



June 17, 2021

Gynesonics, Inc.
Christine Ehmann
Director of Regulatory Affairs
600 Chesapeake Drive
Redwood City, California 94063

Re: K211535
Trade/Device Name: Sonata Transcervical Fibroid Ablation System 2.2
Regulation Number: 21 CFR 884.4160
Regulation Name: Unipolar Endoscopic Coagulator-Cutter and Accessories
Regulatory Class: II
Product Code: KNF
Dated: May 15, 2021
Received: May 18, 2021

Dear Christine Ehmann:

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 and Part 809); 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,

Jason R. Roberts, Ph.D.
Assistant Director
DHT3B: Division of Reproductive
Gynecology and Urology Devices
OHT3: Office of GastroRenal, ObGyn,
General Hospital and Urology Devices
Office of Product Evaluation and Quality
Center for Devices and Radiological Health

Enclosure

Indications for Use

510(k) Number (if known)
K211535

Device Name
Sonata® Transcervical Fibroid Ablation System 2.2

Indications for Use (Describe)

The Sonata® Transcervical Fibroid Ablation System 2.2 is intended for diagnostic intrauterine imaging and transcervical treatment of symptomatic uterine fibroids, including those associated with heavy menstrual bleeding.

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

Sponsor: Gynesonics, Inc.
600 Chesapeake Drive
Redwood City, CA 94063

Contact Person: Christine Ehmann
Director, Regulatory Affairs
cehmann@gynesonics.com
(585) 315-6973

Date Prepared: May 15, 2021

Device Information

Proprietary Name: Sonata[®] Transcervical Fibroid Ablation System 2.2

Common Name: Sonography-Guided Transcervical Fibroid Ablation System

Class: Class II

Regulation: 21 CFR 884.4160
Unipolar endoscopic coagulator-cutter and accessories

Product Code: KNF Coagulator-Cutter, Endoscopic, Unipolar (And Accessories)
ITX Transducer, Ultrasonic, Diagnostic
IYO Ultrasonic pulsed echo imaging system

Classification Panel: 85 – Obstetrical & Gynecological

Indications for Use

The Sonata[®] Transcervical Fibroid Ablation System 2.2 is intended for diagnostic intrauterine imaging and transcervical treatment of symptomatic uterine fibroids, including those associated with heavy menstrual bleeding.

Predicate Devices

The predicate device is listed in Table 1. The predicate device is the Sonata Sonography-Guided Transcervical Fibroid Ablation System 2.1.

The predicate device has not been the subject of any design-related recalls.

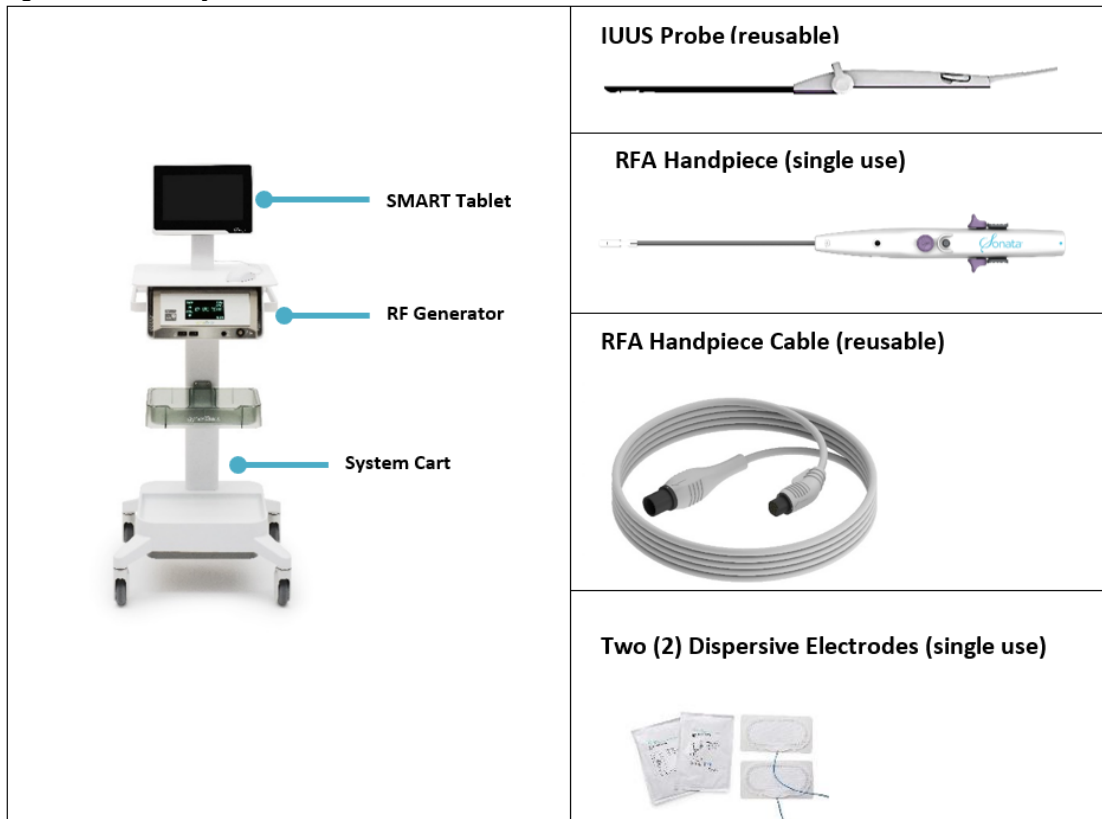
Table 1 Table of Predicate and Reference Device

| 510(k) | Product | 510(k) Holder | Clearance Date |
|---------|--|---------------|----------------|
| K193516 | Sonata Sonography-Guided Transcervical Fibroid Ablation System 2.1 | Gynesonics | May 4, 2020 |

Device Description:

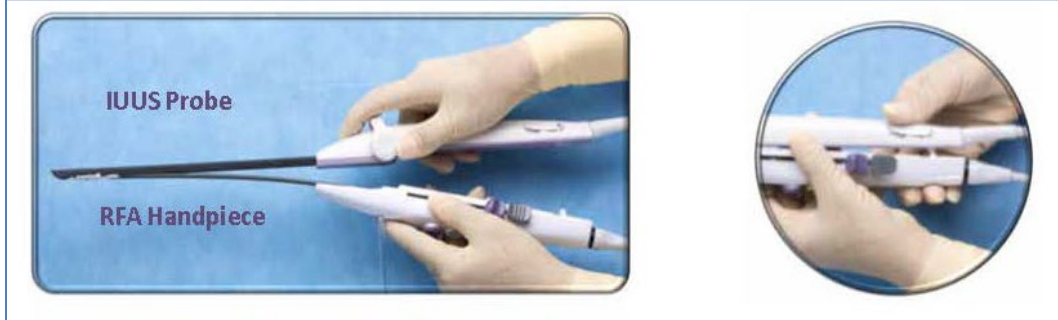
The Sonata System 2.2 (Figure 1) provides radiofrequency (RF) ablation of uterine fibroids using a transcervical approach that is uterine sparing without incisions or material uterine distension. The system enables a clinician to deliver radiofrequency energy to fibroid tissue resulting in thermal fixation and coagulative necrosis of the tissue.

Figure 1 Sonata System 2.2



The system combines two technologies - ultrasound for visualization, and radiofrequency energy for ablative therapy - in a single integrated handpiece.

Figure 2 Intrauterine Ultrasound (IUUS) Probe being connected to the Radiofrequency Ablation (RFA) Handpiece to form a single Treatment Device



The Sonata System is comprised of medical equipment (Figure 1), software, and various single-use and reusable instruments. Sonata System devices and accessories are summarized in Table 2. The devices that are changed or new with this submission are shown in **bold purple**.

Table 2 Sonata System 2.2 Devices and Accessories

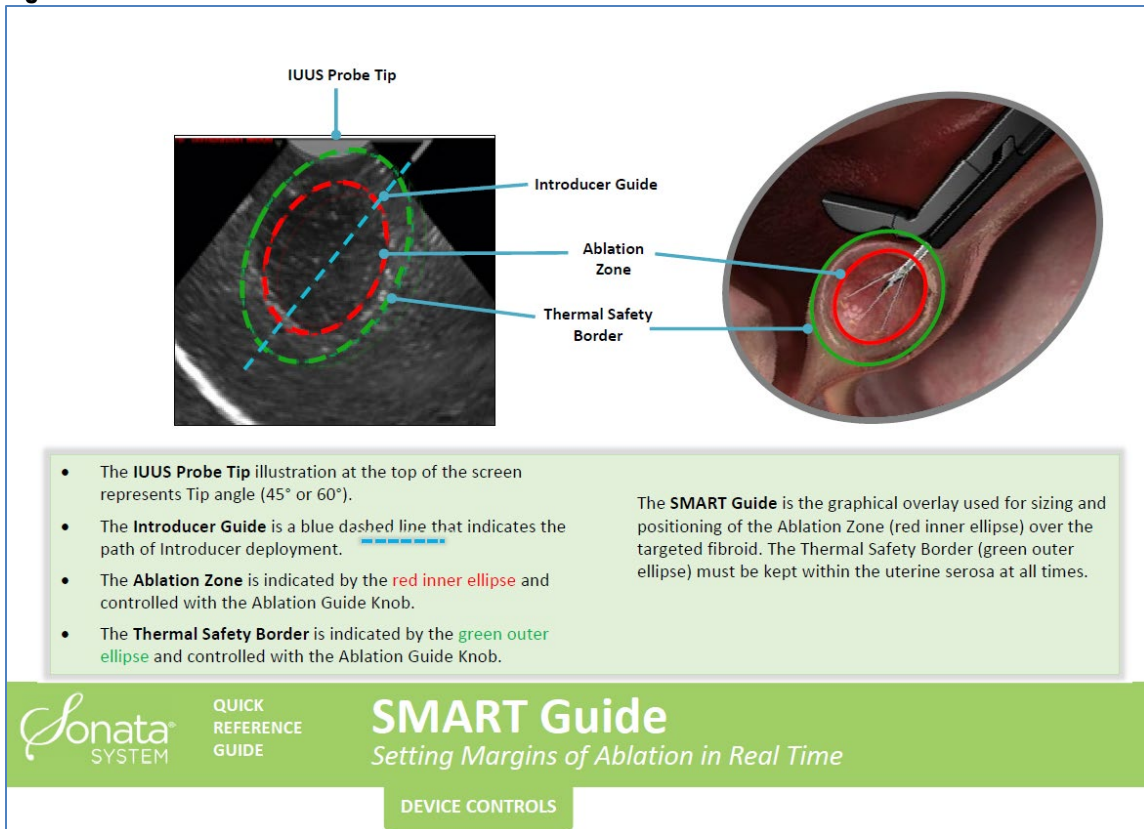
| Catalog Number | Product Description |
|---------------------------|--|
| Durable Equipment | |
| SONATA2-110 | Sonata Transcervical Fibroid Ablation System, consisting of: |
| RFG2-110 | Sonata Radiofrequency Generator |
| USCON-2200 | Sonata SMART Tablet |
| ACCY-002 | Sonata System Cart |
| External components | <i>Footswitch, mouse, cables</i> |
| System Software | |
| SW-002 | Sonata System Software v2.1.0 |
| Reusable Devices | |
| IUSP-002 | Sonata Intrauterine Ultrasound (IUUS) Probe (Non-Sterile) |
| IUSP-002S | Sonata Intrauterine Ultrasound (IUUS) Probe (Sterile) |
| ACCY-008 | Sonata RFA Handpiece Cable, Reusable |
| Single-Use Devices | |
| RFA-002 | Sonata Radiofrequency Ablation Handpiece (Sterile) |
| DE-001 | Sonata Dispersive Electrode (Non-sterile) |
| Accessories | |
| SHPR-001 | Sonata Intrauterine Ultrasound Probe Sterile Shipper Kit |
| RTN-001 | Sonata Intrauterine Ultrasound Probe Return Kit |
| OM-1000-GS | Sonata IUUS Probe Reprocessing Tray (Manufacturer: Summit Medical LLC) |
| 8EC4A | Endocavity Ultrasound Transducer (Manufacturer: Terason®) |

A single-use Radiofrequency Ablation (RFA) Handpiece attaches to a reusable Intrauterine Ultrasound (IUUS) Probe as shown in Figure 2 to provide sonography-guided RF ablation. Once connected, the combination is referred to as the “Treatment Device”. The RFA Handpiece connects to the Sonata RF Generator and contains the Needle Electrodes that deliver radiofrequency energy to the target tissue. The IUUS Probe connects to the SMART Tablet and provides diagnostic ultrasound imaging and guidance. Ultrasound guidance is used to localize the fibroids from within the uterine cavity, guide placement of the RFA Handpiece Needle Electrodes into a target fibroid and ensure safety with respect to the serosa. When the Needle Electrodes are anchored within tissue, the physician is able to pivot the IUUS Probe transducer around the Needle Electrodes in order to confirm safety of the uterine serosa through multiple ultrasound planes.

The Sonata System allows for treatment planning through the use of a graphical interface and automated control of RF energy delivery.

Sonata Graphical Guidance Software (GGS) includes the SMART Guide (Figure 3) and integrates treatment planning, targeting, and ablation of fibroids. The SMART Guide displays a real-time graphic overlay on the live ultrasound image for targeting and deployment of radiofrequency ablation.

Figure 3 Sonata SMART Guide



Two main elements of the SMART Guide are the Ablation Zone and the Thermal Safety Border.

- Ablation Zone (red inner ellipse) – a two-dimensional representation of the outer boundary of the average region of tissue ablation for the selected ablation size
- Thermal Safety Border (green outer ellipse) – the distance at which tissue outside of the Ablation Zone is safe from the potential of thermal damage.

Changes triggering this 510(k)

Table 3 summarizes the changes to the Sonata System 2.2 that are driving the need for a new 510(k).

Table 3 Summary of Device Changes Triggering New 510(k)

| Sonata System 2.1 Component/Accessory | Description of Change | Reason for change | Impact of Change |
|---|---|--|---|
| Single Use RFA Handpiece Cable ACCY-007 change to Reusable RFA Handpiece Cable ACCY-008 | Change from single use cable to reusable cable with same functionality. | Eliminate unnecessary electronic waste associated with single use cable. | New IFU specific to accessory required. Validation of thorough cleaning and sterilization instructions required. |
| Sonata System Software SW-002 | Some alarms instructing the user to terminate RF are replaced with automatic termination of RF by system software upon detection of events that would previously have triggered the alarm. Prior alarm messages remain but are downgraded to standard messages. | Enhancement. User no longer is required to terminate RF for some alarms triggered in hazardous situations. RF delivery is terminated without physician intervention. | Modification of an existing risk control measure for a hazardous situation that could result in significant harm to improve risk mitigation. Software verification and validation required. |
| Addition of Established Category B Sterilization Option for Reusable Sonata Intrauterine Ultrasound (IUUS) Probe IUSP-002 | Addition of validated instructions for sterilization of the IUUS Probe by STERIS V-PRO family of hydrogen peroxide sterilizers. | Expand options for sterilization of reusable device. | No impact to device. Sterilization validation and verification of device compatibility required. |

Comparison to Predicate Device

Table 4 contains a detailed comparison of the Sonata System 2.2 to its predicate, Sonata System 2.1. The Sonata Transcervical Fibroid Ablation System 2.2 employs the same fundamental scientific technology as the currently marketed predicate Sonata Sonography-Guided Transcervical Fibroid Ablation System 2.1 (K193516). None of these differences raise any new questions of safety and effectiveness.

Table 4 Substantial Equivalence Table for Sonata System

| Characteristics | Sonata System 2.2 (this submission) | Sonata System 2.1 (K193516) | Comparison Discussion |
|--|--|--|------------------------------|
| Intended Use/Indications for Use | | | |
| Intended Use | Ablation of uterine fibroids with diagnostic ultrasound imaging. | Ablation of uterine fibroids with diagnostic ultrasound imaging. | Same |
| Indications for Use | The Sonata System is intended for diagnostic intrauterine imaging and transcervical treatment of symptomatic uterine fibroids, including those associated with heavy menstrual bleeding. | The Sonata System is intended for diagnostic intrauterine imaging and transcervical treatment of symptomatic uterine fibroids, including those associated with heavy menstrual bleeding. | Same |
| Regulation Number | §884.4160 Unipolar endoscopic coagulator-cutter and accessories | §884.4160 Unipolar endoscopic coagulator-cutter and accessories | Same |
| Product Code | KNF Coagulator-Cutter, Endoscopic, Unipolar (And Accessories) ITX Transducer, Ultrasonic, Diagnostic IYO Ultrasonic pulsed echo imaging system | KNF Coagulator-Cutter, Endoscopic, Unipolar (And Accessories) ITX Transducer, Ultrasonic, Diagnostic IYO Ultrasonic pulsed echo imaging system | Same |
| System Functional/ Operational Features | | | |
| Principal Mode of Operation | Radiofrequency ablation of fibroid tissue resulting in thermal fixation and coagulative necrosis. | Radiofrequency ablation of fibroid tissue resulting in thermal fixation and coagulative necrosis. | Same |
| | B Mode ultrasound imaging | B Mode ultrasound imaging | Same |
| Primary user interface | Graphical user interface | Graphical user interface | Same |

| Characteristics | Sonata System 2.2 (this submission) | Sonata System 2.1 (K193516) | Comparison Discussion |
|--------------------------|---|---|--|
| Treatment Planning | Integrated SMART Guide in software | Integrated SMART Guide in software | Same |
| Treatment Approach | In situ delivery and control of RF energy through deployable array needle electrodes with impedance and temperature feedback under visual control. | In situ delivery and control of RF energy through deployable array needle electrodes with impedance and temperature feedback under visual control. | Same |
| Treatment Guidance | Must be used under ultrasound guidance that is integrated into the system. The Ultrasound Console (SMART Tablet) with IUUS Probe is indicated for intrauterine imaging and guidance for placement of the Needle Electrodes. | Must be used under ultrasound guidance that is integrated into the system. The Ultrasound Console (SMART Tablet) with IUUS Probe is indicated for intrauterine imaging and guidance for placement of the Needle Electrodes. | Same |
| Route of Access | Transcervical | Transcervical | Same |
| System Components | | | |
| RF Generator | An RF Generator provides RF energy to the RFA Handpiece through the handpiece cable | An RF Generator provides RF energy to the RFA Handpiece through the handpiece cable | Same |
| Treatment Device | Single-use RFA handpiece with trocar-pointed shaft and 7 deployable needle electrodes, with reusable Cable. Combines with the reusable Intrauterine Ultrasound Probe to form the "Treatment Device". | Single-use RFA handpiece with trocar-pointed shaft and 7 deployable needle electrodes, with single-use Cable. Combines with the reusable Intrauterine Ultrasound Probe to form the "Treatment Device". | Similar The Sonata 2.1 RFA Handpiece Cable is single-use and provided sterile. The Sonata 2.2 RFA Handpiece Cable is reusable and provided non-sterile. Labeling includes validated instructions for cleaning and sterilization prior to use and between uses. |

| Characteristics | Sonata System 2.2 (this submission) | Sonata System 2.1 (K193516) | Comparison Discussion |
|--|---|---|------------------------------|
| Dispersive Electrodes | Dispersive Electrodes, quantity 2, with cables; provides return path for the RF energy delivered by the Handpiece | Dispersive Electrodes, quantity 2, with cables; provides return path for the RF energy delivered by the Handpiece | Same |
| Ultrasound Console | Incorporates the Terason uSmart3200T Ultrasound System (K150533) with addition of Sonata Graphical Guidance software. The uSmart3200T is a tablet with 11.6" LED backlit display, lithium-polymer battery. Uses a medical-grade power supply. Data transferred internally from the ultrasound engine to the laptop computer over a FireWire (aka IEEE 1394) | Incorporates the Terason uSmart3200T Ultrasound System (K150533) with addition of Sonata Graphical Guidance software. The uSmart3200T is a tablet with 11.6" LED backlit display, lithium-polymer battery. Uses a medical-grade power supply. Data transferred internally from the ultrasound engine to the laptop computer over a FireWire (aka IEEE 1394) | Same |
| Ultrasound Transducer | Gynesonics Sonata Intrauterine Ultrasound (IUUS) Probe | Gynesonics Sonata Intrauterine Ultrasound (IUUS) Probe | Same |
| Ultrasound Transducer | Claimed compatibility with commercially available Terason 8EC4A transducer | Claimed compatibility with commercially available Terason 8EC4A transducer | Same |
| Power cord | Power cord - A medical grade power cord that provides AC power to the power strip on the System Cart. The power strip in turn powers the RF Generator and the Ultrasound Console. | Power cord - A medical grade power cord that provides AC power to the power strip on the System Cart. The power strip in turn powers the RF Generator and the Ultrasound Console. | Same |
| Footswitch | Pneumatic footswitch with PVC tubing used to activate and terminate delivery of RF energy. | Pneumatic footswitch with PVC tubing used to activate and terminate delivery of RF energy. | Same |
| Optical Mouse | Optical Mouse | Optical Mouse | Same |
| System Cart | Cart, accommodates tablet | Cart, accommodates tablet | Same |
| Materials | | | |
| Materials – Patient Contact – IUUS Probe | Glass fiber filled polyetherimide, glass reinforced vinyl ester, fluorocarbon rubber, UV adhesive, Silicone | Glass fiber filled polyetherimide, glass reinforced vinyl ester, fluorocarbon rubber, UV adhesive, Silicone | Same |

| Characteristics | Sonata System 2.2 (this submission) | Sonata System 2.1 (K193516) | Comparison Discussion |
|--|---|--|-----------------------------------|
| Patient Contact Materials – active electrode | Medical grade metal alloys and plastic polymers (i.e. Nitinol®, surgical grade stainless steel) | Medical grade metal alloys and plastic polymers (i.e. Nitinol®, surgical grade stainless steel) | Same |
| Patient Contact Materials - dispersive electrode | Acrylate-polymer based hydrogel, polyester fabric with poly film and medical grade acrylic adhesive | Acrylate-polymer based hydrogel, polyester fabric with poly film and medical grade acrylic adhesive | Same |
| Biocompatibility | Is biocompatible with intended use in compliance with <ul style="list-style-type: none"> • ISO 10993-1 5th Ed. 2018-08 • ISO 10993-5 3rd ed. 2009-06-01 • ISO 10993-10 3rd ed. 2010-08-01 • ISO 10993-11 3rd ed. 2017-09 | Is biocompatible with intended use in compliance with <ul style="list-style-type: none"> • ISO 10993-1 4th Ed. 2009-10-15 and ISO 10993-1 5th Ed. 2018-08 • ISO 10993-5 3rd ed. 2009-06-01 • ISO 10993-10 3rd ed. 2010-08-01 • ISO 10993-11 3rd ed. 2017-09 | Same with use of current versions |
| Safety and Performance | | | |
| Electrical Safety & EMC | ANSI/AAMI ES60601-1:2005/(R)2012 And A1:2012, C1:2009 / (R)2012 And A2:2010/(R)2012 IEC 60601-1-2 Ed 4: 2014-02 IEC 60601-1-6 Ed 3.1 2013-10 ANSI AAMI IEC 62366-1:2015 IEC 60601-1-8: Edition 2.1 2012-11 ANSI/AAMI IEC 60601-2-2:2017 IEC 60601-2-37 Ed 2.1 2015 IEC 62304 Ed. 1.1 2015-06 | ANSI/AAMI ES60601-1:2005/(R)2012 And A1:2012, C1:2009 / (R)2012 And A2:2010/(R)2012 IEC 60601-1-2 Ed 4: 2014-02 IEC 60601-1-6 Ed 3.1 2013-10 ANSI AAMI IEC 62366-1:2015 IEC 60601-1-8: Edition 2.1 2012-11 ANSI/AAMI IEC 60601-2-2:2017 IEC 60601-2-37 Ed 2.1 2015 IEC 62304 Ed. 1.1 2015-06 | Same |
| Performance testing – System level (bench) | <ul style="list-style-type: none"> • Shelf-life / Service life • Confirmatory verification to specifications, standards, and guidance documents. | <ul style="list-style-type: none"> • Shelf-life / Service life • Full system verification to specifications, standards, and guidance documents. | Same with regression testing |

| Characteristics | Sonata System 2.2 (this submission) | Sonata System 2.1 (K193516) | Comparison Discussion |
|--|--|--|---|
| Performance testing – Ablation | <ul style="list-style-type: none"> • Ablation output • RF Generator safety features • Handpiece retention forces • Ultrasound visibility of the handpiece • Dispersive Electrode adhesion • RF Generator software and hardware verification and validation, including GUI, alerts, communication between components, real-time feedback to user via device sensors, power control, and software/hardware interface <p>Successfully demonstrated through early clinical and bench ablation testing that the system performs as intended and per specifications. Ablation capability was confirmed and the radiofrequency ablation provides a reproducible, discretely demarcated zone of tissue necrosis.</p> | <ul style="list-style-type: none"> • Ablation output • RF Generator safety features • Handpiece retention forces • Ultrasound visibility of the handpiece • Dispersive Electrode adhesion • RF Generator software and hardware verification and validation, including GUI, alerts, communication between components, real-time feedback to user via device sensors, power control, and software/hardware interface <p>Successfully demonstrated through early clinical and bench ablation testing that the system performs as intended and per specifications. Ablation capability was confirmed and the radiofrequency ablation provides a reproducible, discretely demarcated zone of tissue necrosis.</p> | <p>Similar</p> <p>Note: Enhancement to safety features by enabling automatic termination of RF delivery when safety-related error conditions are detected by the SMART Tablet software.</p> <p>No changes made that require clinical confirmation and no change to ablation geometry or algorithms.</p> |
| Acoustic Output Measurement Standard | <p>NEMA UD 2-2004 (R2009)</p> <p>IEC 60601-2-37 Ed 2.1 2015</p> | <p>NEMA UD 2-2004 (R2009)</p> <p>IEC 60601-2-37 Ed 2.1 2015</p> | <p>Same</p> |
| Acoustic Output Global Maximum B Mode: | <ul style="list-style-type: none"> • $I_{SPTA} \leq$ limit of 720 mW/cm² Value: 162 mW/cm² • $MI \leq$ limit of 1.9 Value: 1.7 | <ul style="list-style-type: none"> • $I_{SPTA} \leq$ limit of 720 mW/cm² Value: 162 mW/cm² • $MI \leq$ limit of 1.9 Value: 1.7 | <p>Same</p> |

| Characteristics | Sonata System 2.2 (this submission) | Sonata System 2.1 (K193516) | Comparison Discussion |
|--|--|--|------------------------------|
| Usability and Human Factors Validation | IEC 60601-1-6 Ed 3.1 2013-10 ANSI AAMI IEC 62366-1:2015 Sonata System 2.2 continues to rely on HFE validation of Sonata System 2.1. | IEC 60601-1-6 Ed 3.1 2013-10 ANSI AAMI IEC 62366-1:2015 HFE validation conducted in accordance with FDA Guidance <i>Applying Human Factors and Usability Engineering to Medical Devices</i> (Feb 3, 2016) successfully completed for treatment and reprocessing tasks. | Same |
| Clinical Trial to demonstrate safety and effectiveness | IDE G140114 NCT NCT02228174 n = 147 22 centers with treated patients Single-arm cohort study with each subject serving as her own control. Sonata System 2.2 continues to rely on the clinical trial study as Sonata System 2.1. The changes associated with the subject of this 510k do not change safety or efficacy of the device. | IDE G140114 NCT NCT02228174 n = 147 22 centers with treated patients Single-arm cohort study with each subject serving as her own control. | Same |

Performance Testing

Gynesonics has applied their design control procedures including risk analysis to evaluate the modifications to the device which are the subject of this 510(k). For each change, verification and as required, validation was conducted on the modified device to demonstrate that the modified device meets the applicable design requirements. The test methods and acceptance criteria used established methods consisting of FDA recognized standards and/or the same methods and criteria as were used in the predicate device submission; thus, meeting the FDA's requirement for a Special 510(k). Table 5 summarizes the design control activities. In all cases, the verification and validation testing met the acceptance criteria.

Table 5 Summary of Design Control Activities

| Change | Summary of Design Control Activities |
|--|--|
| Single Use RFA Handpiece Cable ACCY-007 change to Reusable RFA Handpiece Cable ACCY-008 | Risk Analysis Cleaning, disinfection & sterilization validations Cable Life testing including shipping stress & multiple cycles of simulated use, cleaning, disinfection & sterilization System Integration Testing |
| Sonata System Software SW-002 – Automatic termination of RF by system software upon detection of events that would previously trigger an alarm requiring user intervention | Risk Analysis Software Development Lifecycle Activities Software System testing at unit, integration and system level |
| Addition of validated instructions for sterilization of the IUUS Probe by STERIS V-PRO family of hydrogen peroxide sterilizers for Reusable Sonata Intrauterine Ultrasound (IUUS) Probe IUSP-002 | Risks Analysis Sterilization Validation Residuals Testing Impact on IUUS Probe Use Life |

The risk analysis demonstrated that no new risks were identified as a consequence of the modifications and the overall risk profile of the device remains unchanged.

Animal Data

No animal data was needed to validate the Sonata System 2.2.

Clinical Data

No additional clinical study data was needed to validate the Sonata System 2.2.

Conclusion

The Sonata Transcervical Fibroid Ablation System 2.2 employs the same fundamental scientific technology as the currently marketed predicate Sonata Sonography-Guided Transcervical Fibroid Ablation System 2.1 (K193516). Both systems combine radiofrequency ablation with intrauterine sonography. The indications for use and workflow are the same. The modifications to the device, as described in this 510(k) have

been verified and validated according to design controls. None of these differences raise any new questions of safety and effectiveness. Therefore, the Sponsor believes that the Sonata System 2.2 is substantially equivalent to its predicate device, the Sonata System 2.1 (K193516).