



December 2, 2021

Rebound Therapeutics
Naomi Gong, RAC
Vice President of Regulatory Affairs
13900 Alton Pkwy Suite 120
Irvine, California 92618

Re: K203745

Trade/Device Name: AURORA Evacuator +Coag
Regulation Number: 21 CFR 878.4400
Regulation Name: Electrosurgical Cutting And Coagulation Device And Accessories
Regulatory Class: Class II
Product Code: GEI
Dated: November 1, 2021
Received: November 2, 2021

Dear Naomi Gong:

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. 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 located 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.

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 803) for devices or postmarketing safety reporting (21 CFR 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 4, Subpart A) for combination products; 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 <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,

Adam D. Pierce, Ph.D.
Assistant Director
DHT5A: Division of Neurosurgical,
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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)

K203745

Device Name

AURORA Evacuator +Coag

Indications for Use (Describe)

The AURORA Evacuator +Coag is a powered instrument with a handpiece intended for removal of soft tissue and fluids, and coagulation of tissue under direct visualization. Types of direct visualization may include laparoscopic, pelviscopic, endoscopic, percutaneous, and open. Applications include those when access to the surgical site is limited, such as neurosurgical.

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 (K203745)

SUBMITTER

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Date Prepared: December 2, 2021

DEVICE

Name of Device: AURORA Evacuator +Coag
Regulation Number: 21 CFR 878.4400
Regulation Name: Electrosurgical Cutting & Coagulation Device & Accessories
Regulatory Class: II
Product Code: GEI

PREDICATE DEVICE

K960455, Bipolar Suction Coagulator, Kirwan Surgical Products (primary predicate)
K201637, AURORA Evacuator +Coag, Rebound Therapeutics (secondary predicate)
K190075/K180372, AURORA Evacuator, Rebound Therapeutics (reference)

DEVICE DESCRIPTION

The AURORA Evacuator +Coag device is provided sterile, for single use only. It is a disposable, handheld, battery powered instrument that combines the ability to remove fluids and soft tissue, apply bipolar energy for the coagulation of tissue, and apply irrigation directly to clear the surgical site during minimally invasive surgical procedures.

It consists of a wand and handle with connection ports for a bipolar electrode cable, vacuum source (for aspiration) and irrigation line. At the distal tip of the wand, a side aspiration window with an internally rotating whisk is provided to break up and aspirate soft tissue and fluids. The battery and motor that powers the whisk is contained in the device handle. Bipolar electrodes are located at the distal tip of the wand and can be activated to coagulate tissue when connected to an electrosurgical generator. When desired, an irrigation line may be connected to the handle and saline can be delivered to clear the surgical field as a procedural aid.

Bipolar electrosurgical generator/cables, vacuum source, and irrigation source are not provided with the device. Prior to use, the device is to be connected to electrosurgical generator, external vacuum source (i.e. operating room suction) and irrigation source (i.e. drip).

A green power indicator light is located on the top portion of the handle to show that power is available to the device. A suction control vent for the user to control vacuum pressure and a button for activating the whisk are located conveniently on the handle.

INDICATIONS FOR USE

The AURORA Evacuator +Coag is a powered instrument with a handpiece intended for removal of soft tissue and fluids, and coagulation of tissue under direct visualization. Types of direct visualization may include laparoscopic, pelviscopic, endoscopic, percutaneous, and open. Applications include those when access to the surgical site is limited, such as neurosurgical.

COMPARISON TO PREDICATE

The subject device, the AURORA Evacuator +Coag, was previously cleared under 510(k) K201637. In this 510(k), the same predicate and reference devices are utilized for the addition of neurosurgical indications.

Comparison to Predicate/Reference Devices

Description	Subject Device	Primary Predicate Device	Secondary Predicate Device	Reference Device
Device	AURORA Evacuator +Coag	Kirwan Bipolar Suction Coagulator	AURORA Evacuator +Coag	AURORA Evacuator
510(k)	K203745	K960455	K201637	K190075/K180372
Product Code	GEI (21CFR 878.4400)	Same	Same	Same
Rx or OTC	Rx	Same	Same	Same
Indications for Use	<p>The AURORA Evacuator +Coag is a powered instrument with a handpiece intended for removal of soft tissue and fluids, and coagulation of tissue under direct visualization. Types of direct visualization may include laparoscopic, pelviscopic, endoscopic, percutaneous, and open.</p> <p>Applications include those when access to the surgical site is limited, such as neurosurgical.</p>	<p>Disposable device designed to be used in soft tissue surgical procedures that require slow to rapid fluid evacuation and lower energy output for the coagulation of the tissue i.e. neurosurgery, endoscopic, sinusoidal, ENT, OB-GYN and plastic surgery.</p>	<p>The AURORA Evacuator +Coag is a powered instrument with a handpiece intended for removal of soft tissue and fluids, and coagulation of tissue under direct visualization. Types of direct visualization may include laparoscopic, pelviscopic, endoscopic, percutaneous, and open.</p>	<p>The AURORA Evacuator with coagulation is a powered instrument with a handpiece intended for removal of soft tissue and fluids under direct visualization. Types of direct visualization may include laparoscopic, pelviscopic, endoscopic, percutaneous, and open.</p> <p>Applications include those when access to the surgical site is limited, such as Neurosurgical/Spinal and ENT/Otolaryngological.</p>
Technological characteristics - Summary	<ol style="list-style-type: none"> Removal of fluid by suction lumen (wall vacuum source) <ul style="list-style-type: none"> Rotating whisk incorporated in suction lumen at distal tip for removal of soft tissue (i.e. blood clot) Bipolar electrodes at distal tip for coagulation of tissue Irrigation lumen for saline drip 	<ol style="list-style-type: none"> Removal of fluid by suction lumen (wall vacuum source) Same as Subject device N/A 	<ol style="list-style-type: none"> Same as Subject device Same as Subject device Same as Subject device 	<ol style="list-style-type: none"> Same as Subject device N/A N/A

Description	Subject Device	Primary Predicate Device	Secondary Predicate Device	Reference Device
Aspiration Characteristics				
Wand Working length OD	7 – 13 cm 12 F (4.0 mm)	14 -19 cm 8 – 15 F	Same as Subject device	7 - 13 cm 9 – 11 F (3.0 – 3.6 mm)
Aspiration Window	Window at side of distal end	At distal end	Same as Subject device	Same as Subject device
Whisk	Located and fully contained within inner lumen at aspiration window Flat member with notches 301 SS	N/A (Evacuation through suction only)	Same	Same Two wire loops (perpendicular) Nitinol
Power Source for Motor	Battery located in handle – one 6V Alkaline	N/A	Same	Batteries located in handle – two AAA 1.5V Alkaline
Vacuum source (external)	Connect to barb on device handle to Operating Room suction (i.e. wall)	Same	Same	Same
Vacuum control	Suction vent on handle that is fingertip controlled	Same	Same	Same
Bipolar Electrodes Characteristics				
Electrodes Type Shape Insulation Rated Voltage	Bipolar 2 rectangular components Polyphenylsulfone 450 Vp-p	Same 2 concentric tubes High temp polymer 1200 V p-p	Same as Subject device	N/A
Power Source for Bipolar electrodes	Cable to electrosurgical generator (external) connected to AC mains. - Cable and Electrosurgical generator are not provided	Same	Same	N/A
Irrigation				
Irrigation lumen with luer connector	Capability for saline drip irrigation delivery to distal tip. Connection on device handle to saline bag with line clamp for clinician to control irrigation rate.	N/A	Same	N/A
Other Characteristics				
Use	Single use, sterile	Same	Same	Same
Sterilization Method	Ethylene oxide gas SAL 10 ⁻⁶	Irradiation Same	Same as Subject device Same	Same as Subject device Same
Biocompatibility	ISO 10993-1	Same	Same	Same
EMC, Immunity, and Electrical Safety	IEC 60601-1 IEC 60601-1-2 IEC 60601-2-2	Same Same Same	Same Same Same	Same Same N/A
Accessories	None	Same	Same	Same

SUMMARY OF NON-CLINICAL TESTING

The following testing was conducted to demonstrate the safe and effective use of the AURORA Evacuator +Coag:

Test	Test method summary	Results
Biocompatibility: - Cytotoxicity (MEM Elution) - Sensitization (Kligman Maximization) - Irritation (intracutaneous Injection) - Systemic toxicity (Systemic Injection) - Materials Mediated Pyrogenicity	ISO 10993-1 Biological evaluation of medical devices – Part 1: Evaluation and testing within a risk management process	Pass
Electrical safety and Enclosure Protection	IEC 60601-1 Medical electrical equipment – Part 1: General requirements for basic safety and essential performance, IEC 60601-2-2 Medical electrical equipment - Part 2-2: Particular requirements for the basic safety and essential performance of high frequency surgical equipment and high frequency surgical accessories	Pass
Emissions and Immunity	IEC 60601-1-2 Medical electrical equipment – Part 1-2: General requirements for basic safety and essential performance – Collateral standard: Electromagnetic disturbances – Requirements and tests	Pass
Particulate Testing	USP <788> Particulate Matter in Injections	Pass
Sterilization Validation (SAL of 10 ⁻⁶)	ISO 11135-1 Sterilization of health care products – Ethylene oxide – Part 1: requirements for development, validation and routine control of a sterilization process for medical devices	Pass
Packaging and Shelf Life	ISTA 2A simulation performance test procedure ASTM F1980-16 Standard Guide for Accelerated Aging of Sterile Barrier Systems for Medical Devices	Pass
In-vitro verification of product specifications	Verification of materials, multiple bonds evaluations, physical characteristics, performance characteristics and tissue thermal effects (coagulation of tissue).	Pass
Ex-vivo tissue studies (porcine heart, liver, and kidney)	Demonstrated comparable thermal damage effect (coagulation zone) using the bipolar electrodes when compared with the primary predicate under the	Pass

Test	Test method summary	Results
	same test parameters and conditions. Thermal damage as a function of temperature and time with the 3 tissue types also supported comparability.	
Ex-vivo tissue studies (porcine brain)	Demonstrated comparable thermal damage effect (coagulation zone) using the bipolar electrodes when compared with the primary predicate device under the same test parameters and conditions for neurosurgical applications.	Pass
Validation of product performance	Validation of product using surrogate soft tissue materials and fluids	Pass

CONCLUSION

Based on the similarities of the intended use/indications for use, device design, principles of operation, technological characteristics and the results of the non-clinical performance testing, the subject device, AURORA Evacuator+Coag, is substantially equivalent to the legally marketed predicate devices.