

September 7, 2023

Shenzhen Qianyu Technology Co., Ltd.
% Riley Chen
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: K231800

Trade/Device Name: IPL Hair Removal Device, Model(s): JP1, JR3, JR8, JR9 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 19, 2023 Received: June 20, 2023

Dear Riley Chen:

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>.

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 <u>https://www.fda.gov/medical-devices/medical-device-safety/medical-device-reporting-mdr-how-report-medical-device-problems</u>.

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

Sincerely,

 Tanisha L.
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 12:21:30 - 04'00'

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

# Indications for Use

510(k) Number *(if known)* K231800

Device Name IPL Hair Removal Device Model(s): JP1, JR3, JR8, JR9

Indications for Use (Describe)

IPL Hair Removal Device is an over-the-counter device intended for removal of unwanted body and/or facial 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 - K231800

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

#### I. Submitter

Shenzhen Qianyu Technology Co., Ltd. Room 1002, Building A2, KeXing Science Park, No.15 Keyuan Road, Nanshan District, Shenzhen, Guangdong Province, China Post code: 518057

Guoyang Li Certification Engineer Tel: +86 15099998872 Email: liguoyang@jovs-beauty.com

#### II. Device

Name of Device: IPL Hair Removal Device Model(s): JP1, JR3, JR8, JR9 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	<u>510(k) Number</u>	Approval Date
	Hand-held IPL device (JOVS Graphene Hair Removal		Amril 5, 2022
	Device)	K214115	April 5, 2022

Secondary predicate device:

Manufacturer	Predicate Device	<u>510(k) Number</u>	Approval Date
Shenzhen Ulike Smart Electronics Co.,Ltd	IPL Hair Removal Device, Model(s): UI06 PN, UI06 PL, UI06 JL, UI06 BR, UI06 DB, UI06 PR, UI06 OG, UI06 RD	K223618	Feb. 28, 2023

Reference device:

Manufacturer		Reference Device		510(k) Number	Approval Date		
	Shenzhen	Junbobeauty	IPL	HAIR	REMOVAL	K220669	Max 16, 2022
	Technology Co., Ltd.		HANDSET, Model: IPL-666		K220009	May 16, 2022	

#### **IV. Device Description**

IPL Hair Removal Device is a personal, light-based, home-use hair reduction device intended to be sold over-the-counter. The device provides hair reduction by using Intense Pulsed Light (IPL) technology. 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 (100-240V, 50/60Hz) and its IPL emission activation is by finger switch. It contains a skin sensor to detect appropriate skin contact, if the light outlet of the device is not in full contact with the skin, the device cannot emit the treatment light pulses.

The device includes JP1, JR3, JR8, JR9 four models. There is difference in product appearance, physical product dimension, indicator display, spot size and output energy, but their intended use, performance, structure design and operation are basically identical.

#### V. Indications for Use

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

#### VI. Materials

Model	Material of Component	<b>Body Contact Category</b>	<b>Contact Duration</b>
JP1	Plastic		
JR3	ABS, PC	Surface contacting	
JR8	ABS, PC, Sapphire, Zinc Alloy,	Surface-contacting device: Intact skin	Less than 24 hours
	Epoxy	device. Intact skin	
JR9	ABS, PC, Sapphire		

We have tested the device for biocompatibility by a reliable third-party lab. For details, please refer to "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 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 for its intended use. Therefore, the IPL Hair Removal Device may be found substantially equivalent to its predicate devices.

<u>Comparison</u> <u>Elements</u>	Subject Device	Primary Predicate Device	Secondary Predicate Device	Reference Device	<u>Remark</u>
510(k) Number	Pending	K214113	K223618	K220669	/
Trade name	IPL Hair Removal Device (model: JP1, JR3, JR8, JR9)	Hand-held IPL device (JOVS Graphene Hair Removal Device)	IPL Hair Removal Device, Model(s): UI06 PN, UI06 PL, UI06 JL, UI06 BR, UI06 DB, UI06 PR, UI06 OG, UI06 RD	IPL HAIR REMOVAL HANDSET Model: IPL-666	/
Regulation number	21 CFR 878.4810	21 CFR 878.4810	21 CFR 878.4810	21 CFR 878.4810	Same
Product code	OHT	OHT	OHT	OHT	Same
Device classification	Class II	Class II	Class II	Class II	Same
Indication for use/ Intended use	IPL Hair Removal Device is an over-the-counter device intended for removal of unwanted body and/or facial hair.	The Hand-held IPL device (JOVS Graphene Hair Removal Device) is an over- the-counter device intended for removal of unwanted body and/or facial hair.	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 HANDSET is an over the- counter device intended for removal of unwanted body and/or facial hair.	Same
Prescription or OTC	OTC	OTC	OTC	OTC	Same
Source energy	Supplied by external adapter	Supplied by external adapter	Supplied by external adapter	External Power supply	Same
Power supply	100-240V, 50/60Hz	AC 100-240 V, 50/60 Hz	100~240V, 50/60Hz	100~240V AC Input 12V3A DC Output	Same
Dimension	JP1: 188.15×58×70.6mm JR3: 159×58×58mm	Unknown	58×34×179mm (W x H x D)	124*83*48.5mm	Different

<u>Comparison</u> <u>Elements</u>	Subject Device	Primary Predicate Device	Secondary Predicate Device	Reference Device	<u>Remark</u>
	JR8: 158.6×58×39mm				
	JR9: 163.8×78.2×44.6mm				
	JP1 & JR3: 265g				
Weight	JR8: 256g	275g	Unknown	186g	<u>Different</u>
	JR9: 260g				
Sterilization	Not required	Not required	Not required	Not required	Same
Light source	Intense Pulsed Light	Intense Pulsed Light	Intense Pulsed Light	Intense Pulsed Light	Same
Energy medium	Xenon Flashlamp	Xenon lamp	Xenon Arc Flashlamp	Xenon Quartz Tube	Same
Wavelength	JP1 & JR3: 590-1200nm	590nm~1200nm	560-1200nm	470nm~1100nm	Same
range	JR8 & JR9: 560-1200nm	590mm~1200mm	500-1200mm	4701111~11001111	Same
	JP1: 1.4~2.5J/cm <sup>2</sup>		3~6 J/cm <sup>2</sup>	1.3~2.49J/cm <sup>2</sup>	Similar
<b>D</b> 1 1	JR3: 2.0~4.6J/cm <sup>2</sup>				
Energy density	JR8: 1.77~5.22J/cm <sup>2</sup>	2.9~5.4 J/cm <sup>2</sup>			
	JR9: 1.77~5.59J/cm <sup>2</sup>				
	JP1: 1.6cm <sup>2</sup>				
Spot size	JR3: 3cm <sup>2</sup>	3.4cm <sup>2</sup>	3.3cm <sup>2</sup>	3cm <sup>2</sup>	Similar
	JR8&JR9: 3.42cm <sup>2</sup> ±0.2cm <sup>2</sup>				
<b>D</b> 1 1 <i>C</i>	JP1 & JR3: 7.5ms±2ms	5.5.0.5	1ms~7ms	11.5~15ms	Similar
Pulse duration	JR8 & JR9: 8.2±2ms	5.5~9.5ms			
Pulsing control	Finger switch	Finger switch	Finger switch	Finger switch	Same
Delivery device	Direct illumination to tissue	Direct illumination to tissue	Direct illumination to tissue	Direct illumination to tissue	Same
	JP1: 3 levels				
Output intensity	tput intensity JR3: 6 levels	6 levels	3 levels	5 levels	Same
level	JR8: 6 levels	0 10/018			
	JR9: 5 levels				
Software/ Firmware/	Yes	Yes	Yes	Yes	Same

<u>Comparison</u> <u>Elements</u>	Subject Device	Primary Predicate Device	Secondary Predicate Device	Reference Device	<u>Remark</u>
Microprocessor Control?					
Electrical safety	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	ANSI AAMI ES60601-1 IEC 60601-1-2 IEC 60601-1-11 IEC 60601-2-57 IEC 60601-2-83	IEC 60601-1 IEC 60601-1-2 IEC 60601-1-11 IEC 60601-2-83	Same
Eye safety	IEC 62471	IEC 62471	IEC 62471	IEC 62471	Same
Biocompatibilit y	ISO 10993-5 ISO 10993-10 ISO 10993-23	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 –Part 5: Tests for In Vitro Cytotoxicity
- ISO 10993-10: 2010, Biological Evaluation of Medical Devices –Part 10: Tests for Irritation and Skin Sensitization
- ISO 10993-10: 2021, Biological evaluation of medical devices Part 10: Tests for skin sensitization
- ▶ ISO 10993-23: 2021, Biological evaluation of medical devices Part 23: Tests for irritation

#### 2) Electrical Safety and EMC

Electrical safety and EMC testing was performed to, and passed, as per the following standards:

- IEC 60601-1 Medical electrical equipment Part 1: General requirements for basic safety and essential performance
- IEC 60601-1-2 Medical electrical equipment –Part 1-2: General requirements for basic safety and essential performance –Collateral standard: electromagnetic compatibility
- IEC 60601-1-11 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 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 devices.