



April 8, 2020

Applied Medical Resources Corp.  
Blake Stacy  
Regulatory Affairs Analyst  
22872 Avenida Empresa  
Rancho Santa Margarita, California 92688

Re: K200598

Trade/Device Name: Voyant Maryland Fusion Device  
Regulation Number: 21 CFR 878.4400  
Regulation Name: Electrosurgical Cutting and Coagulation Device and Accessories  
Regulatory Class: Class II  
Product Code: GEI  
Dated: March 9, 2020  
Received: March 9, 2020

Dear Blake Stacy:

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](mailto:DICE@fda.hhs.gov)) or phone (1-800-638-2041 or 301-796-7100).

Sincerely,

Long Chen, Ph.D.  
Assistant Director  
DHT4A: Division of General Surgery Devices  
OHT4: Office of Surgical  
and Infection Control Devices  
Office of Product Evaluation and Quality  
Center for Devices and Radiological Health

Enclosure

DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Food and Drug Administration

Form Approved: OMB No. 0910-0120

Expiration Date: 06/30/2020

See PRA Statement below.

## Indications for Use

510(k) Number (if known)

~~N/A~~ K200598

Device Name

Voyant Maryland Fusion device

Indications for Use (Describe)

The Voyant Maryland Fusion device is a bipolar, electrosurgical device indicated for use with the Voyant electrosurgical generator in open and laparoscopic procedures where the ligation and division of vessels and tissue bundles is desired. The device can seal and divide vessels up to and including 7mm in diameter and tissue bundles that can be captured in the jaws of the device.

The device has not been shown to be effective for tubal sterilization or tubal coagulation for sterilization procedures, and should not be used for these 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.

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## 510(k) Summary

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**510(k) Submitter:** Applied Medical Resources Corporation  
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(949) 713 – 8000

**Contact Person:** Blake Stacy  
Regulatory Affairs Analyst  
Applied Medical Resources Corporation  
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**Preparation Date:** 9 March 2020

**Trade Name:** Voyant® Maryland Fusion Device

**Common Name:** Bipolar Electrosurgical Sealer-Divider

**Classification:** General and Plastic Surgery Devices – Electrosurgical Cutting and Coagulation Device and Accessories  
Regulation: 21 CFR 878.4400  
Device Class: Class II  
Product Code: GEI

**Legally Marketed Device:** Voyant® Maryland Fusion Device  
510(k)#: K193292  
Produce Code: GEI

**Device Description:** The Voyant Maryland Fusion device is an advanced bipolar instrument that uses RF energy, provided by the Voyant Electrosurgical Generator (K182244), to seal vessels up to and including 7mm in diameter. The device may also be used to seal tissue bundles that can be captured in the device jaws. The device features a mechanical, user-actuated blade for the division of sealed tissue.

**Intended Use:** The Voyant Maryland Fusion device is a bipolar, electrosurgical device intended for use with the Voyant Electrosurgical Generator to seal and divide vessels and tissues bundles.

**Indications for Use:** The Voyant Maryland Fusion device is a bipolar, electrosurgical device indicated for use with the Voyant electrosurgical generator in open and laparoscopic procedures where the ligation and division of vessels and tissue bundles is desired. The device can seal and divide vessels up to and including 7mm in diameter and tissue bundles that can be captured in the jaws of the device.

The device has not been shown to be effective for tubal sterilization or tubal coagulation for sterilization procedures, and should not be used for these procedures.

#### **Summary of Technological Characteristics between Subject and Predicate Devices:**

The subject and predicate devices are single-use, electrosurgical hand piece devices designed to deliver RF energy to vessels and tissue captured between its jaws for tissue fusion. Both devices feature a pistol-grip style handle with a trigger for jaw closure and a button for energy activation. The devices are equipped with a mechanical, user-actuated blade for the division of sealed tissue.

The subject device design is the same as the predicate, with the exception of the change in software of the device. The fundamental technological features, and intended use of the subject device are the same as the predicate device.

#### **Discussion of Performance Testing:**

The FDA guidance documents *Premarket Notification (510(k)) Submissions for Electrosurgical Devices for General Surgery (2016)*, *Premarket Notification (510(k)) Submissions for Bipolar Electrosurgical Vessel Sealers for General Surgery (2016)*, and *Guidance for the Content of Premarket Submissions for Software Contained in Medical Devices (2005)* were considered in evaluating the subject device's electrical, software, and functional capabilities. The tests addressed below were utilized to demonstrate safety and efficacy of the subject device and substantial equivalence to the predicate device.

##### *EMC, Electrical Safety, and Mechanical Testing*

The Voyant Maryland Fusion device was designed and evaluated in accordance with relevant standards of the IEC 60601 series for electromagnetic compatibility and electrical testing and met all acceptance criteria.

Simulated repeated-use testing was conducted to verify the continued performance of the subject device over multiple device activations. The result of the study demonstrated that the subject device met the predetermined acceptance criteria.

### *System Testing*

The following testing was performed using the subject device in comparison to the predicate:

- Burst pressure testing using vessels representative of the devices' indications. These vessels were sealed, and the burst pressure of each vessel was recorded.
- Thermal spread testing to evaluate the thermal spread damage produced by the subject and predicate devices.

Analysis of the results of these tests demonstrated that the subject device met the predetermined acceptance criteria and is substantially equivalent to the predicate device with respect to these test endpoints.

### *Animal Testing*

A chronic survival study was performed using large porcine animal models to evaluate long-term seal quality, device performance, and the potential for an adverse effect on adjacent structures. Vessels representative of the devices' indications were sealed and evaluated for hemostasis and signs of hematoma. The results of the study demonstrated that the subject device met the predetermined acceptance criteria.

### *Software Verification*

Unit, integration, and system level software testing were conducted to evaluate the design, implementation, and performance of the device software script.

### **Conclusion:**

The subject Voyant Maryland Fusion device with the updated software script is substantially equivalent in performance to the predicate Voyant Maryland Fusion device with respect to intended use (i.e. vessel sealing performance and local tissue effects) and does not raise any new issues of safety and efficacy.