



October 4, 2017

ConMed Corporation  
Lisa Anderson  
Manager, Regulatory Affairs  
525 French Road  
Utica, New York 13502

Re: K172671

Trade/Device Name: HelixAR ABC System  
Regulation Number: 21 CFR 878.4400  
Regulation Name: Electrosurgical Cutting and Coagulation Device and Accessories  
Regulatory Class: Class II  
Product Code: GEI  
Dated: September 1, 2017  
Received: September 5, 2017

Dear Lisa Anderson:

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 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); 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.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Division of Industry and Consumer Education (DICE) at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>. 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 the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Industry and Consumer Education (DICE) at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely,

**Jennifer R.  
Stevenson -S3**

For Binita S. Ashar, M.D., M.B.A., F.A.C.S.

Director

Division of Surgical Devices

Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure

DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Food and Drug Administration

### Indications for Use

Form Approved: OMB No. 0910-0120

Expiration Date: 06/30/2020

See PRA Statement below.

510(k) Number (if known)

K172671

Device Name

HelixAR ABC System

Indications for Use (Describe)

The CONMED HelixAR ABC System is intended to deliver argon gas as well as high frequency electrical current for the cutting and/or coagulation of tissue.

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:

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## 510(k) Summary of Safety and Effectiveness

### CONMED HelixAR ABC System

In accordance with the requirements of the Safe Medical Device Act of 1990 and 21CFR 807.92, ConMed Corporation is hereby submitting the 510(k) Summary of Safety and Effectiveness for 510(k) number \_\_\_\_\_ as of September 1, 2017.

#### A. Submitter

ConMed Corporation  
525 French Road  
Utica, NY 13502

Establishment Registration: 1320894

#### B. Company Contact

Lisa Anderson  
Manager, Regulatory Affairs  
T: (941) 713-2035  
F: (315) 624-3225

#### C. Device Name

Proprietary Name:	HelixAR
Common Name:	Electrosurgical Generator with Argon Beam Coagulation
Classification Name:	Electrosurgical, Cutting & Coagulation & Accessories
Regulation Number:	878.4400
Product Code:	GEI
Regulatory Class:	II
Panel:	General and Plastic Surgery

#### D. Predicate Device

Primary Device Name: HelixAR ABC System

Company Name: CONMED Corporation  
510(k): K152860

This predicate has not been subject to a design-related recall.

#### E. Device Description

The HelixAR ABC System is composed of an electrosurgical generator with argon beam coagulation (ABC) and a mobile pedestal. The generator is designed with a graphic user interface (GUI) display which allows the user to select monopolar, bipolar, and ABC modes of operation, choose power and argon flow settings, adjust user settings options, and create, edit, or delete user programs. The HelixAR mobile pedestal (cart) houses two D-size argon gas cylinders and provides connection ports for the use of wired footswitches. The mobile pedestal is designed with an argon tank

capacity monitor that provides the user with feedback on the argon gas cylinder pressure.

## **F. Intended Use / Indications for Use**

The ConMed HelixAR ABC System is intended to deliver argon gas as well as high frequency electrical current for the cutting and/or coagulation of tissue.

## **G. Technological Characteristics**

The modified HelixAR ABC System has similar technological characteristics as the predicate HelixAR ABC System cleared under K152860. Both systems include an electrosurgical generator used in conjunction with monopolar and bipolar handpieces and footswitches and an accessory cart. The HelixAR ABC System output panel provides receptacles for monopolar and bipolar hand- and foot-controlled devices. Footswitch receptacles for monopolar, bipolar, and ABC footswitches are provided on the accessory cart which also accommodates the use of a smoke evacuation system. The HelixAR ABC System provides Automatic Return Monitoring (ARM) for dual dispersive electrodes and includes the same visual and audible alerts as the predicate design. The HelixAR generator design includes the monopolar, bipolar, and ABC modes present in the predicate device. The modified HelixAR ABC System includes the following improvements:

- Wireless footswitch re-pairing capability;
- Improved flow control;
- Enabling Pulse mode in the ABC<sup>®</sup> Flex minor mode;
- Updates to GUI, User Settings, and system start-up for improved user experience.

## **H. Performance Characteristics**

Modifications to the HelixAR ABC System do not alter the safety or performance. Risk management activities in accordance with ISO 14971 demonstrate the risks associated with the use of the HelixAR ABC System are mitigated to an acceptable level. Design verification testing demonstrates the modified HelixAR ABC System complies with the electrical safety requirements of IEC 60601-1:2005/A1:2012 and IEC 60601-2-2:2009 and electromagnetic compatibility per IEC 60601-1-2:2007. Benchtop testing and software verification validation demonstrate the modified HelixAR ABC System meets design specifications.

## **I. Substantial Equivalence**

The differences between the predicate and modified device do not raise any new risks of safety or efficacy. Supporting information per this premarket submission confirms that the modified ConMed HelixAR ABC System is safe and effective for its intended use and is substantially equivalent in design, intended use, principals of operation, and technical characteristics to the CONMED HelixAR ABC System cleared under K152860.