



August 1, 2022

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

Re: K221451

Trade/Device Name: IPL hair removal

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 9, 2022

Received: May 18, 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)

K221451

Device Name

IPL hair removal

Model(s): FZ-610, FZ-609, FZ-612, FZ-611, FZ-613, FZ-608

Indications for Use (Describe)

IPL hair removal 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: 2022-05-09**

### I. Submitter

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### II. Device

Name of Device: IPL hair removal  
Model(s): FZ-610, FZ-609, FZ-612, FZ-611, FZ-613, FZ-608  
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

Primary predicate device:  
510(k) number: K192432  
Manufacturer: Shenzhen Bosidi Technology Co.,Ltd.  
Trade name: IPL Home Use Hair Removal Device, D-1103  
Product code: OHT  
Approval date: 11/08/2019

Reference device:  
510(k) number: K160968  
Manufacturer: CyDen Limited.  
Trade name: iPulse SmoothSkin Gold Hair Removal System  
Product code: OHT, GEX  
Approval date: 14/04/2016

### IV. Device Description

The IPL hair removal 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 IPL hair removal is only powered by the external power 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.

The IPL hair removal includes FZ-610, FZ-609, FZ-612, FZ-611, FZ-613, and FZ-608 six models. Their intended use, performance, structure design and operation are basically identical, with the differences mainly contains product appearance and its spot size of the treatment window, but these differences do not affect or change the intended use of the device.

## V. Indications for Use

IPL hair removal 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 hair removal has the same intended use, mode of action and similar operational characteristics as the predicate device. Any minor differences between the subject device and the listed predicate device 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 subject device may be found substantially equivalent to its predicate device. The subject device is compared with the following Predicate Device in terms of intended use, design, material, specifications, and performance:

<u>Comparison Elements</u>	<u>Subject Device</u>	<u>Primary predicate device K192432</u>
K Number	Pending	K192432
Trade name	IPL hair removal/ FZ-610, FZ-609, FZ-612, FZ-611, FZ-613, FZ-608	IPL Home Use Hair Removal Device/D-1103
Wavelength range	530-1100nm	510-1100nm
Energy medium	Xenon Arc Flashlamp	Xenon Arc Flashlamp
Energy density	2.1~5.3J/cm <sup>2</sup>	2.5~4.5J/cm <sup>2</sup>
Spot size	4.1cm <sup>2</sup> , 3.4cm <sup>2</sup>	3.0cm <sup>2</sup>
Pulse duration	8~10ms	7.5~14ms
Pulsing control	Finger switch	Finger switch
Delivery device	Direct illumination to tissue	Direct illumination to tissue
Indication for use/Intended use	IPL hair removal is an over-the-counter device intended for removal of unwanted body hair.	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

## 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 ABS plastic and 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 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

### **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 hair removal 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 is to be concluded substantial equivalent to its predicate device.