



April 3, 2025

Spine Wave, Inc.
Ronald Smith
Executive Vice President, Quality, Regulatory & Clinical Affairs
Three Enterprise Drive
Suite 210
Shelton, Connecticut 06484

Re: K243514

Trade/Device Name: Salvo® Robotic Navigation Instruments
Regulation Number: 21 CFR 882.4560
Regulation Name: Stereotaxic Instrument
Regulatory Class: Class II
Product Code: OLO
Dated: February 28, 2025
Received: February 28, 2025

Dear Ronald Smith:

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 (the 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 available 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.

Additional information about changes that may require a new premarket notification are provided in the FDA guidance documents entitled "Deciding When to Submit a 510(k) for a Change to an Existing Device" (<https://www.fda.gov/media/99812/download>) and "Deciding When to Submit a 510(k) for a Software Change to an Existing Device" (<https://www.fda.gov/media/99785/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 (21 CFR 820.30 and 21 CFR 820.70) and document changes and approvals in the device master record (21 CFR 820.181).

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 Part 803) for devices or postmarketing safety reporting (21 CFR Part 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 Part 4, Subpart A) for combination products; and, if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR Parts 1000-1050.

All medical devices, including Class I and unclassified devices and combination product device constituent parts are required to be in compliance with the final Unique Device Identification System rule ("UDI Rule"). The UDI Rule requires, among other things, that a device bear a unique device identifier (UDI) on its label and package (21 CFR 801.20(a)) unless an exception or alternative applies (21 CFR 801.20(b)) and that the dates on the device label be formatted in accordance with 21 CFR 801.18. The UDI Rule (21 CFR 830.300(a) and 830.320(b)) also requires that certain information be submitted to the Global Unique Device Identification Database (GUDID) (21 CFR Part 830 Subpart E). For additional information on these requirements, please see the UDI System webpage at <https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance/unique-device-identification-system-udi-system>.

Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 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,


Shumaya Ali -S

Shumaya Ali, M.P.H.
Assistant Director
DHT6C: Division of Restorative, Repair
and Trauma Devices
OHT6: Office of Orthopedic Devices
Office of Product Evaluation and Quality
Center for Devices and Radiological Health

Enclosure

Indications for Use

Submission Number (if known)

K243514

Device Name

Salvo® Robotic Navigation Instruments

Indications for Use (Describe)

The Salvo® Robotic Navigation Instruments are indicated for use during the preparation and placement of Salvo® Spine System screws in open or minimally invasive procedures. The Salvo® Robotic Navigation Instruments are specifically designed for use with Globus Medical's ExcelsiusGPS® Robotic Navigation Platform, which is intended for use as an aid for precisely locating anatomical structures and for the spatial positioning and orientation of an instrument holder or guide tube to be used by surgeons for navigating and/or guiding compatible surgical instruments in open or percutaneous procedures, provided that the required fiducial markers and rigid patient anatomy can be identified on CT scans or fluoroscopy.

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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Contact Details

[21 CFR 807.92\(a\)\(1\)](#)

Applicant Name	Spine Wave, Inc.
Applicant Address	Three Enterprise Drive Suite 210 Shelton CT 06484 United States
Applicant Contact Telephone	203-712-1846
Applicant Contact	Mr. Ronald Smith
Applicant Contact Email	rsmith@spinewave.com

Device Name

[21 CFR 807.92\(a\)\(2\)](#)

Device Trade Name	Salvo® Robotic Navigation Instruments
Common Name	Stereotaxic instrument
Classification Name	Orthopedic Stereotaxic Instrument
Regulation Number	882.4560
Product Code(s)	OLO

Legally Marketed Predicate Devices

[21 CFR 807.92\(a\)\(3\)](#)

Predicate #	Predicate Trade Name (Primary Predicate is listed first)	Product Code
K220862	E-GPS Navigated Instruments	OLO
K171651	ExcelsiusGPS®	OLO

Device Description Summary

[21 CFR 807.92\(a\)\(4\)](#)

The Salvo® Robotic Navigation Instruments are surgical instruments that are designed to be used with Globus Medical's Excelsius GPS® Robotic Navigation Platform. These instruments are intended to facilitate the placement of screws during spinal surgery. The instruments are reusable and offered non-sterile to be cleaned and steam sterilized by the end user.

Intended Use/Indications for Use

[21 CFR 807.92\(a\)\(5\)](#)

The Salvo® Robotic Navigation Instruments are indicated for use during the preparation and placement of Salvo® Spine System screws in open or minimally invasive procedures. The Salvo® Robotic Navigation Instruments are specifically designed for use with Globus Medical's ExcelsiusGPS® Robotic Navigation Platform, which is intended for use as an aid for precisely locating anatomical structures and for the spatial positioning and orientation of an instrument holder or guide tube to be used by surgeons for navigating and/or guiding compatible surgical instruments in open or percutaneous procedures, provided that the required fiducial markers and rigid patient anatomy can be identified on CT scans or fluoroscopy.

Indications for Use Comparison

[21 CFR 807.92\(a\)\(5\)](#)

The subject Salvo® Robotic Navigation Instruments has the same intended use as the primary predicate. Specifically, the devices are used during the preparation and placement of screws in open or minimally invasive spinal procedures with Globus Medical's ExcelsiusGPS® Robotic Navigation Platform. Therefore, the subject Salvo® Robotic Navigation Instruments is substantially equivalent to

its predicate in intended use, and no new issues of safety and effectiveness are raised.

Technological Comparison

[21 CFR 807.92\(a\)\(6\)](#)

The subject Salvo® Robotic Navigation Instruments have equivalent technological characteristics to that of the predicate devices and the minor differences do not raise any new issues of safety and effectiveness. Specifically, the following characteristics are similar between the subject and predicates: device design and dimensions, materials of manufacture, and principles of operation. Identical to the predicates, the subject Salvo® Robotic Navigation Instruments are also non-sterile, reusable instruments to be steam sterilized by the end user.

Non-Clinical and/or Clinical Tests Summary & Conclusions

[21 CFR 807.92\(b\)](#)

The Salvo® Robotic Navigation Instruments have been evaluated through a dimensional analysis and geometric comparison to the predicate devices to establish the safety and effectiveness for accuracy performance. Validation testing was also conducted to demonstrate compatibility of the subject device with the built-in safety feature of the ExcelsiusGPS end effector.

Clinical testing is not applicable.

The overall technology characteristics and engineering analysis lead to the conclusion that the Salvo® Robotic Navigation Instruments are substantially equivalent to the predicate device.