

#### December 15, 2021

LED Technologies, Inc. Jelena Barbaric Compliance Manager 12821 Starkey Rd., Suite 4900 Largo, Florida 33773

Re: K210965

Trade/Device Name: reVive Light Therapy Essentials

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: OHS Dated: March 29, 2021 Received: March 31, 2021

#### Dear Jelena Barbaric:

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 <a href="https://www.fda.gov/medical-devices/medical-device-safety/medical-device-reporting-mdr-how-report-medical-device-problems">https://www.fda.gov/medical-device-problems</a>.

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

Enclosure

# DEPARTMENT OF HEALTH AND HUMAN SERVICES Food and Drug Administration

## **Indications for Use**

510(k) Number (if known)

Form Approved: OMB No. 0910-0120

Expiration Date: 06/30/2023 See PRA Statement below.

K210965			
Device Name reVive Light Therapy® Essentials			
Indications for Use (Describe) The reVive Light Therapy® Essentials is an Over the Counter (	OTC) device intended for treatment of wrinkles.		
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.

### \*DO NOT SEND YOUR COMPLETED FORM TO THE PRA STAFF EMAIL ADDRESS BELOW.\*

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Department of Health and Human Services Food and Drug Administration Office of Chief Information Officer Paperwork Reduction Act (PRA) Staff PRAStaff@fda.hhs.gov

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# 510(k) Summary - K210965

This summary of 510 (k) information is being submitted in accordance with the requirements of 21 CFR § 807.92.

Submission Date: December 14th, 2021

1. Submitter Information: LED Technologies, Inc. – Jelena Barbaric

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For Specification Developer: LED Technologies, Inc.

Attn: Lloyd Nelson

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#### 2. General Information

2.1 Classification Name: Light Based Over-The-Counter Wrinkle Reduction

2.2 Common/usual name: reVive Light Therapy® Essentials

2.3 Proprietary Names: reVive Light Therapy® Essentials

2.4 Classification: Class II

2.5 Classification Number: 878.4810

2.6 Product Code: OHS

2.7 Review Panel: General & Plastic Surgery

#### 3. Device Description

The reVive Light Therapy® Essentials is an over-the counter light emitting diode (LED) device, that emits energy for use in dermatology for the treatment of wrinkles. The device uses four types of LEDs: 605nm amber, 630nm red, 660nm red, and 880nm infrared.

The reVive Light Therapy® Essentials components include the device containing the LED module.

There are no user settings or adjustments required.

The unit is applied directly to the skin to ensure consistent administration of light during each treatment. The device does not contain any user serviceable components.

#### **Indications/Intended Use:**

The reVive Light Therapy® Essentials is an Over the Counter (OTC) LED device intended for use in treating wrinkles.

#### 4. Predicate Devices:

K171390 – dpl® II Panel (LED Technologies, Inc.)
K180445 – reVive Light Therapy® LED Cleansing System (LED Technologies, Inc.)

## **Comparison Chart**

Device	reVive Light Therapy® Essentials K210965	dpl® II Panel LED Technologies, Inc. K171390	reVive Light Therapy® LED Cleansing System LED Technologies, Inc. K180445
Wavelengths	605nm, 630nm, 660nm, 880nm	605nm, 630nm, 660nm, 880nm	605nm, 630nm, 660nm, 880nm
Irradiance source	LED	LED	LED
Treatment Area (cm²)	7	415	18.86
Treatment Time	3 minutes per treatment	3 minutes per treatment	3 minutes per treatment
Type/Class	ОТС	ОТС	ОТС
IFU	For treatment of wrinkles	For treatment of wrinkles	For treatment of wrinkles

#### 5. Summary of the technological characteristics of the device compared to predicate device:

- 1. Has the same intended use as the predicate devices (i.e., treatment of wrinkles).
- 2. Has the similar technical characteristics.
- **3.** Has the same method of operation.
- **4.** Utilizes the same treatment duration as the predicate devices.

The reVive Light Therapy® Essentials and the above referenced predicate devices are Over the Counter Devices used to treat wrinkles as defined in 21 CFR § 878.4810. These devices utilize red and IR diodes between 605 nm to 880 nm to provide narrow bands of light energy to treat wrinkles. The performance achieved by these devices is same with similar power output.

The reVive Light Therapy® Essentials is powered by Battery (3 AA Batteries) or via Universal USB power source.

The devices are intended to be placed directly on the skin. They are manufactured out of similar materials. Based upon comparison to the predicate devices, the reVive Light Therapy® Essentials has the same intended uses, with similar technological characteristics as predicate devices. The system performs as intended and does not raise any new safety or effectiveness issues.

#### 6. Performance Testing and Standards:

Testing of the reVive Light Therapy® Essentials, included functional performance testing, software validation, testing, and user safety testing.

Safety and functionality testing demonstrate that the reVive Light Therapy® Essentials conforms to various international consensus standards.

ANSI/AAMI ES 60601-1:2005® + 2012 and A1:2012 IEC 60601-1:2005, COR1:2006, COR2:2007, AMD1:2012: Medical Electrical Equipment part 1: General Requirements for Basic Safety and Essential Performance.

ANSI/AAMI/IEC 60601-1-2 (2014): Medical Electrical Equipment Part 1: General Requirements for Basic Safety and Essential Performance: Collateral Standard: Electromagnetic Compatibility.

#### **Biocompatibility**

ISO 10993-5:2009 – Cytotoxicity Test

ISO 10993-10:2010 - Intracutaneous reactivity test

ISO 10993-10:2010 - Skin Sensitization Test

The reVive Light Therapy® Essentials software was tested and validated in accordance with FDA's "Guidance for the content of Premarket Submissions for Software Contained in Medical Devices".

A Usability Study was conducted with 17 participants.

The results of the study found that:

100% of the participants were able to demonstrate the correct preparation of device for use.

100% of the participants were able to demonstrate correct device usage.

The conclusions drawn from nonclinical tests demonstrate that the device is safe, as effective, and performs as well as the legally marketed devices.

#### 7. Conclusion

After analysis of safety, indications, intended uses, dose rates, performance, features, design materials, power output, technological properties, treatment areas, treatment regimens and methods of operation, the manufacturer asserts that no significant differences exist between the subject device and predicate, and no different questions of safety and effectiveness arise. Therefore, the subject device is substantial equivalence to the predicate.