

July 8, 2021

Shenzhen XFT Medical Limited % Field Fu Senior Consultant Shenzhen Joyantech Consulting Co., Ltd. 1713A, Zhongguan Times Square, Liuxian Avenue, Xili Town, Nanshan District Shenzhen, Guangdong China

Re: K211094

Trade/Device Name: Nerve and Muscle Stimulator

Regulation Number: 21 CFR 890.5850

Regulation Name: Powered Muscle Stimulator

Regulatory Class: Class II Product Code: IPF, HCC Dated: April 6, 2021 Received: April 12, 2021

Dear Field Fu:

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 <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

K211094 - Field Fu Page 2

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-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">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,

Patrick Antkowiak
Acting Assistant Director
DHT5B: Division of Neuromodulation
and Physical Medicine Devices
OHT5: Office of Neurological
and Physical Medicine 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: 06/30/2020 See PRA Statement below.

K211094
Device Name
Nerve and Muscle Stimulator
Indications for Use (Describe)
sEMG:
Biofeedback, Relaxation & Muscle Re-Education purposes;
NMES (muscle stimulation) and sEMG triggered stimulation (IncludingETS, PAS and MIRROR Mode):
1) Relaxation of muscle spasms;
2) Prevention or retardation of disuse atrophy;
3) Increasing local blood circulation;
4) Immediate post-surgical stimulation of calf muscles to prevent venous thrombosis;
5) Maintaining or increasing range of motion;6) Stroke Rehab by Muscle re-education.
b) Shoke Kehao by Muscle re-education.
Type of Use (Select one or both, as applicable)
Prescription Use (Part 21 CFR 801 Subpart D)
CONTINUE ON A SEPARATE PAGE IF NEEDED

This section applies only to requirements of the Paperwork Reduction Act of 1995.

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Version: A/1

510(k) Summary

This summary of 510(K) safety and effectiveness information is submitted As Required by requirements of SMDA and 21 CFR §807.92.

1 Administrative Information

Date of Summary prepared Manufacturer

information

Apr., 6, 2021

Shenzhen XFT Medical Limited.

Company address:

Room 203, Building 1, Biomedicine Innovations Industrial Park, #14 Jinhui Road, Pingshan New

District, Shenzhen, China. Contact person: Cindy Peng Phone: +86 755 29888818 Fax: +86-0755-28312625

E-mail: xftrs2@xft.cn

Submission Correspondent

卓远天成

Shenzhen Joyantech Consulting Co., Ltd.

Address: 1713A, 17th Floor, Block A,

Zhongguan Times Square, Liuxian Avenue, Xili Town, Nanshan District, Shenzhen, Guangdong

Province, China.

Contact person: Mr. Field Fu E-Mail: field@cefda.com;

Establishment registration number

2 Device Information

Type of 510(k) submission:

Traditional

Trade Name:

Nerve and Muscle Stimulator

Model:

XFT-2003k

Stimulator, Muscle, Powered;

Classification name:

Stimulator, Nerve,

Transcutaneous, For Pain Relief.

Version: A/1

Review Panel: | Physical Medicine; Neurology.

Product Code: | IPF; HCC.

Device Class: | |

Regulation Number: | 890.5850

3 Predicate Device Information

Sponsor: Thought Technology Ltd.

Device: Powered muscle stimulator and biofeedback device

Device#: SA9800

Trade name: | MYOTRAC INFINITI

510(K) Number: K053266

4 Device Description

The Nerve and Muscle Stimulator (model: XFT-2003K) is an electrical muscle stimulator for contraction of muscles as indicated above. The Nerve and Muscle Stimulator (model: XFT-2003K) is also an electromyography device. It is intended for medical purposes, such as to monitor and display the bioelectric signals produced by muscles, to stimulate peripheral nerves and to monitor and display the electrical activity produced by nerves. The indications for use are muscle reeducation, relaxation and biofeedback.

Nerve and Muscle Stimulator (model: XFT-2003K) is powered by MAINS SUPPLY AC 100-240V, 50-60Hz, and used together with Electrode cup (including Sponge).

The device is used for prescription. It is neither for life-supporting nor for implanting. It does not contain any drug or biological product and it does not need to be sterilized.

5 Intended Use/ Indications for Use

sEMG:

Biofeedback, Relaxation & Muscle Re-Education purposes;

NMES (muscle stimulation) and sEMG triggered stimulation (Including ETS, PAS and MIRROR Mode):

- 1) Relaxation of muscle spasms;
- 2) Prevention or retardation of disuse atrophy;

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- 3) Increasing local blood circulation;
- 4) Immediate post-surgical stimulation of calf muscles to prevent venous thrombosis;
- 5) Maintaining or increasing range of motion;
- 6) Stroke Rehab by Muscle re-education.

6 Technological characteristics of the subject device compared to the predicate device

Table 01: SE Comprehensive Comparison Table

Elements of Comparison	Subject Device	Predicate Device	Remarks
510(k) Number	Pending	K053266	
Manufacturer	Shenzhen XFT Medical Limited	Thought Technology Ltd.	
Device type/model	XFT-2003K	MYOTRAC INFINITI	1
Intended use/ Indication for use	sEMG: Biofeedback, Relaxation & Muscle Re-Education purposes; NMES (muscle stimulation) and sEMG triggered stimulation (IncludingETS, PAS and MIRROR Mode): 1) Relaxation of muscle spasms; 2) Prevention or retardation of disuse atrophy; 3) Increasing local blood circulation; 4) Immediate post-surgical stimulation of calf muscles to prevent venous thrombosis; 5) Maintaining or increasing range of motion; 6) Stroke Rehab by Muscle re- education.	1) Biofeedback, Relaxation and Muscle Re-Education purposes; 2) Relaxation of muscle spasms; 3) Prevention or retardation of disuse atrophy; 4) Increasing local blood circulation; 5) Immediate post-surgical stimulation of calf muscles to prevent venous thrombosis; 6) Maintaining or increasing range of motion. 7) Stroke Rehab by Muscle reeducation.	SE
Prescription or OTC	RX	RX	SE
Electrode	EC002: 25.57cm ² ; EC001: 9.621cm ² ;	Axelgaard Model 895340: 75 cm ² ; Axelgaard Model 895220: 25cm ² ;	Note 01

Product: Nerve and Muscle Stimulator

Elements of Comparison	Subject Device	Predicate Device	Remarks
Waveform	Pulsed,Symmetrical balanced biphasic wave (rectangular)	Asymmetrical balanced pulsed current	SE
Performance	Compliance with IEC 60601-2-10	Compliance with IEC 60601-2-10	Same
Biocompatibility	All the patient contacting materials are in compliance with ISO 10993-1/-5/-10	All the patient contacting materials are in compliance with ISO 10993-1/-5/-10	Same
Electrical Safety	Compliance with IEC 60601-1	Compliance with IEC 60601-1	Same
EMC	Compliance with IEC 60601-1-2	Compliance with IEC 60601-1-2	Same
Connecting Safety	21CFR 898	21CFR 898	Same

Note 01: Maximum Current Density and Maximum Power Density are equivalent respectively.

Table 02: SE General Specification Comparison Table

Parameter	Subject Device	Predicate Device	Remarks
510(k) Number	Pending	K053266	/
Device Name and Model	XFT-2003K	MYOTRAC INFINITI	1
Manufacturer	Shenzhen XFT Medical Limited	Thought Technology Ltd.	1
Power Source(s)	AC 110-240 50-60Hz	4 AAA batteries, single use alkaline or Rechargeable battery pack	Note 02
Method of Line Current Isolation	2MOPP	2MOPP	Same
Patient Leakage Current: Normal Condition (µA)	≤1	≤1	Same
Patient Leakage Current: Single Fault Condition (µA)	≤1	≤1	Same
Number of Output Modes(programs)	4	2	SE
Number of Output Channels:	Double	Double	Same
Synchronous or Alternating?	Synchronous	Synchronous	Same
Method of Channel Isolation	Transformer	Transformer	Same
Regulated Current or Regulated Voltage?	Regulated Current	Regulated Voltage	SE
Software/Firmware/Microproces	Yes	Yes	Same

Product: Nerve and Muscle Stimulator

Parameter		Subject Device	Predicate Device	Remarks	
sor Control?					
Automatic Ov Trip?	rerload	Yes	Yes	Same	
Automatic No	-Load Trip?	Yes	Yes	Same	
Automatic Sh	ut Off?	Yes	No	SE	
Patient Overr	ide Control?	Yes	Yes	Same	
Indicator	On/Off Status?	yes	Yes	Same	
Display:	Low Battery?	No.	Yes	Note 03	
	Voltage/Current Level?	Yes	Yes	Same	
Timer Range	(minutes)	1-60min, step 1min	1-120min	SE	
sEMG detecti	ion	Bipolar	Bipolar	same	
sEMG range (μ V)		1-2000	0-5, 0-10, 5-10, 0-20, 5-20, 10-20, 0-50, 10-50, 0-100, 50-100,0-200, 50-200, 100- 200, 0-500,100-500, 0- 1000, 0-2000	SE	
Feedback response frequency bands(Hz)		20-500	20-500	Same	
sEMG indication accuracy		±10%or±2 μ V, whichever is greater	unknown	The triggering	
Feedback threshold		±10%or±2 μV, whichever is greater	unknown	of electrical stimulation is not adverse affected	
Compliance with Voluntary Standards?		IEC 60601-1 IEC 60601-1-2 IEC 60601-2-10 IEC 60601-2-40	IEC 60601-1 IEC 60601-1-2 IEC 60601-2-10	SE	
Compliance v	vith 21 CFR 898	Yes	Yes	Same	
Weight		3.8kg 330g		Note 04	
Dimensions (mm) [W x H x D]		359×289×202mm	102*152*51mm	NOLE U4	

Note 02: DC adaptor meets IEC 60601-1 standard.

Note 03: The subject device is powered by AC, not battery.

Note 04: The subject device is not a portable device.

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Table 03: SE Detailed Comparison Table

Parameter	Subject De	evice	Predicate Device K053326	Remarks
Maximum Output	NMES Mode:	50V@500Ω	50V@ 500 Ω	SE
Voltage (volts) (+/-	P1 ~ P6, P8 ~ P10,	125V@ 2 kΩ	100V@ 2 kΩ	The NMES
20%)	P12 ~ P29, P33, P37, P39, P41 ~P42.	125V@10 kΩ	100V@ 10 kΩ	Modeof the Subject Device
	NMES Mode:	48.4V@500Ω	50V@ 500 Ω	is compared to
	P7, P11, P30, P34.	125V@ 2 kΩ	100V@ 2 kΩ	the STIMMode
		125V@10 kΩ	100V@ 10 kΩ	of the
	NMES Mode:	34.2V@500Ω	50V@ 500 Ω	Predicate Device.
	P31.	125V@ 2 kΩ	100V@ 2 kΩ	Device.
		125V@10 kΩ	100V@ 10 kΩ	The ETS
	NMES Mode:	41.9V@500Ω	50V@ 500 Ω	Mode of the
	P32, P36, P40.	125V@ 2 kΩ	100V@ 2 kΩ	Subject Device
		125V@10 kΩ	100V@ 10 kΩ	is compared to the Threshold
	NMES Mode:	39.5V@500Ω	50V@ 500 Ω	Mode of the
	P35.	125V@ 2 kΩ	100V@ 2 kΩ	Predicate
		125V@10 kΩ	100V@ 10 kΩ	Device.
	NMES Mode:	44.8V@500Ω	50V@ 500 Ω	The PAS
	P38.	125V@ 2 kΩ	100V@ 2 kΩ	Mode of the
		125V@10 kΩ	100V@ 10 kΩ	Subject Device
	NMES Mode:	15V@500Ω	50V@ 500 Ω	is compared to the Triggered Mode of the Predicate
	P43.	60V@ 2 kΩ	100V@ 2 kΩ	
		125V@10 kΩ	100V@ 10 kΩ	
	ETS Mode.	23.7V@500Ω	50V@ 500 Ω	Device.
		94.6V@ 2 kΩ	100V@ 2 kΩ	1
		125V@10 kΩ	100V@ 10 kΩ	The Mirror Mode of the
	PAS Mode.	50V@500Ω	50V@ 500 Ω	Subject Device
		125V@ 2 kΩ	100V@ 2 kΩ	is compared to
		125V@10 kΩ	100V@ 10 kΩ	the Triggered
	MIRROR Mode.	50V@500Ω	50V@ 500 Ω	Mode of the Predicate
		125V@ 2 kΩ	100V@ 2 kΩ	Device.
		125V@10 kΩ	100V@ 10 kΩ	
Maximum Output	NMES Mode:	100mA@500Ω	100.0mA@500Ω	SE
Current (specify	P1 ~ P6, P8 ~ P10,	62.5mA@ 2 kΩ	50mA@ 2 kΩ	
units) (+/- 20%)	P12 ~ P29, P33, P37,	12.5mA@10 kΩ	10mA@10 kΩ	The NMES
	P39, P41 ~P42. NMES Mode:	96.8mA@500Ω	100.0mA@500Ω	Modeof the
	P7, P11, P30, P34.	62.5mA@ 2 kΩ	50mA@ 2 kΩ	Subject Device is compared to
	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	12.5mA@10 kΩ	10mA@10 kΩ	the STIMMode
	NMES Mode:	68.4mA@500Ω	100.0mA@500Ω	of the
	P31.	62.5mA@ 2 kΩ	50mA@ 2 kΩ	Predicate
		12.5mA@10 kΩ	10mA@10 kΩ	Device.
	NMES Mode:	83.8mA@500Ω	100.0mA@500Ω	_

Product: Nerve and Muscle Stimulator

Parameter	Subject Device		Predicate Device K053326	Remarks
	P32, P36, P40.	62.5mA@ 2 kΩ	50mA@ 2 kΩ	The ETS
	F32, F30, F40.	12.5mA@10 kΩ		Mode of the
	NMES Mode:		10mA@10 kΩ	Subject Device
	l l	79mA@500Ω	100.0mA@500Ω	is compared to
	P35.	62.5mA@ 2 kΩ	50mA@ 2 kΩ	the Threshold
	NN450 N4 1	12.5mA@10 kΩ	10mA@10 kΩ	Mode of the
	NMES Mode:	89.6mA@500Ω	100.0mA@500Ω	- Predicate
	P38.	62.5mA@ 2 kΩ	50mA@ 2 kΩ	Device.
		12.5mA@10 kΩ	10mA@10 kΩ	The PAS
	NMES Mode:	30mA@500Ω	100.0mA@500Ω	Mode of the
	P43.	30mA@ 2 kΩ	50mA@ 2 kΩ	Subject Device
		12.5mA@10 kΩ	10mA@10 kΩ	is compared to
	ETS Mode.	47.4mA@500Ω	100.0mA@500Ω	the Triggered
		47.4mA@ 2 kΩ	50mA@ 2 kΩ	Mode of the
		12.5mA@10 kΩ	10mA@10 kΩ	Predicate
	PAS Mode.	100mA@500Ω	100.0mA@500Ω	Device.
		62.5mA@ 2 kΩ	50mA@ 2 kΩ	The Mirror
		12.5mA@10 kΩ	10mA@10 kΩ	Mode of the
	MIRROR Mode.	100mA@500Ω	100.0mA@500Ω	Subject Device
	WINTON WOOD.	62.5mA@ 2 kΩ	50mA@ 2 kΩ	is compared to
	+			the Triggered
		12.5mA@10 kΩ	10mA@10 kΩ	Mode of the
				Predicate
Dula	NIMEO Marta	050	F0 400	Device.
Pulse	NMES Mode:	250µs	50-400µs	SE
Duration/width [†] (μse	P1.	4=0	50.400	
c)	NMES Mode:	150µs	50-400µs	SE
	P2, P14, P24.			+
	NMES Mode:	50µs	50-400µs	SE
	P3, P16, P19, P26.			
	NMES Mode:	45µs	50-400µs	SE
	P4.			
	NMES Mode:	200µs	50-400µs	SE
	P5~P12, P18, P28, P41,			
	P42.			
	PAS Mode.			
	MIRROR Mode.			
	NMES Mode:	300µs	50-400µs	SE
	P13, P17, P21~P23, P			
	25,			
	P35.			
	NMES Mode: P15, P20, P27, P39.	100µs	50-400µs	SE
	NMES Mode:	400µs	50-400µs	SE
	P29~P34, P36~P38, P			
	40.			
	NMES Mode: P43.	50-500µs	50-400µs	SE
			İ	1

Product: Nerve and Muscle Stimulator

Parameter	Subject Device		Predicate Device K053326	Remarks
Frequency [†] (Hz) [or Rate [†] (pps)]	NMES Mode: P1, P5, P9, P13, P17, P21, P25, P29, P33, P37, P41.	5Hz	2-100Hz	SE
	NMES Mode: P2, P15, P18, P23, P38.	35Hz	2-100Hz	SE
	NMES Mode: P3, P7, P11, P19, P26, P31,P35, P39.	60Hz	2-100Hz	SE
	NMES Mode: P4.	100Hz	2-100Hz	SE
	NMES Mode: P6, P30, P34. MIRROR Mode.	30Hz	2-100Hz	SE
	NMES Mode: P8.	45Hz	2-100Hz	SE
	NMES Mode: P10, P12, P16, P20, P24, P27, P28, P32, P36, P40,P42.	40Hz	2-100Hz	SE
	NMES Mode: P14, P22.	25Hz	2-100Hz	SE
	NMES Mode: P43.	2~250Hz	2-100Hz	SE
	ETS Mode.	2-100Hz	2-100Hz	SE
	PAS Mode.	18Hz	2-100Hz	SE
For interferential modes only: -Beat Frequency (Hz)	NMES Mode: P1~P43, ETS Mode, PAS Mode, MIRROR Mode.	N/A	N/A	/
For Symmetrical multipha phases? sic wavefor	NMES Mode: P1~P43, ETS Mode, PAS Mode, MIRROR Mode.	N/A	N/A	/
ms only: Phase Duration [†] (in clude units), (state range, if applicable), (both phases, if asymmetrical	NMES Mode: P1~P43, ETS Mode, PAS Mode, MIRROR Mode.	N/A	N/A	/
Net Charge (microcoulombs (µC) per pulse) (If zero, state method of achieving zero	NMES Mode: P1~P43, ETS Mode, PAS Mode, MIRROR Mode	0@500Ω	0@500Ω	Same

area)

Product: Nerve and Muscle Stimulator Version: A/1 **Predicate Device Parameter Subject Device** Remarks K053326 net charge.) NMES Mode: 25@500Ω SE Maximum Phase $60@500\Omega$ Charge, (µC) P1, P6. 15@500Ω NMES Mode: $60@500\Omega$ P2, P14, P24, NMES Mode: 5@500Ω $60@500\Omega$ P3, P16, P19, P26. NMES Mode: 10@500Ω $60@500\Omega$ P4,P15, P20, P27, P39. NMES Mode: 20@500Ω $60@500\Omega$ P5, P8~P10, P12, P18, P28, P41, P42. PAS Mode. MIRROR Mode. NMES Mode: $19.36@500\Omega$ $60@500\Omega$ P7, P11. NMES Mode: 30@500Ω $60@500\Omega$ P13, P17, P21~P23, P25. NMES Mode: 40@500Ω $60@500\Omega$ P29, P33, P37. NMES Mode: 38.72@500Ω $60@500\Omega$ P30, P34,. NMES Mode: $27.36@500\Omega$ $60@500\Omega$ P31. NMES Mode: 33.52@500Ω $60@500\Omega$ P32, P36, P40. NMES Mode: 23.7@500Ω $60@500\Omega$ P35. 35.84@500Ω NMES Mode: $60@500\Omega$ P38. 50@500Ω NMES Mode: $60@500\Omega$ P43. ETS Mode. Axelgaard Model Maximum Current NMES: P43. $0.38977@500\Omega$ Note 05 Density,^{††}(mA/cm².) (EC001) 895220 $0.14696@500\Omega$ 0.24mA/cm2 (EC002) **Axelgaard Model** 895340 0.08mA/cm2 Maximum Power Note 06 Axelgaard Model Density,^{††} (mW/cm²) 895220 11.69@500Ω , (using smallest 16mW/cm2 NMES: P30, P34, P43. (EC001) electrode $4.41@500\Omega$ Axelgaard Model conductive surface (EC002) 895340

5.3mW/cm2

Product: Nerve and Muscle Stimulator Version: A/1

Parameter		Subject Device		Predicate Device K053326	Remarks
	(a) Pulses per burst		2~6000	4-2000	Note 07
(i.e., pulse trains):	(b) Bursts per second		0.05~1	0.05-0.5	1
	(c) Burst duration (seconds)		1~20	2-20	1
	(d) Duty Cycle: Line (b) x Line (c)		1	1	Same
ON Time (seconds))		1~20	2-20	1
OFF Time			1~20	2-50	1

Note 05: The treatment effect is mainly determined by Maximum Power Density.

Note 06: The Maximum Power Density at this level is effective, for instance, Maximum Power Density is effective when it is as small as 1.38 mW/cm2 (K172933), 1.44 mW/cm2 (K182203, model PL-029K12), 1.26 mW/cm2 (K182203, model PL-029K13:), 1.68 mW/cm2 (K191151, model PL-029K15) and even as low as 0. 32 mW/cm2 (K162517, PL-029K12, P3.)

Note 07: subject device's pulses per burst rate is significantly different than the predicate device, but the duty cycle of the subject device is same as the duty cycle of the predicate, so the differences do not affect safety and effectiveness of the subject device.

Maximum Output Voltage, Maximum Output Current, Pulse Duration/width, Frequency range of the subject device are respectively SE to or similar with the predicate; there are little differences between the Maximum Current Density, Maximum Power Density, Burst Mode (i.e., pulse trains) of the subject device and the predicate, but the differences do not exert adverse effect on the proposed device.

7 Brief discussion of the nonclinical tests

The subject device conforms to the following standards:

IEC 60601-1:2005+CORR.1:2006+CORR.2007+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 60601-2-40:2016 Medical Electrical Equipment - Part 2-40: Particular requirements for the basic safety and essential performance of electromyographs and evoked response equipment

IEC 60601-2-10:2016 Medical Electrical Equipment - Part 2-10: Particular Requirements For The Basic Safety And Essential Performance Of Nerve And Muscle Stimulators

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.

8 Brief discussion of clinical tests N/A.

9 Other information (such as required by FDA guidance/Test) No.

10 Conclusions

The subject device has features that are similar to the predicate device. The few differences do not affect the safety and effectiveness of the subject device. Thus, the subject device is substantially equivalent to the predicate device.