



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

May 6, 2024

Re: K240685

Trade/Device Name: Salvo® Spine System
Regulation Number: 21 CFR 888.3070
Regulation Name: Thoracolumbosacral Pedicle Screw System
Regulatory Class: Class II
Product Code: NKB
Dated: March 12, 2024
Received: March 12, 2024

Dear Mr. 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.

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,

 Digitally signed
by Eileen Cadel -
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Date: 2024.05.06
15:23:45 -04'00'

for

Colin O'Neill, M.B.E.

Assistant Director

DHT6B: Division of Spinal 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)

K240685

Device Name

Salvo® Spine System

Indications for Use (Describe)

The Salvo® Spine System is intended to provide immobilization and stabilization of spinal segments in skeletally mature patients as an adjunct to fusion in the treatment of the following acute and chronic instabilities or deformities of the thoracic, lumbar, and sacral spine: degenerative disc disease; spondylolisthesis; fracture; dislocation; scoliosis; kyphosis; spinal tumor; and failed previous fusion (pseudarthrosis).

When used in a percutaneous approach with minimally invasive surgery (MIS) instrumentation, the Salvo® Spine System is intended to provide immobilization and stabilization of spinal segments in skeletally mature patients as an adjunct to fusion in the treatment of the following acute and chronic instabilities or deformities of the thoracic, lumbar, and sacral spine: degenerative disc disease; spondylolisthesis; fracture; dislocation; scoliosis; kyphosis; spinal tumor; and failed previous fusion (pseudarthrosis).

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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510(k) Summary

Prepared on: 2024-05-02

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® Spine System
Common Name	Thoracolumbosacral pedicle screw system
Classification Name	Thoracolumbosacral Pedicle Screw System
Regulation Number	888.3070
Product Code(s)	NKB

Legally Marketed Predicate Devices

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

Predicate #	Predicate Trade Name (Primary Predicate is listed first)	Product Code
K222362	Salvo® Spine System	NKB
K160003	Sniper® Spine System	MNI

Device Description Summary

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

The Salvo® Spine System is a thoracolumbosacral pedicle screw system designed to be implanted through a posterior surgical approach. The implants are manufactured from titanium alloy (Ti-6Al-4V ELI) per ASTM F136, commercially pure titanium per ASTM F67, cobalt-chromium alloy per ASTM F1537, and PEEK-OPTIMA LT1 with BaSO4. The Salvo® Spine System consists of a variety of screws, rods, and connectors that create a rigid construct as an adjunct to fusion for internal fixation and stabilization of the thoracic, lumbar, and sacral spine.

Intended Use/Indications for Use

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

The Salvo® Spine System is intended to provide immobilization and stabilization of spinal segments in skeletally mature patients as an adjunct to fusion in the treatment of the following acute and chronic instabilities or deformities of the thoracic, lumbar, and sacral spine: degenerative disc disease; spondylolisthesis; fracture; dislocation; scoliosis; kyphosis; spinal tumor; and failed previous fusion (pseudarthrosis).

When used in a percutaneous approach with minimally invasive surgery (MIS) instrumentation, the Salvo® Spine System is intended to provide immobilization and stabilization of spinal segments in skeletally mature patients as an adjunct to fusion in the treatment of the following acute and chronic instabilities or deformities of the thoracic, lumbar, and sacral spine: degenerative disc disease; spondylolisthesis; fracture; dislocation; scoliosis; kyphosis; spinal tumor; and failed previous fusion (pseudarthrosis).

Indications for Use Comparison[21 CFR 807.92\(a\)\(5\)](#)

The Salvo® Spine System is substantially equivalent to the primary predicate, cleared in K222362. The Salvo® Spine System has the same intended use as the primary predicate. Specifically, the devices are used to provide immobilization and stabilization of spinal segments in skeletally mature patients as an adjunct to fusion. Therefore, the subject Salvo® Spine System 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 Salvo® Spine System has technological characteristics equivalent to those of the predicate device, including design, and material composition.

Non-Clinical and/or Clinical Tests Summary & Conclusions[21 CFR 807.92\(b\)](#)

Nonclinical testing was performed on the Salvo® Spine System to support substantial equivalence to the predicate device. Dynamic axial compression bending testing per ASTM F1717 was performed.

Clinical testing is not applicable.

Evaluation of the subject device performance data as compared to the predicate system has found that the Salvo® Spine System is substantially equivalent to the predicate device.