

November 4, 2021

Shenzhen Century Dongyuan Technology Co Ltd. % You Yijie Manager Qimmiq Medical Consulting Service Co., Ltd. Rm.1711, Building K, No.101 Science Ave International Creative Valley Guangzhou, Guangdong 510663 China

Re: K212897

Trade/Device Name: IPL Hair Removal Device, model: AI01
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: ONF
Dated: August 27, 2021
Received: September 10, 2021

Dear You Yijie:

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 and Part 809); 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,

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

#### Indications for Use

510(k) Number *(if known)* K212897

Device Name IPL Hair Removal Device, model: AI01

Indications for Use (Describe)

The IPL Hair Removal Device (Model: AI01) is intended for the 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.

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# Section 5: 510(k) Summary

#### 1. Submitter's Information

#### **Establishment Registration Information**

Name: Shenzhen Century Dongyuan Technology Co Ltd. Address: Floor 2, Building B1, Gonghe Fourth Industrial Zone, Shajing Street, Bao'an District, Shenzhen City, Guangdong Province China **Contact Person of applicant** Name: Zhang Benrong Address: Floor 2, Building B1, Gonghe Fourth Industrial Zone, Shajing Street, Bao'an District, Shenzhen City, Guangdong Province China TEL: +86 18565833539 Email: aijofi01@163.com

#### **Contact Person of the Submission:**

Name: Yijie You Address: RM.1711, Building K, NO.101 Science Ave International Creative Valley Development Zone, Guangzhou China Floor 2, Building B1, Gonghe Fourth Industrial Zone, Shajing Street, Bao'an District, Shenzhen City, Guangdong Province China TEL: +86 020-8224 5821 FAX: +86 020-8224 5821 Email: Jet.you@gimmiq-med.com

Date prepared: Oct. 20, 2021

#### 2. Device Information

Trade Name:	IPL Hair Removal Device, model: Al01
Classification name:	Laser Surgical Instrument For Use In General And Plastic
	Surgery And In Dermatology
Common or Usual Name:	Powered Light Based Non-Laser Surgical Instrument With
	Thermal Effect
Review panel:	General & Plastic Surgery
Product code:	ONF
Regulation Class:	II
Regulation Number:	878.4810

### 3. Predicate Device Information

510(k) submitter/holder:	Touchbeauty Beauty & Health (Shenzhen) Co., Ltd.
510(K) Number:	K183217
Trade Name:	IPL Hair Removal Device
Model:	TB-1755
Classification name:	Laser Surgical Instrument For Use In General And
	Plastic Surgery And In Dermatology
Review panel:	General & Plastic Surgery
Product code:	OHT, ONF
Regulation Class:	II
Regulation Number:	878.4810

# 4. Device description

IPL Hair Removal Device, model: Al01 is a device for the permanent reduction of hair growth based on 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. The device contains a Xenon Arc Flashlamp and a skin sensor to detect appropriate skin contact. If the device is not properly applied to the treatment area (in full contact with the skin), the device cannot emit the treatment light pulses. The device incorporates Intense Pulse Light (IPL) technology. The purpose of the light is to heat the root where the hair grows.

Device includes a main unit, an adaptor, and accessories, accessories include goggle.

#### Principle of operation:

The device works by use of thermal energy of Intense Pulse Light (IPL) to kill hair follicles for hair removal. The device generally targets skin (including dermis, epidermis), underlying soft tissue and hair follicles.

## 5. Indications for Use

The IPL Hair Removal Device (Model: Al01) is intended for the removal of unwanted body hair.

## 6. Summary of technological characteristics of device

#### compared to the predicate devices (K183217)

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SE	Subject device	Predicate device	Discussion of
Comparisons	(IPL Hair Removal Device,	(IPL Hair Removal Device, Model:	Discussion of difference
	model: Al01)	TB-1755)	amerence
510K Number	/	K183217	1
Classification	21CFR 878.4810	21CFR 878.4810	Same
Product Code	ONF	OHT, ONF	Same
FDA Class	II	II	Same
	The IDL Hair Removal Device (Madel:	The IPL Hair Removal Device (Model:	Same
Indications for Use	The IPL Hair Removal Device (Model:	TB-1755) is an Over the Counter	(Discussion is
Indications for Use	AI01) is intended for the removal of	device intended for the removal of	indicated in
	unwanted body hair.	unwanted body hair.	D1)
Model	AI01	TB-1755	1
Environment of Use	Home use	Home use	Same
Design	Hand-hold	Hand-hold	Same
Patient Population	Adult	Adult	Same
Material of Definit			Different
Material of Patient	50	450	(Discussion is
contact	PC	ABS	indicated in
components			D2)
Biocompability	Meets ISO 10993- 5	Meets ISO 10993- 5	0
testing	ISO 10993-10	ISO 10993-10	Same
Single Patient,			
multi-use	Yes	Yes	Same
Patient Interface	Buttons	Buttons	Same
Technology	Intense Pulse Light (IPL)	Intense Pulse Light (IPL)	Same
Dimensions	140*203*56	182*72.4*69.2mm	Different (Discussion is indicated in D3)
Power source	an external power supply	an external power supply	Same
Light source	Xenon Arc Flashlamp	Xenon Arc Flashlamp	Same
Wavelength	510nm~1100nm	510nm~1100nm	Same
Spot Size	3.1 cm <sup>2</sup>	3.1 cm <sup>2</sup>	Same
Max. Fluence (J/cm²)	3.8-5.2 J/cm <sup>2</sup>	3.8-5.2 J/cm <sup>2</sup>	Same
Pulse duration	3 milliseconds	3 milliseconds	Same
Output energy	12-16 J	12-16 J	Same
Pulsing			Same
Control	Finger switch	Finger switch	
Output			Same
Channel	One channel	One channel	
Delivery	Direct Illumination to Tissue	Direct Illumination to Tissue	Same
Software	Yes	Yes	Same

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Control			
Electrical	IEC 60601-1	IEC 60601-1	Same
safety, EMC,	IEC 60601-1-2	IEC 60601-1-2	
Biological	IEC 60601-1-11	IEC 60601-1-11	
Evaluation	IEC 60601-2-57	IEC 60601-2-57	
	IEC 62471	IEC 62471	
	ISO 10993-5	ISO 10993-5	
	ISO 10993-10	ISO 10993-10	

# The discussion of differences exist between the subject and predicate devices is listed in following:

- D1: The subject device has same indication with equivalent device regarding remove unwanted hair, the difference is that the equivalent device is for OTC use and the subject device is for Prescription Use, this difference does not raise new questions of safety.
- D2: The subject device has been validated for cytotoxicity per ISO 10993- 5 and Irritation as well as Sensitization per ISO 10993-10 with positive results, therefore, the material difference of subject device with Predicate device TB-1755 (K183217) do not raise new questions of safety and effectiveness.
- D3: The difference of dimensions will not affect the safety and effectiveness.

# 7. Discussion of Non-Clinical Tests Performed for Safety and

#### effectiveness are as follows

The recognized consensus standards for safety of medical electrical equipment: ANSI AAMI ES60601-1, IEC 60601-1-11 for safety, IEC 60601-1-2 for electromagnetic compatibility, IEC 60601-2-57:2011 for performance and IEC 62304 for software verification, and ISO 10993-5:2009 for Cytotoxicity endpoints, ISO 10993-10:2010 for Sensitization and Irritation endpoints are complied. See below table for details:

Standards	Standards Name
ANSI AAMI ES60601- 1:2005/(R)2012 and A1:2012	Medical Electrical Equipment - Part 1: General Requirements For Basic Safety And Essential Performance
IEC 60601-1-2: 2014	Medical Electrical Equipment Part 1-2: General Requirements For Basic Safety And Essential Performance Collateral Standard: Electromagnetic Disturbances Requirements And Tests
IEC 60601-1-11: 2015	Medical Electrical Equipment - Part 1-2: General Requirements For Basic Safety And Essential Performance - Collateral

	Standard: Electromagnetic Disturbances - Requirements And
	Tests
ISO 60601-2-57: 2011	Particular requirements for the basic safety and essential
	performance of non-laser light source equipment intended for
	therapeutic, diagnostic, monitoring and cosmetic/aesthetic use
IEC 62471: 2006	Photobiological safety of lamps and lamp systems
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
IEC 62304:2006+A1:2015	Medical device software - Software life cycle processes

Software verification and validation was performed for the subject device in accordance with Guidance for the Content of Premarket Submissions for Software Contained in Medical Devices - Guidance for Industry and FDA Staff, May 2005.

# 8. Discussion of Clinical Accuracy Testing Performed

There was no clinical testing performed.

#### 9. Conclusions

Based on performance testing, comparison and analysis, the subject device IPL Hair Removal Device, model Al01 is as safe, as effective, and performs as well as the legally marketed predicate device.