docket number. Within 30 days from the date that this information is placed on the Internet, any interested person may seek review of this decision by submitting a petition for review under section 515(g) of the act and requesting either a hearing or review by an independent advisory committee. FDA may, for good cause, extend this 30-day filing period.

Failure to comply with any post-approval requirement constitutes a ground for withdrawal of approval of a PMA. The introduction or delivery for introduction into interstate commerce of a device that is not in compliance with its conditions of approval is a violation of law.

You are reminded that, as soon as possible and before commercial distribution of your device, you must submit an amendment to this PMA submission with a copy of all final labeling. Final labeling that is identical to the labeling approved in draft form will not routinely be reviewed by FDA staff when accompanied by a cover letter stating that the final labeling is identical to the labeling approved in draft form. If the final labeling is not identical, any changes from the final draft labeling should be highlighted and explained in the amendment.

All required documents should be submitted, unless otherwise specified, to the address below and should reference the above PMA number to facilitate processing.

U.S. Food and Drug Administration
Center for Devices and Radiological Health
Document Control Center - WO66-G609
10903 New Hampshire Avenue
Silver Spring, MD 20993-0002

If you have any questions concerning this approval order, please contact Makarand Deo at Makarand.Deo@fda.hhs.gov.

Sincerely,

Hetal B. Odobasic -S

Hetal Odobasic
Director
Division of Cardiac Electrophysiology,
Diagnostics, and Monitoring Devices
Office of Cardiovascular Devices
Office of Product Evaluation and Quality
Center for Devices and Radiological Health