September 6, 2023

Foshan Jindi Electric Appliance Co.,Ltd
% Yvonne Liu
Registration engineer
Feiying Drug & Medical Consulting Technical Service Group
Rm 2401 Zhenye International Business Center, No. 3101-90,
Qianhai Road
Shenzhen, Guangdong 518052
China

Re: K231717
Trade/Device Name: IPL Home Use Hair Removal Device, Model(s): JD-TM002, JD-TM003, JD-TM012, JD-TM016, JD-TM022
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: June 12, 2023
Received: June 13, 2023

Dear Yvonne Liu:

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) or phone (1-800-638-2041 or 301-796-7100).

Sincerely,

Tanisha Hithe
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

Form Approved: OMB No. 0910-0120
Expiration Date: 06/30/2023
See PRA Statement below.

510(k) Number *(if known)*
/K231717

Device Name
IPL Home Use Hair Removal Device
Model(s): JD-TM002, JD-TM003, JD-TM012, JD-TM016, JD-TM022

Indications for Use *(Describe)*
IPL Home Use Hair Removal Device is indicated for the removal of unwanted hair. The device is also indicated for the permanent reduction in hair regrowth, 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 regime.

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 K231717

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

I. Submitter

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II. Device

Name of Device: IPL Home Use Hair Removal Device
Model(s): JD-TM002, JD-TM003, JD-TM012, JD-TM016, JD-TM022
Common or Usual Name: Light Based Over-The-Counter Hair Removal
Regulation 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:

Manufacturer	Predicate Device	510(k) Number	Approval Date
CyDen Limited.	iPulse Smoothskin Gold Hair Removal System	K160968	April 14, 2016

Secondary predicate device:

Manufacturer	Reference Device	510(k) Number	Approval Date
Shenzhen Jizhimei Technology Co., Ltd	IPL Cooling Hair Removal Device (NBB01, NBB02)	K230360	April 10, 2023

Reference device:

Manufacturer	Reference Device	510(k) Number	Approval Date
Shenzhen Yangyi Technology Co., Ltd	IPL Hair Removal Device, Model(s): AP10,AP20,AP30,AP32	K230021	March 31, 2023

IV. Device Description

IPL Home Use Hair Removal Device (Models:JD-TM002, JD-TM003, JD-TM012, JD-TM016, JD-TM022),is an over-the-counter, home-use and single-person-use device for hair reduction by using Intense Pulsed Light (IPL). 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 power adapter and its IPL emission activation is by finger switch. This product adopts irreplaceable flash window and is suitable for multiple hair removal areas (such as: lips, underarms, bikini lines, arms, legs, etc.). It contains a skin sensor to detect appropriate skin contact, if the device is not in full contact with the skin, the device cannot emit the treatment light pulses.

The subject device includes five models. The three models of JD-TM002,JD-TM003,JD-TM012 are white , JD-TM016 has two colors of white and purple while three colors of rose gold, green and champagne for JD-TM022. Except JD-TM022, the other four models have cooling function to relieve pain of burning sensation during operation. Except JD-TM002, you can use auxiliary head to limit the spot area and get better effect with the other four models. The auxiliary head is suitable for small parts such as underarms and lips.

IPL Home Use Hair Removal Device, models: JD-TM002, JD-TM003, JD-TM012, JD-TM016, JD-TM022 have the same indication for use, performance, structure design and operation. The main difference mainly contains product appearance, size, weight, energy density , number of levels and auxiliary head. The little difference won't affect the safety and effectiveness of the device.

V. Indications for Use

IPL Home Use Hair Removal Device is indicated for the removal of unwanted hair. The device is also indicated for the permanent reduction in hair regrowth, 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 regime.

VI. Materials

Component name	Material of Component	Body Contact Category	Contact Duration
IPL Home Use Hair Removal Device (Enclosure and flash window)	ABS, PC	Surface-contacting device: Intact skin	Less than 24 hours

We have tested the device for biocompatibility by a reliable third-party lab. For details, please refer to Section 16 "Biocompatibility Discussion".

VII.Comparison of Technological Characteristics With the Predicate Device

The IPL Home Use 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 and reference device do no raise any issues of safety or efficacy. Performance

data supports that the device is safe and as effective as the predicate devices and reference device for its intended use. Therefore, the IPL Home Use Hair Removal Device may be found substantially equivalent to its predicate devices and reference device.

IPL Home Use Hair Removal Device is compared with the following Predicate Device and Reference Devices in terms of intended use, design, material,specifications, and performance:

Comparison Elements	**Subject Device**	**Primary Predicate Device**	**Secondary Predicate Device**	**Reference Device**	**Remark**
510(k) Number	Pending	K160968	K230360	K230021	/
Trade name	IPL Home Use Hair Removal Device (JD-TM002,JD-TM003,JD-TM012,JD-TM016,JD-TM022)	iPulse Smoothskin Gold Hair Removal System	IPL Cooling Hair Removal Device (NBB01, NBB02)	IPL Hair Removal Device, Model(s):AP10,AP20 ,AP30,AP32	/
Manufacturer	Foshan Jindi Electric Appliance Co.,Ltd	CyDen Limited.	Shenzhen Jizhimei Technology Co.,Ltd	Shenzhen Yangyi Technology Co.,Ltd	
Regulation number	21 CFR 878.4810	21 CFR 878.4810	21 CFR 878.4810	21 CFR 878.4810	Same
Product code	OHT	OHT, GEX	OHT	OHT	Same
Device classification	Class II	Class II	Class II	Class II	Same
Indication for use/ Intended use	IPL Home Use Hair Removal Device is indicated for the removal of unwanted hair. The device is also indicated for the permanent reduction in hair regrowth, 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 regime.	The iPulse Smoothskin Gold Hair Removal System is indicated for the removal of unwanted hair. The iPulse Smoothskin Gold is also indicated for the permanent reduction in hair regrowth, defined as the long-term, stable reduction in the number of hairs regrowing when measured at 6, 9 and 12 months after the	The IPL Cooling Hair Removal Device is an over-the-counter device intended for removal of unwanted body and /or facial hair.	IPL Hair Removal Device is an over-the-counter device intended for removal of unwanted body and /or facial hair.	Same

		completion of a treatment regime.			
Prescription or OTC	OTC	OTC	OTC	OTC	Same
Device design					
Source energy	Supplied by external adapter	Supplied by external adapter	Supplied by external adapter	Supplied by external adapter	Same
Power Supply	100-240V~, 50/60Hz	110V or 230V, 50/60Hz	100-240V, 50/60Hz	100-240V AC	Same
Dimension	JD-TM002: 138*78*47mm JD-TM003: 145*75*50mm JD-TM012: 195*73*47mm JD-TM016: 180*100*47mm JD-TM022: 176*147*91mm	Unknown	NBB01: 47.6*54.3*240mm NBB02-MAX: 235*76*43mm	AP10: 201*184*80mm AP20: 209*161*78mm AP30: 166*62*40mm AP32: 167*63*41mm	Different **Note 1**
Sterilization	Not required	Not required	No	Not required	Same
Output specification					
Light Source	Intense Pulsed Light	Intense Pulsed Light	Intense Pulsed Light	Intense Pulsed Light	Same
Energy medium	Xenon Arc Flashlamp	Xenon Arc Flashlamp	Xenon Arc Flashlamp	Xenon Arc Flashlamp	Same
Wavelength range	JD-TM002,JD-TM003: 550-1100nm JD-TM012,JD-TM016: 600-1100nm JD-TM022: 640-1100nm	510-1100nm	550-1200mm	530-1100nm	Same
Spot Size (cm^2)	JD-TM002,JD-TM003,JD-TM012: 3 cm^2 JD-TM016: 3.3 cm^2 JD-TM022: 4 cm^2	3cm^2	3.6cm^2	3.3cm^2 3.96cm^2 ,3.63cm^2	Similar **Note 2**

Energy Density	JD-TM002,JD-TM003,JD-TM012, JD-TM016: 2-5 J/cm² JD-TM022: 2-6 J/cm²	3-6 J/cm²	2-5 J/cm ² (applicable for model NBB01) 2-4 J/cm ² (applicable for model NBB02)	Max 4.3 J/cm²	Similar **Note 3**
Pulse duration	8-12ms	2-10 ms	6.4-7.2ms	8.8-13.2 ms	Similar **Note 4**
Pulsing control	Finger switch	Finger switch	Finger switch	Finger switch	Same
Output intensity level	JD-TM002,JD-TM003,JD-TM012: 5 Levels JD-TM016: 9 Levels JD-TM022: 10 Levels	Unknown	NB001: 5 Levels NBB02: 6 Levels	5 (applicable for model AP10, AP30,AP32) 9 (applicable for model AP20)	Similar **Note 3**
Delivery Device	Direct Illumination to Tissue	Direct Illumination to Tissue	Direct Illumination to Tissue	Direct Illumination to Tissue	Same
Software/ Firmware/ Microprocessor Control?	Yes	Yes	Yes	Yes	Same
Additional features					
Electrical safety	IEC 60601-1 IEC 60601-1-2 IEC 60601-1-11 IEC 60601-2-57	IEC 60601-1 IEC 60601-1-2	IEC 60601-1 IEC 60601-1-2 IEC 60601-1-11 IEC 60601-2-83	IEC 60601-1 IEC 60601-1-2 IEC 60601-1-11 IEC 60601-2-83	Similar
Eye safety	IEC 62471	IEC 62471	IEC 62471	IEC 62471	Same
Biocompatibility	ISO 10993-5 ISO 10993-10	ISO 10993-5 ISO 10993-10 ISO 10993-12	ISO 10993-5 ISO 10993-10	ISO 10993-5 ISO 10993-10	Same

Note 1:
Though the dimensions are different from the predicate devices and reference device, this difference is insignificant and do not raise any safety/ effectiveness problems.

Note 2:
There is minor difference in spot size between the subject device and the predicate devices and reference device. The spot size is related to light intensity and since the difference in light intensity is not significant as explained in note 3, so this difference will not raise any safety or effectiveness issue.

Note 3:

Though the energy density and output intensity level are a little different from the predicate devices and reference device, the energy density of subject device is within the range of the minimum and maximum value of the predicate devices and reference device, and they all comply with IEC 60601-2-57 and IEC 62471 requirements, so this difference will not raise any safety or effectiveness issue.

Note 4:

Though the pulse duration of subject device is a little different from the predicate devices and reference device, and the subject device complies with IEC 60601-2-57 and IEC 62471 requirements, so this difference will not raise any safety or effectiveness issue.

VIII. 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 IPL Home Use Hair Removal 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, Document Issued on September 4, 2020", as recognized by FDA. The following testing was performed to, and passed, including:

- ISO 10993-5:2009, Biological Evaluation of Medical Devices –Par t 5: Tests for In Vitro Cytotoxicity
- ISO 10993-10:2010, Biological Evaluation of Medical Devices –Par t 10: Tests for Irritation and Skin Sensitization

2) Electrical Safety and EMC

Electrical safety and EMC testing was performed to, and passed, as per 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
- ANSI AAMI ES60601-1 Medical electrical equipment - Part 1: General requirements for basic safety and essential performance (IEC 60601-1:2005, MOD)
- 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 light 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.

5) Usability

The product usability has been evaluated and verified according to the following FDA guidance

- Applying Human Factors and Usability Engineering to Medical Devices, issued on FEBRUARY 2016

IX. Conclusions

Based on the above analysis and non-clinical tests performed, it can be concluded that the subject device IPL Home Use Hair Removal Device is as safe, as effective, and performs as well as the legally marketed predicate device and reference devices.