



September 22, 2023

Shenzhen Koli Technology Co.,Ltd
% Yvonne Liu
Registration Engineer
Feiyang Drug & Medical Consulting Technical Service Group
Rm 2401 Zhenye International Business Center, No. 3101-90
Qianhai Road,
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China

Re: K232183

Trade/Device Name: IPL Hair Removal Device, Model(s): T1, T2, T3, T7, T10

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: July 24, 2023

Received: July 24, 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 L. Tanisha L. Hithe -S
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Tanisha Hithe, MS, MHS
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)
K232183

Device Name
IPL Hair Removal Device
Model(s): T1, T2, T3, T7, T10

Indications for Use (Describe)

IPL 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 K232183

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

I. Submitter

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II. Device

Name of Device: IPL Hair Removal Device
Model(s): T1, T2, T3, T7, T10
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 and reference device

Predicate device:

<u>Manufacturer</u>	<u>Predicate Device</u>	<u>510(k) Number</u>	<u>Approval Date</u>
Shenzhen Ishine Technology Company Limited	IPL Hair Removal Device, Model(s): skn001,skn005,skn006,skn002, RoseSkinCo Lumi	K222537	Oct 14,2022

Reference device:

<u>Manufacturer</u>	<u>Reference Device</u>	<u>510(k) Number</u>	<u>Approval Date</u>
Shenzhen Beauty Every Moment intelligent electric Co.,Ltd	IPL Home Use Hair Removal Device, Models: D-1198, D-1185, D-1186, D-1189, D-1197	K221001	May 12, 2022

IV. Device Description

IPL Hair Removal Device (Models:T1, T2, T3, T7, T10),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. There are four function modes including skin, face, body and bikini for T1 and T7, but only body mode for T3, and five modes including skin, face, underarm, body and bikini for T2 and T10. There are five levels for each mode. The device 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.

IPL Hair Removal Device, models:T1, T2, T3, T7, T10 have the same indication for use, performance, structure design and operation. The main difference mainly contains product appearance, dimension, weight, number of keys and function modes, spot size and energy density. The five models are in two colors, one set is in white and the other set is in green.

V. Indications for Use

IPL 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 Hair Removal Device (Enclosure and flash window)	ABS, PC,POM	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 Hair Removal Device 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 and reference device do not raise any issues of safety or efficacy. Performance data supports that the device is safe and as effective as the predicate device and reference device for its intended use. Therefore, the IPL Hair Removal Device may be found substantially equivalent to its predicate device and reference device.

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

<u>Comparison Elements</u>	<u>Subject Device</u>	<u>Predicate Device</u>	<u>Reference Device</u>	<u>Remark</u>
510(k) Number	Pending	K222537	K221001	/
Trade name	IPL Hair Removal Device T1,T2,T3,T7,T10	IPL Hair Removal Device (skn001,skn005,skn006,skn002,RoseSkin Co Lumi)	IPL Home Use Hair Removal Device, Models: D-1198, D-1185, D-1186, D-1189, D-1197	/
Manufacturer	Shenzhen Koli Technology Co.,Ltd	SHENZHEN ISHINE TECHNOLOGY COMPANY LIMITED	Shenzhen Beauty Every Moment intelligent electric Co.,Ltd	/
Regulation number	21 CFR 878.4810	21 CFR 878.4810	21 CFR 878.4810	Same
Product code	OHT	OHT	OHT	Same
Device classification	Class II	Class II	Class II	Same
Indication for use/ Intended use	IPL 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.	IPL 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.	IPL Home Use Hair Removal Device is an over-the counter device intended for removal of unwanted body and /or facial hair	Same
Prescription or OTC	OTC	OTC	OTC	Same
Source energy	Supplied by external adapter	Supplied by external adapter	Supplied by external adapter	Same
Power Supply	100-240V~, 50/60Hz	100-240V~, 50/60Hz	Unknown	Same
Dimension	T1: 176 x 62 x 35mm T2: 171 x 64 x 34mm T3: 214 x 63 x 64mm T7: 174 x 63 x 36mm	skn001:134*83*48.5mm skn005:132.5*83*48mm skn006:135.5*86*52.5mm skn002:134*82*40mm	Unknown	<u>Different</u>

<u>Comparison Elements</u>	<u>Subject Device</u>	<u>Predicate Device</u>	<u>Reference Device</u>	<u>Remark</u>
	T10: 171 x 64 x 35mm	RoseSkinCo Lumi: 134*82*40mm		
Weight	T1: 200g T2: 296g T3: 200g T7: 216g T10: 216g	skn001:196g skn005: 196g skn006: 210g skn002: 186g RoseSkinCo Lumi:186g	Unknown	<u>Different</u>
Sterilization	Not required	Not required	Not required	Same
Light Source	Intense Pulsed Light	Intense Pulsed Light	Intense Pulsed Light	Same
Energy medium	Xenon Arc Flashlamp	Xenon Arc Flashlamp	Xenon Arc Flashlamp	Same
Wavelength range	510-1100nm	510-1100nm	550-1100nm	Same
Spot Size (cm ²)	T1: 3.0 ± 0.25cm ² T2: 3.9 ± 0.25cm ² T3: 3.2 ± 0.25cm ² T7: 3.0 ± 0.25cm ² T10: 3.9 ± 0.25cm ²	3.3cm ²	D-1198: 2.7 cm ² D-1185: 2.7 cm ² D-1186: 3.0 cm ² D-1189: 3.0 cm ² D-1197: 3.4 cm ²	Similar
Energy Density (± 20%)	T1,T7: 1.33~3.00 J/cm ² T3: 1.25-2.81 J/cm ² T2,T10: 1.03~ 3.08 J/cm ²	For sk001,skn005,skn006 Level 1: 1.5 J/cm ² Level 2: 1.9J/cm ² Level 3: 2.3J/cm ² Level 4: 2.8J/cm ² Level 5: 3.5J/cm ² For skn002 and RoseSkinCo Lumi Level 1: 1.6J/cm ² Level 2: 1.9J/cm ² Level 3: 2.3J/cm ² Level 4: 2.8J/cm ² Level 5: 3.2J/cm ² Level 6: 3.8J/cm ²	2.0~4.3 J/cm ²	Similar
Pulse duration	4-12ms	6-8ms	5-12 ms	Similar

<u>Comparison Elements</u>	<u>Subject Device</u>	<u>Predicate Device</u>	<u>Reference Device</u>	<u>Remark</u>
Pulsing control	Finger switch	Finger switch	Finger switch	Same
Number of output channels	One channel	One channel	One channel	Same
Output intensity level	5 Levels	5 Levels for skn001,skn005,skn006; 6 Levels for skn002 and RoseSkinCo Lumi	Unknown	Similar
Skin Contact Sensor	Yes	Yes	Yes	Same
Software/ Firmware/ Microprocess or Control?	Yes	Yes	Yes	Same
Electrical safety	ANSI AAMI ES60601-1 IEC 60601-1-2 IEC 60601-1-11 IEC 60601-2-83	ANSI AAMI ES60601-1 IEC 60601-1-2 IEC 60601-1-11 IEC 60601-2-83	IEC 60601-1-1 IEC 60601-1-2 IEC 60601-1-11 IEC 60601-2-57	Same
Eye safety	IEC 62471	IEC 62471	IEC 62471	Same
Biocompatibility	ISO 10993-5 ISO 10993-10	ISO 10993-5 ISO 10993-10	ISO 10993-5 ISO 10993-10	Same

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 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 60601-1-11 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.

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 Hair Removal Device is as safe, as effective, and performs as well as the legally marketed predicate device and reference device.