



August 31, 2022

Shenzhen Desida Technology Co., Ltd.  
% Rain Yip  
Registration Engineer  
Feiying Drug & Medical Consulting Technical Service Group  
Contact Address

Re: K221635

Trade/Device Name: IPL sapphire ice cooling hair remove device

Regulation Number: 21 CFR 878.4810

Regulation Name: Laser Surgical Instrument For Use In General And Plastic Surgery And In  
Dermatology

Regulatory Class: Class II

Product Code: OHT

Dated: May 26, 2022

Received: June 6, 2022

Dear Rain Yip:

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,

Jianting Wang  
Acting 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)

K221635

Device Name

IPL sapphire cooling hair remove device, model: LB06

Indications for Use (Describe)

IPL sapphire cooling hair remove device is an over-the-counter device intended for removal of unwanted body hair.

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

"510(k) Summary" as required by 21 CFR Part 807.92.

**Date: 2022-05-26**

## I. Submitter

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## II. Device

Name of Device: IPL sapphire cooling hair remove device

Model: LB06

Common or Usual Name: Light Based Over-The-Counter Hair Removal

Classification Name: Laser surgical instrument for use in general and plastic surgery and in dermatology

Regulatory Class: II

Product Code: OHT

Regulation Number: 21 CFR 878.4810

## III. Predicate Device

Primary predicate device:

510(k) number: K210311

Manufacturer: Shenzhen Mismon Technology Co.,Ltd.

Trade name: Home Use IPL Beauty Device, MS-216B

Product code: OHT

Approval date: 07/23/2021

Predicate device II:

510(k) number: K161565

Manufacturer: STETIC MEDICAL AESTHETICS DEVELOPMENT (SHENZHEN) CO.,LTD

Trade name: DUO, IPL-HH380-IT

Product code: OHT, ONF

Approval date: 09/01/2016

Predicate device III:

510(k) number: K221001  
 Manufacturer: Shenzhen Beauty Every Moment Intelligent Electric Co.,Ltd.  
 Trade name: IPL Home Use Hair Removal Device, D-1198  
 Product code: OHT  
 Approval date: 05/12/2022

#### IV. Device Description

The IPL sapphire cooling hair remove device is a personal, light-based, hair reduction device intended to be sold over-the-counter directly to the end user. The device provides hair reduction using Intense Pulsed Light (IPL) technology, and it works below the skin's surface and does not involve any cutting or pulling, reducing hair growth with minimal pain. The device is only powered by the external adapter and its IPL emission activation is by finger switch. The device contains a Xenon lamp and a skin sensor to detect appropriate skin contact. If the device is not in full contact with the skin, the device cannot emit the light pulse.

#### V. Indications for Use

IPL sapphire cooling hair remove device is an over-the-counter device intended for removal of unwanted body hair.

#### VI. Comparison of Technological Characteristics With the Predicate Device

The subject device IPL sapphire cooling hair remove device has the same intended use, mode of action and similar operational characteristics as the predicate devices. Any minor differences between the subject device and the listed predicate devices do not raise any issues of safety or efficacy. Performance data supports that the device is safe and as effective as the predicate devices for its intended use. Therefore, the subject device may be found substantially equivalent to its predicate devices.

The subject device is compared with the following Predicate Devices in terms of intended use, design, specifications, and performance:

<u>Comparison Elements</u>	<u>Subject Device</u>	<u>Primary predicate device K210311</u>	<u>Predicate device II K161565</u>	<u>Predicate device III K221001</u>
K Number	Pending	K210311	K161565	K221001
Trade name	IPL sapphire cooling hair remove device /LB06	Home Use IPL Beauty Device/MS-216B	DUO/IPL-HH380-IT	IPL Home Use Hair Removal Device/D-1198
Wavelength range	640-1200nm	510-1100nm	480-1200nm	530-1100nm
Energy medium	Xenon Arc Flashlamp	Xenon Arc Flashlamp	Xenon Arc Flashlamp	Xenon Arc Flashlamp
Energy density	3.0~5.1J/cm <sup>2</sup>	2.5~4.5J/cm <sup>2</sup>	5J/cm <sup>2</sup> Max.	2.0~4.3J/cm <sup>2</sup>
Spot size	3.3cm <sup>2</sup>	3.0cm <sup>2</sup>	3.0cm <sup>2</sup>	2.7cm <sup>2</sup>
Pulse duration	16~24ms	9~12ms	<20ms	5~12ms

<u>Comparison Elements</u>	<u>Subject Device</u>	<u>Primary predicate device K210311</u>	<u>Predicate device II K161565</u>	<u>Predicate device III K221001</u>
Pulsing control	Finger switch	Finger switch	Finger switch	Finger switch
Delivery device	Direct illumination to tissue	Direct illumination to tissue	Direct illumination to tissue	Direct illumination to tissue
Indication for use/Intended use	IPL sapphire cooling hair remove device is an over-the-counter device intended for removal of unwanted body hair.	The Home Use IPL Beauty Device is an over-the-counter device intended for removal of unwanted hair such as but not limited to small areas such as underarm and facial hair below the chin line and large areas such as legs.	The DUO (Model: IPL-HH380-IT) is an over the Counter device intended for the removal of unwanted body and/or facial hair in adults. The DUO is also intended for permanent reduction in unwanted hair. Permanent hair reduction is defined as the long-term stable reduction in the number of hairs regrowing when measured at 6, 9, and 12 months after the completion of a treatment regimen.	IPL Home Use Hair Removal Device is an over-the-counter device intended for removal of unwanted body and/or facial hair.
Location for use	OTC	OTC	OTC	OTC

## VII. Performance Data

The following performance data were provided in support of the substantial equivalence determination.

### 1) Biocompatibility Safety

The materials of the patient-directly contacting components of the subject device is performed the biocompatibility evaluation in accordance with the "Use of International Standard ISO 10993-1, 'Biological Evaluation of Medical Devices –Part 1: Evaluation and Testing Within a Risk Management Process, Document issued on Sep. 4, 2020", as recognized by FDA. The battery of testing was performed to, and passed, including:

- 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

### **2) Electrical Safety**

Electrical safety and Eye safety testing was performed to, and passed, the following standards:

- IEC 60601-1-2 Medical electrical equipment –Part 1-2: General requirements for basic safety and essential performance –Collateral standard: electromagnetic compatibility
- IEC 60601-1 Medical electrical equipment –Part 1: General requirements for basic safety and essential performance
- IEC 60601-1-11 Medical Electrical Equipment –Part 1: General Requirements for Basic Safety and Essential Performance –Collateral Standard: Requirements for Medical Electrical Equipment and Medical Electrical Systems Used in the Home Healthcare Environment
- IEC 60601-2-83 Medical Electrical Equipment - Part 2-83: Particular Requirements For The Basic Safety And Essential Performance Of Home Light Therapy Equipment

### **3) Eye Safety**

- IEC 62471 Photobiological safety of lamps and lamp systems

### **4) Software Verification and Validation**

Software documentation consistent with *moderate level* of concern was submitted in this 510(k). System validation testing presented in this 510(k) demonstrated that all software requirement specifications are met and all software hazards have been mitigated to acceptable risk levels.

### **Summary**

Based on the above performance as documented in this application, the subject device IPL sapphire cooling hair remove device was found to have a safety and effectiveness profile that is similar to the predicate device.

## **VIII. Conclusions**

In accordance with the Federal Food, Drug and Cosmetic Act, 21 CFR Part 807 and based on the comparison of intended use, design, materials and performance, the subject device IPL sapphire cooling hair remove device is to be concluded substantial equivalent to its predicate device.