



March 26, 2026

Surgify Medical OY
% Richard Lilly
Consultant to Surgify Medical Oy
Avania, LLC
3031 Tisch Way
Suite 1010
San Jose, California 95128

Re: K253627

Trade/Device Name: Surgify Halo (54.085.SHD.U1); Surgify Halo (54.140.SHD. U1); Surgify Halo (54.070.NVG.U1); Surgify Halo (54.125.NVG.U1); Surgify Halo (54.000.SEE.U1); Surgify Halo (40.070.NVG.U1); Surgify Halo (40.125.NVG.U1); Surgify Halo (40.000.SEE.U1); Surgify Halo (30.070.NVG.U2); Surgify Halo (30.125.NVG.U2); Surgify Halo (30.000.SEE.U2)

Regulation Number: 21 CFR 882.4310

Regulation Name: Powered Simple Cranial Drills, Burrs, Trephines, And Their Accessories

Regulatory Class: Class II

Product Code: HBE

Dated: February 24, 2026

Received: February 24, 2026

Dear Richard Lilly:

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 Management System Regulation (QMSR) (21 CFR Part 820), which includes, but is not limited to, ISO 13485 clause 7.3 (Design controls), ISO 13485 clause 8.3 (Nonconforming product), ISO 13485 clause 8.5.2 (Corrective action), and ISO 13485 clause 8.5.3 (Preventative action). Please note that regardless of whether a change requires premarket review, the QMSR requires device manufacturers to review and approve changes to device design and production (ISO 13485 clause 7.3 and ISO 13485 clause 7.5) and document changes and approvals in the Medical Device File (ISO 13485 clause 4.2.3).

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 Management System Regulation (QMSR) (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,

JULIA E.

SLOCOMB -S

Digitally signed by JULIA E.
SLOCOMB -S
Date: 2026.03.26 15:50:26
-04'00'

for Jaime Raben, Ph.D.

Director

DHT5A: Division of Neurosurgical,
Neurointerventional, and
Neurodiagnostic Devices

OHT5: Office of Neurological and
Physical Medicine Devices

Office of Product Evaluation and Quality

Center for Devices and Radiological Health

Enclosure

Indications for Use

510(k) Number (if known)
K253627

Device Name

Surgify Halo (54.085.SHD.U1); Surgify Halo (54.140.SHD. U1); Surgify Halo (54.070.NVG.U1); Surgify Halo (54.125.NVG.U1);
Surgify Halo (54.000.SEE.U1); Surgify Halo (40.070.NVG.U1); Surgify Halo (40.125.NVG.U1); Surgify Halo (40.000.SEE.U1);
Surgify Halo (30.070.NVG.U2); Surgify Halo (30.125.NVG.U2); Surgify Halo(30.000.SEE.U2)

Indications for Use (Describe)

Surgify Halo is a sterile surgical burr indicated for shaping and removal of hard tissue and bone in Neurosurgical, Spinal, ENT, and general surgical procedures.

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
PRASStaff@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

This 510(k) Summary is submitted in accordance with the requirements of 21 CFR 807.87 and 807.92.

I. Submitter

Name: Surgify Medical Oy

Address: Otakaari 5
02150 Espoo, Finland

Phone: +358 40 707 3200

Email: jukka.kreander@surgifymedical.com

Contact Person: Jukka Kreander, CQRO

Date Prepared: October, 2025

Device Trade Name: Surgify Halo

Device Common or Usual Name: Burr

Regulation Name: Powered simple cranial drills, burrs, trephines, and their accessories.

Regulation Number: 21CFR 882.4310

Product Code: HBE

Device Class: Class II

Classification Panel: Neurology

II. Predicate Device

Predicate Name and 510(k) Number: Surgify Halo, K251433.

III. Device Description

The Surgify Halo is a sterile-packaged, single-use rotary cutting device (a burr) made from high-grade metallic materials, designed to cut bone and other hard tissues selectively while minimizing chattering. The device is similar to conventional surgical cutting burrs but includes a ring mechanism in the burr head to reduce chattering. Like traditional burrs, the device is designed to be compatible with commonly marketed, high-speed, surgical drill systems.

The Surgify Halo comprises:

- A head part, which is shaped to have cutting edge(s) to cut hard tissue.
- Dynamically positioned ring surrounding the burr head that controls the exposure of the cutting edge(s) decreasing chattering and enabling the tissue selective feature.
- A shaft, which transfers rotary movement from the drill motor to the head.
- An end-attachment feature, which allows the Surgify Halo to be locked to commonly marketed high-speed, surgical drill systems.

IV. Indications for Use

Surgify Halo is a sterile surgical burr indicated for shaping and removal of hard tissue and bone in Neurosurgical, Spinal, ENT, and general surgical procedures.

V. Technological Characteristics

The technological characteristics of the subject Surgify Halo remain the same as the previously cleared device under K251433.

The similarities and differences do not alter the intended use of the device, nor do they affect the safety and effectiveness of the subject device relative to the predicate. Both the subject and predicate devices have the same intended use for shaping and removal of hard tissue and bone in Neurological, Spinal, ENT and general surgical procedures. The proposed modifications of adding new models for the optional burr size of 3.0 mm is verified to ensure overall performance remains the same as the predicate with acceptable results.

In summary, the subject device has the following technological characteristics which are same as the predicate device:

1. **Intended use/Indications for Use:** The intended use/indications for use of the subject device are identical to those of the predicate device i.e. for shaping and removal of hard tissue and bone in Neurological, Spinal, ENT and general surgical procedures.
2. **Environment of Use:** The environment of use remains the same as the predicate, i.e., hospital use.
3. **Technology (Operating Principle):** The subject device operates on the same fundamental principle as the predicate device i.e., controlled exposure of the cutting edge(s) through a dynamically positioned protective ring surrounding the burr head. During operation, rotational motion transmitted from the drill motor drives the burr head, while the protective ring adjusts its radial position in response to tissue interaction. This movement allows the cutting edge(s) to be exposed during engagement with hard tissue and covered when encountering soft tissue. The

overall mechanism and operational sequence remain consistent with the predicate device.

4. **Design Configuration:** The Surgify Halo Burr consists of a cylindrical shank with locking features at the distal end that securely attach the burr to the drill handpiece for stability. The burr head contains precision cutting edge(s) for efficient shaping and removal of bone and hard tissue. An end-attachment feature allows the Surgify Halo to be locked to commonly marketed high-speed surgical drill systems.
5. **Materials Compatibility:** Indirect tissue and bone contacting materials meet biocompatibility requirements.
6. **Compatible Interface:** The device is compatible with commonly available surgical drill handpieces and attachments, allowing for flexible integration into existing surgical setups.
7. **Sterility:** Single-use, Gamma Sterilization

VI. Performance Data

Performance testing requirements were determined through the application of a risk management process, applicable FDA guidance documents and performance standards (21 CFR §882.4310). Performance testing in support of substantial equivalence determination included:

- **Functional:** Testing (see below) to verify that the device functions as intended, and all design and functional specifications are met for all models/system configurations. The relevant performance tests for the modified device included durability, chattering, and compatibility with drill systems.

Test	Test Method Summary	Results
Design Verification Tests	Device performance parameters. <ul style="list-style-type: none"> ▪ Durability ▪ Cutting Effectiveness ▪ Chatter Rate ▪ Noise ▪ Thermal ▪ Tissue Selectivity 	All tests fulfilled Design input requirements

- **Design Validation/Summative Evaluation:** Testing (see below) to verify that the device functions as intended, and all design and functional specifications are met for all models/system configurations. The relevant performance tests for the modified device included durability, chattering, and compatibility with drill systems.
 - Summative evaluation was performed as part of the design validation efforts to evaluate that the device is has equivalent safety to the predicate device from a user interaction and ergonomics perspective. The usability assessments were conducted with production equivalent Surgify Halo (3.0mm). This evaluation addressed the use errors and hazard related use scenarios from the risk analysis and was conducted in accordance with the requirements and principles of Human Factors and Risk Management outlined in IEC 62366-1:2015 and FDA's 2000 Guidance "Medical Device Use-Safety: Incorporating Human Factors Engineering into Risk Management." (February 2016).

VII. Conclusions

The subject Surgify Halo device is as safe and as effective as the previously cleared predicate device system (K251433), as demonstrated by performance data and risk assessment. The intended use, technological characteristics and principle of operation are substantially equivalent to the predicate device. Thus, the subject Surgify Halo device is substantially equivalent to the predicate device.