



January 5, 2022

BTL Industries Inc.  
David Chmel  
VP of Operations  
362 Elm Street  
Marlborough, Massachusetts 01752

Re: K213344

Trade/Device Name: BTL-899A

Regulation Number: 21 CFR 878.4400

Regulation Name: Electrosurgical Cutting and Coagulation Device and Accessories

Regulatory Class: Class II

Product Code: GEI

Dated: November 5, 2021

Received: November 9, 2021

Dear David Chmel:

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

## Indications for Use

510(k) Number (if known)  
K213344

Device Name  
BTL-899A

### Indications for Use (Describe)

BTL-899A is indicated to be used for:

Non-invasive lipolysis (breakdown of fat) of the abdomen.

Reduction in circumference of the abdomen.

Non-invasive lipolysis (breakdown of fat) of the thighs.

Reduction in circumference of the thighs.

BTL-899A is intended for use with skin type I - VI.

Non-invasive lipolysis (breakdown of fat) of the upper arms limited to skin types II and III and BMI 30 and under.

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

### General Information

Sponsor: BTL Industries, Inc.  
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Applicant: BTL Industries, Inc.  
362 Elm Street  
Marlborough, MA 01752  
Tel: [+1-866-285-1656](tel:+1-866-285-1656)  
Fax: +1-888-499-2502

Contact Person: David Chmel  
BTL Industries, Inc.  
[chmel@btlnet.com](mailto:chmel@btlnet.com)

Summary Preparation  
Date January 5<sup>th</sup>, 2022

### Device Name

Trade/Proprietary Name: BTL-899A  
Primary Classification Name: Electrosurgical, Cutting & Coagulation Device & Accessories  
Classification Regulation: 878.4400, Class II  
Classification Product Code: GEI

### Legally Marketed Predicate Device

The BTL-899A is a state-of-the-art high-frequency energy device with accessories and is substantially equivalent to the current product that is already cleared for distribution in the USA under the following 510(k) Premarket Notification numbers:

- BTL-899 FP (K211107)

## Product Description

The BTL-899A is a non-invasive therapeutic device.

BTL-899A consists of a main unit and applicators. The main unit is equipped with a color touch screen that makes the device easy to use. The on-screen information guides the Operator through the entire therapy procedure. The therapeutic parameters are easily set using the touch screen. During therapy, the screen displays information about the remaining therapy time and other therapy parameters. The device is equipped with an emergency button to terminate the therapy. The two outputs (applicators) of the device enable hands-free simultaneous treatment.

## Indications for Use

BTL-899A is indicated to be used for:

- Non-invasive lipolysis (breakdown of fat) of the abdomen.
- Reduction in circumference of the abdomen.
- Non-invasive lipolysis (breakdown of fat) of the thighs.
- Reduction in circumference of the thighs.
- BTL-899A is intended for use with skin types I - VI.
- Non-invasive lipolysis (breakdown of fat) of the upper arms limited to skin types II and III and BMI 30 or under.

## Non-clinical Testing (Performance, Bench Testing)

The BTL-899A device has been thoroughly evaluated for electrical safety. The device has been found to comply with the following applicable medical device safety standards:

IEC 60601-1	Medical electrical equipment – Part 1: General requirements for basic safety and essential performance
IEC 62304	Medical device software – Software life cycle processes
ISO 14971	Medical devices – Application of risk management to medical devices
ISO 10993-1	Biological evaluation of medical devices – Part 1: Evaluation and testing within a risk management process
ISO 10993-5	Biological evaluation of medical devices – Part 5: Tests for in vitro cytotoxicity
ISO 10993-10	Biological evaluation of medical devices – Part 10: Tests for irritation and skin sensitization

## Clinical Testing

BTL Industries conducted a clinical investigation in order to study the effect of the device for non-invasive lipolysis on human arms.

The primary objective of the study was to gather clinical evidence that the BTL-899 device, equipped with applicator 899-AP-C-2, is capable of inducing non-invasive lipolysis on human upper arms. Correct identification of pre-treatment and 3-months follow-up images by at least two out of three independent blinded evaluators had to be reported.

The secondary objectives of the study were to evaluate the safety of the BTL-899 device for non-invasive lipolysis (breakdown of fat) of the upper arms as well as to assess the participants' satisfaction from the therapy and how comfortable it was. Statistically significant reduction of upper arms fat thickness had to be observed.

The clinical investigation used a single-arm, open-label, interventional design. Forty (40) participants received treatments with the study device and were examined at 1-month and 3-month follow-up intervals.

All three blinded evaluators correctly recognized the pre-/post treatment images with more than 75% success rate and thus the trial meets its primary efficacy endpoint.

The overall satisfaction with the study treatment was 94% and 97% of the participants satisfied with their result at 1-month and 3-months follow-ups, respectively. Furthermore, all the subjects found the therapy comfortable with seven reporting weak pain while 33 reporting no pain at all.

The treatment with the BTL-899 device has shown to be both effective and safe for non-invasive lipolysis and fat thickness reduction of upper arms.

## Technological Characteristics

The BTL-899A device has the same intended use and identical technological characteristics and principles of operation to its predicate device. The BTL-899A device and its predicate are comprised of a system console and applicator(s). The system console consists of the generators, computer, and the touch-screen control panel.

The mechanism of action and technological similarities and differences between the BTL-899 FP device and the predicate device are described below in the comparison table. The differences do not raise any new types of safety or effectiveness questions.

**Comparison with the Predicate Device**

<b>510(k) number</b>	<b>Not assigned</b>	<b>K211107</b>	<b>Significant Difference</b>
<b>Device name</b>	BTL-899A	BTL-899 FP	
<b>Company name</b>	BTL Industries, Inc.	BTL Industries, Inc.	
<b>Product Code and Regulation</b>	<u>General &amp; Plastic Surgery</u> 21 CFR 878.4400 GEI - Electrosurgical, Cutting & Coagulation & Accessories	<u>General &amp; Plastic Surgery</u> 21 CFR 878.4400 GEI - Electrosurgical, Cutting & Coagulation & Accessories	<b>None</b>
<b>Indications for Use</b>	BTL-899A is indicated to be used for: <ul style="list-style-type: none"> <li>• Non-invasive lipolysis (breakdown of fat) of the abdomen.</li> <li>• Reduction in circumference of the abdomen</li> <li>• Non-invasive lipolysis (breakdown of fat) of the thighs.</li> <li>• Reduction in circumference of the thighs.</li> <li>• BTL-899A is intended for use with skin types I - VI.</li> <li>• Non-invasive lipolysis of the upper arms limited to skin types II and III and BMI 30 or under.</li> </ul>	BTL-899 FP is indicated to be used for: <ul style="list-style-type: none"> <li>• Non-invasive lipolysis (breakdown of fat) of the abdomen.</li> <li>• Reduction in circumference of the abdomen</li> <li>• Non-invasive lipolysis (breakdown of fat) of the thighs.</li> <li>• Reduction in circumference of the thighs.</li> <li>• BTL-899 FP is intended for use with skin types I - VI.</li> </ul>	<b>Not significantly different</b>
<b>Basic Technology</b>	The system combines bipolar radiofrequency with electromagnetic stimulation.	The system combines bipolar radiofrequency with electromagnetic stimulation.	<b>None</b>
<b>Clinical Use</b>	Prescription use	Prescription use	<b>None</b>
<b>Electrical Protection</b>	Class II, BF	Class II, BF	<b>None</b>

<b>User Interface</b>	Touch screen	Touch screen	<b>None</b>
<b>Firmware Controlled</b>	Yes	Yes	<b>None</b>
<b>Number of output channels</b>	2	2	<b>None</b>
<b>RF Type</b>	bipolar	bipolar	<b>None</b>
<b>Max. RF Power</b>	60 W (2x30 W)	60 W (2x30 W)	<b>None</b>
<b>RF Frequency</b>	27.12 Mhz	27.12 Mhz	<b>None</b>
<b>Number of Magnetic coils in the Applicators</b>	1	1	None
<b>Magnetic Field Intensity (on the coil surface)</b>	AP-C-1 - 0.5 to 1.8 T AP-C-2 - 0.7 to 2.0 T AP-C-4/5 - 0.35 to 1.3 T	AP-C-1 - 0.5 to 1.8 T	Not significantly different
<b>Pulse Repetition Rate - supported by the device</b>	1 – 150 Hz	1 – 150 Hz	None
<b>Pulse Duration</b>	AP-C-1 - 280 $\mu$ s $\pm$ 20% $\mu$ s AP-C-2 - 190 $\mu$ s $\pm$ 20% $\mu$ s AP-C-4/5 - 260 $\mu$ s $\pm$ 20% $\mu$ s	AP-C-1 - 280 $\mu$ s $\pm$ 20% $\mu$ s	Not significantly different
<b>Waveform</b>	Biphasic	Biphasic	None
<b>Shape</b>	Sinusoidal	Sinusoidal	None
<b>Temperature Sensor</b>	Yes	Yes	<b>None</b>
<b>Selection of parameters (Intensity, Time)</b>	Yes	Yes	<b>None</b>
<b>Application</b>	Hands-free, applicator fixed by fixation belt	Hands-free, applicator fixed by fixation belt	<b>None</b>
<b>Therapy Time</b>	Up to 30 min	Up to 30 min	<b>None</b>
<b>Energy Source</b>	100 – 240 V AC, 50–60 Hz	100 – 240 V AC, 50–60 Hz	<b>None</b>
<b>System Dimensions (W×H×D)</b>	23 x 39 x 29 in (592 x 985 x 730 mm)	23 x 39 x 29 in (592 x 985 x 730 mm)	<b>None</b>



<b>System Weight</b>	85 kg	85 kg	<b>None</b>
<b>Operating Ambient Temperature</b>	+10°C to +30°C	+10°C to +30°C	<b>None</b>
<b>Operating Relative Humidity</b>	30% to 75%	30% to 75%	<b>None</b>
<b>Environmental Specifications</b>	For indoor use only	For indoor use only	<b>None</b>

### **Substantial Equivalence**

The BTL-899A device has expanded indications for use to include lipolysis of the arms, which is based on positive results from clinical testing.

The BTL-899A device has a new applicator, AP-C-4 and AP-C-5, which is technologically equivalent to the previously approved AP-C-1 but with an improved shape to cover a larger area of the abdomen.

The predicate device BTL-899FP (K211107) and the proposed device are with identical mechanisms of action and technology.

The safety of the device has been evaluated and no new risks have been identified.

Therefore these differences do not raise any new questions of safety or effectiveness.

### **Conclusion**

Based upon the intended use and the known technical and clinical data provided in this pre-market notification, the BTL-899A device has been shown to be substantially equivalent to the currently marketed predicate device.