K113544

#### 510(k) Summary

JUL 2 7 2012

This 510(k) Summary is being submitted in accordance with the requirement of 21 CFR 807.92.

# 1. Contact Details

Submitter: Prospera Corporation Address: 405 Boulder Ct, Ste 500, Pleasanton, CA 94566, USA Contact Person: Jane Ding Tel: 925-225-0888; Fax: 925-225-0660; Email: jane@prosperacorp.com Date of Submission: 11/28/2011

Address of the manufacturing facility: Shenzhen Jingkehui Electronic Co., Ltd. 3F, Building 1, B Area, Xifa Industrial Area, Yintian Village, Xixiang Town, Baoan District, Shenzhen, China

#### 2. Proposed Device

Trade Name: Electronic Pulse Massager, Models PL009, PL009A, and PL029 Common Name: Transcutaneous electrical nerve stimulator Classification Name: Stimulator, Nerve, Transcutaneous, For Pain Relief Regulation Description: Transcutaneous electrical nerve stimulator for pain relief Regulation Medical Specialty: Neurology Review Panel: Neurology Product Code: GZJ Regulation Number: 21 CFR 882.5890 Device Class: II

#### 3. Predicate device

Predicate Device: TENS 3000 Stimulator 510(k) Number: K102014 Manufacturer: Koalaty Products, Inc.

#### 4. Description of Proposed Device

The Electronic Pulse Massager, which includes Models PL009, PL009A, and PL029, is a Transcutaneous Electrical Nerve Stimulator (TENS) for pain relief. TENS can help to relieve the pain caused by trauma or continual strain, and is suitable to be used on the user's back, neck, shoulders, legs, arms, and feet. The proposed Electronic Pulse Massager, which is compact, portable, and microprocessor-controlled, delivers a gentle electrical pulse to the underlying nerve through the wires and electrode pads placed on the skin of users. According to the need of users, the pulse intensity can be adjustable on the front control panel of the massager. Both Models PL009 and PL009A have five automatic stimulation programs and three manual programs, while Massager PL029 contains five automatic stimulation programs and eight selectable programs. The only difference between Models PL009 and PL009A is the former has a "REPEAT" program function and the latter does not. All these programs as well as the pulse intensity and time remaining can be displayed on the liquid crystal display screen of both massagers.

PL009, PL009A, and PL029 Electronic Pulse Massagers consist of the following:

- 1. Stimulation unit with the microprocessor-controlled integrated circuit, liquid crystal display, and ABS plastic shell included
- 2. Four AAA batteries for PL009 and PL009A; two AAA batteries for PL029
- 3. Two wires
- 4. Four pieces electrode pads (FDA-cleared under 510(k) #K100117, manufactured by SHENZHEN DONGDIXIN TECHNOLOGY CO, LTD.)

## 5. Intended Use Statement of Proposed Device

The proposed Electronic Pulse Massager, Models PL009, PL009A, and PL029, is intended for symptomatic relief of acute post traumatic pain, acute post surgical pain, and chronic intractable pain.

The proposed Electronic Pulse Massager, Models PL009, PL009A, and PL029, is intended for prescription use only.

### 6. Technological Characteristics

Both the proposed and predicate devices have the same intended use and fundamental technology. A side-by-side comparison of these two devices is included in the 510(k) submission, showing the proposed Electronic Pulse Massager, Models PL009, PL009A, and PL029, is substantially equivalent to the predicate device (Table 1, below).

Table 1.	Technological	characteristic	comparison	between	the	proposed	device	and
predicate	device							

		Proposed Device	Predicate Device	
1	510(k) Number		K102014	
2	Device Name	Electronic Pulse Massager Models PL009, PL009A, and PL029	TENS 3000 Stimulator	
3	Intended Use	Symptomatic relief of acute post traumatic pain, acute post surgical pain, and chronic intractable pain	Symptomatic relief of chronic intractable pain, acute post traumatic pain or acute post surgical pain	
4	Power Source	6V Battery for PL009 and PL009A; 3V Battery for PL029	9V Battery	
5 ·	Method of Line Current Isolation	Battery Supply N/A	Battery Supply N/A	
6	Number of Output Channels	2	2	
7	Method of Channel Isolation	By Enclosure	By Enclosure	
8	Software/Firmware /Microprocessor Control	Yes	Yes ·	
9	Automatic Overload Trip	No	No	
10	Automatic Over Current Trip	No	No	
11	Automatic No-Load Trip	No	No	

12	Automatic Shut Off	No	No	
13	Patient Override Control	No	No	
14	Indicator Display	Yes	Yes	
15	Timer Range	15 min, continue	15 min, continue	
16	Waveform	Biphasic or Monophasic Rectangular Pulse	Biphasic or Monophasic Rectangular Pulse	
17	Frequency	2-60 Hz	2-150 Hz	
18	Compliance with Voluntary Standards	EN55014-1, EN55014-2, EN60335-1, EN60335-2, EN62233, IEC60601-1, IEC60601-1-2, IEC60601- 2-10	IEC60601-1, IEC60601- 1-2, IEC60601-2-10	
19	Compliance with 21 CFR 898	Yes	Yes	
20	Weight	150 grams for PL009 and PL009A; 125 grams for PL029	115 grams	
21	Dimensions (HxWxT)	200x55x33mm for PL009 and PL009A 203x63x13mm for PL029	95x65x23.5mm	
22	Housing Materials & Construction	Enclosure: ABS Plastic	Enclosure: ABS Plastic	

## 7. Non-Clinical Tests Performed for Determination of Substantial Equivalence

The Electronic Pulse Massager, Models PL009, PL009A, and PL029 do not conduct, nor rely upon, clinical tests to determine substantial equivalence. Non-clinical testing was performed in order to validate the design and to assure conformance with the following voluntary design standards:

- (a) EN55014-1: Electromagnetic compatibility—Requirements for household appliances, electric tools, and similar apparatus—Part 1: Emission—Product family standard
- (b) EN55014-2: Electromagnetic compatibility—Requirements for household appliances, electric tools, and similar apparatus—Part 2: Immunity—Product family standard
- (c) EN60335-1: Household and similar electrical appliances Safety Part 1: General requirements
- (d) EN60335-2: Safety of household and similar electrical appliances—Part 2: Particular requirements for massage appliances
- (e) EN62233: Measurement methods for electromagnetic fields of household appliances and similar apparatus with regard to human exposure
- (f) IEC 60601-1 "Medical electrical equipment Part 1: General requirements for safety".
- (g) IEC 60601-1-2 "Medical electrical equipment Part 1-2: General requirements for safety Collateral Standard"
- (h) IEC 60601-2-10 "Medical electrical equipment Part 2: Particular requirements for the safety of nerve and muscle stimulators"

### 8. Conclusion

The Electronic Pulse Massager, Models PL009, PL009A, and PL029, has the same intended use and technological characteristics as the predicate device. The comparison of these devices

demonstrates that the submitted models are as safe, as effective, and perform as well as the predicate device. Therefore, the Electronic Pulse Massager, Models PL009, PL009A, and PL029, is substantially equivalent to the predicate device.



Food and Drug Administration 10903 New Hampshire Avenue Document Control Room –WO66-G609 Silver Spring, MD 20993-0002

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Alcon Research, Ltd. % Ms. Jane Ding Chief Executive Officer 405 Boulder Court, Suite 500 Pleasanton, CA 94566

Re: K113544

Trade/Device Name: Electronic Pulse Massager, Models PL009, PL009A and PL029 Regulation Number: 21 CFR 882.5890 Regulation Name: Transcutaneous electrical nerve stimulator for pain relief Regulatory Class: II Product Codes: GZJ Dated: June 21, 2012 Received: June 22, 2012

Dear Ms. Ding:

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. 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

device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <u>http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm</u> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm.

Sincerely yours, falls

Malvina B. Eydelman, M.D. Director Division of Ophthalmic, Neurological, and Ear, Nose and Throat Devices Office of Device Evaluation Center for Devices and Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known): K113544

Device Name: Electronic Pulse Massager, Models PL009, PL009A, and PL029

Indications for Use: Symptomatic relief of acute post traumatic pain, acute post surgical pain, and chronic intractable pain.

Prescription Use X (Part 21 CFR 801 Subpart D) AND/OR Over-The-Counter Use \_\_\_\_\_ (21 CFR 801 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE OF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

(Division Sign Off) Division of Ophthalmic, Neurological and Ear, Nose and Throat Devices

K1125 510(k) Number \_\_\_\_

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