

## April 26, 2022

Shenzhen Yuwei Electronic Technology Co., Ltd.
% Rain Yip
Registered Engineer
Feiying Drug & Medical Consulting Technical Service Group
Rm2401, ZhenYe International Center, No.3101-90 Qianhai Road
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China

Re: K220222

Trade/Device Name: IPL Hair Removal Device, model(s): S1-A, S2-A, S1, S2, S3, S4

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: January 18, 2022 Received: January 26, 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 <a href="https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm">https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm</a> 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 <u>Federal Register</u>.

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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 <a href="https://www.fda.gov/combination-products/guidance-regulatory-information/postmarketing-safety-reporting-combination-products">https://www.fda.gov/combination-products/guidance-regulatory-information/postmarketing-safety-reporting-combination-products</a>); 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 <a href="https://www.fda.gov/medical-devices/medical-device-safety/medical-device-reporting-mdr-how-report-medical-device-problems">https://www.fda.gov/medical-device-problems</a>.

For comprehensive regulatory information about medical devices and radiation-emitting products, including information about labeling regulations, please see Device Advice (<a href="https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance">https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance</a>) and CDRH Learn (<a href="https://www.fda.gov/training-and-continuing-education/cdrh-learn">https://www.fda.gov/training-and-continuing-education/cdrh-learn</a>). 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 (<a href="https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance/contact-us-division-industry-and-consumer-education-dice">https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance/contact-us-division-industry-and-consumer-education-dice">https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance/contact-us-division-industry-and-consumer-education-dice</a>) for more information or contact DICE by email (DICE@fda.hhs.gov) or phone (1-800-638-2041 or 301-796-7100).

Sincerely,

Purva Pandya
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

## Indications for Use

510(k) Number (if known)

Form Approved: OMB No. 0910-0120

Expiration Date: 06/30/2023 See PRA Statement below.

K220222	
Device Name IPL Hair Removal Device, model(s): S1-A, S2-A, S1, S2, S3, S4	
Indications for Use (Describe) IPL Hair Removal 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. This section applies only to requirements of the Paperwork Reduction Act of 1995.

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# 510(k) Summary

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

Date: 2022-01-18

#### I. Submitter

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## II. Device

Name of Device: IPL Hair Removal Device

Model(s): S1-A, S2-A, S1, S2, S3, S4

Common or Usual Name: Light Based Over-The-Counter For 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**

Predicate device: Home Use IPL Beauty Device/MS-208B, K210311, cleared by July 23, 2021

Reference device: IPL Home Use Hair Removal Device/D-1128, K192432, cleared by November 8, 2019

## **IV. Device Description**

The IPL Hair Removal 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 to perform hair removal. The device mainly consists of IPL main body and power adapter two parts and it is only powered by the external power adapter, as well as the flash window located in the main body which is the source of optical radiation, namely a Xenon flashlamp and its IPL emission activation is by finger switch. If the flash window of the device is not properly applied to the treatment area, the device cannot be triggered a pulse.

There are six models in this application: S1-A, S2-A, S1, S2, S3, and S4. According to the declaration of the manufacturer, the difference of all models is mainly the exception of the product appearance, display contents on the display and the spot size of treatment window which does not affect the intended use. The spot size of model S1-A and S2-A is designed to  $3.0 \text{cm}^2$ , model S1, S2, S3, and S4 is designed to  $4.1 \text{cm}^2$ , as well as the energy density of the all models is in the range of  $2.2 \sim 5.6 \text{J/cm}^2$ .

## V. Indications for Use

IPL Hair Removal Device is an over-the-counter device intended for removal of unwanted body hair.

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

The IPL Hair Removal 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 no raise any issues of safety or efficacy. Performance data supports that the device is safe and as effective as the predicate device for its intended use. Therefore, the IPL Hair Removal Device may be found substantially equivalent to its predicate device. IPL Hair Removal Device is compared with the following Predicate Device in terms of intended use, design, material, specifications, and performance:

Comparison Elements	Subject Device	Predicate Device K210311
K Number	Pending	K210311
Trade name	IPL Hair Removal Device	Home Use IPL Beauty Device Model: MS-208B
Wavelength range	610-1100nm	510-1100nm
Energy medium	Xenon Arc Flashlamp	Xenon Arc Flashlamp
Energy density	2.2~5.6 J/cm <sup>2</sup>	2.0~5.1J/cm <sup>2</sup>
Spot size	3.0cm <sup>2</sup> , 4.1cm <sup>2</sup>	3.6cm <sup>2</sup>
Pulse duration	8~14ms	9-12ms
Pulsing control	Finger switch	Finger switch
Delivery device	Direct illumination tissue	Direct illumination tissue
Indication for use/Intended use	IPL Hair Removal 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.
Location for use	OTC	OTC

#### VII.Performance Data

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

## 1) Biocompatibility Testing

The biocompatibility evaluation for the body-contacting components of the subject device was conducted 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", as recognized by FDA. The battery of testing was performed to, and passed, including:

- ➤ ISO 10993-5 Biological Evaluation of Medical Devices —Par t 5: Tests for In Vitro Cytotoxicity
- ➤ ISO 10993-10 Biological Evaluation of Medical Devices —Par t 10: Tests for Irritation and Skin Sensitization

## 2) Electrical Safety and Eye 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 60601-2-57 Medical electrical equipment –Part 2-57: Particular requirements for the basic safety and essential performance of non-laser source equipment intended for therapeutic, diagnostic, monitoring and cosmetic/aesthetic use
- ➤ 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 Hair Removal 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 Hair Removal Device is to be concluded substantial equivalent to its predicate devices.