July 31, 2018

SPR Therapeutics, Inc.
Kathryn Stager
Director of Regulatory Affairs and Quality Systems
22901 Millcreek Blvd, Suite 110
Cleveland, Ohio 44122

Re: K181422
  Trade/Device Name: SPRINT Peripheral Nerve Stimulation System
  Regulation Number: 21 CFR 882.5890
  Regulation Name: Transcutaneous Electrical Nerve Stimulator For Pain Relief
  Regulatory Class: Class II
  Product Code: NHI
  Dated: May 29, 2018
  Received: May 31, 2018

Dear Kathryn Stager:

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

Sincerely,

Pamela D. Scott -S

for Carlos L. Peña, PhD, MS
Director
Division of Neurological and Physical Medicine Devices
Office of Device Evaluation
Center for Devices and Radiological Health

Enclosure
Indications for Use

Device Name
SPRINT Peripheral Nerve Stimulation (PNS) System

Indications for Use (Describe)
The SPRINT Peripheral Nerve Stimulation (PNS) System is indicated for up to 60 days in the back and/or extremities for:

• Symptomatic relief of chronic, intractable pain, post-surgical and post-traumatic acute pain;
• Symptomatic relief of post-traumatic pain;
• Symptomatic relief of post-operative pain.

The SPRINT PNS System is not intended to treat pain in the craniofacial region.

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.

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510(k) Summary

1. **Submitter**

SPR Therapeutics, Inc  
22901 Millcreek Boulevard, Suite 110  
Cleveland, OH  44122  
216-378-9108 (phone)  
216-674-2303 (fax)  

Contact Person: Kathryn Stager, MS, RAC, Director of Regulatory Affairs and Quality Systems  
Telephone: 216-378-9067  

Date Prepared: May 29, 2018

2. **Device**

Trade/Proprietary Name: SPRINT PNS System  
Common/Usual Name: Peripheral Nerve Stimulator  
Classification Name: Percutaneous Electrical Nerve Stimulation (PENS) devices (21 CFR 882.5890)  
Regulatory Class: II  
Product Code: NHI

3. **Predicate Device**

SPRINT PNS System (K170902)

4. **Device Description**

The Sprint PNS System is comprised of a percutaneous electrode placed via an introducer needle in proximity to a target peripheral nerve associated with a painful area and a wearable external Pulse Generator (stimulator) that delivers stimulation therapy to the percutaneous electrode. The Sprint PNS System provides peripheral nerve stimulation (PNS) therapy to relieve pain. The percutaneous electrode (MicroLead) is a sterile, flexible, coiled, stainless steel wire designed to be percutaneously inserted via an introducer needle and remain...
indwelling for the duration of the therapy (up to 60 days). The Pulse Generator and accessory components provide tools for percutaneous MicroLead placement, stimulator programming by the clinician, and stimulator use by the patient.

5. **Comparison of Indications for Use with the Predicate Device**

**Indications Statement:**
The SPRINT Peripheral Nerve Stimulation (PNS) System is indicated for up to 60 days in the back and/or extremities for:
- Symptomatic relief of chronic, intractable pain, post-surgical and post-traumatic acute pain;
- Symptomatic relief of post-traumatic pain;
- Symptomatic relief of post-operative pain.

The SPRINT PNS System is not intended to treat pain in the craniofacial region.

**Comparison:**
The indication for use statement is identical to that cleared in K170902.

6. **Comparison of Technological Characteristics with the Predicate Device**

SPR has made some design modifications to the SPRINT® PNS System to improve ease of use and reliability of the system. None of the changes affect the intended use or fundamental functionality of the device.

The proposed modifications include the following:

- Minor changes have been made to parameter ranges and adjustment of stimulus intensity.
- The Pulse Generator is now capable of delivering 2 channels of stimulation.
- The Pulse Generator is now powered by a rechargeable battery pack that connects directly to it, rather than having the battery embedded in the disposable return current Pads.
- A Hand-Held Remote has been added to the system to enable the patient to operate the stimulator (via Bluetooth communication) without having to press buttons and read a display on the skin-mounted stimulator. The clinician can also program stimulation parameters using the Hand-Held Remote.
- A Clinical Programmer tablet computer has been added to the system and can be used to program the Pulse Generator (via Bluetooth) as an alternative to the
Hand-Held Remote for the clinician.

- The OnePass Introducer System has been added to the system to enhance placement of the MicroLead through its Introducer. Echogenic markings have been added to the Percutaneous Sleeve, Stimulating Probe, and Introducer to enhance visibility under ultrasound.
- Changes have been made to cables and accessories to simplify use.

None of these changes alters the fundamental delivery of the same range of stimulation parameters to the target nerve through the identical MicroLead, using the identical stimulus waveform, limited by the identical charge delivery, for the identical indications for use.

7. PERFORMANCE DATA

Nonclinical testing of this device includes biocompatibility testing, electrical testing (safety and electromagnetic compatibility), software verification and validation, system performance testing, human factors/usability testing, and sterile package integrity testing.

8. CONCLUSIONS

The Sprint PNS System has been shown to be substantially equivalent to the identified predicate device.