

February 25, 2022

Shenzhen Dongdixin Technology Co., Ltd.
Siping Yuan
R.A. Specialist
Floor 1-2, No.3 Building, Fanshen Xusheng Industrial Estate
Xilixiaobaimang Nanshan District
Shenzhen, Guangdong 518108
China

Re: K213043

Trade/Device Name: Levator Elite (Model LE9011)

Regulation Number: 21 CFR 890.5850

Regulation Name: Powered muscle stimulator

Regulatory Class: Class II

Product Code: IPF, KPI, HCC, GZJ

Dated: January 20, 2022 Received: January 27, 2022

Dear Siping Yuan:

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 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/training-and-continuing-education/cdrh-learn) 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,

Amber Ballard, PhD
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

Form Approved: OMB No. 0910-0120 Expiration Date: 06/30/2023

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

510(k) Number (if known)
K213043
Device Name
Levator Elite (Model LE9011)
Indications for Use (Describe)
NMES
Relaxation of muscle spasms
Prevention or retardation of disuse atrophy
Increasing local blood circulation
Muscle Re-education
Immediate post-surgical stimulation of calf muscles to prevent venous thrombosis
Maintaining or increasing range of motion
EMG Triggered Stimulation (ETS) (nonimplanted electrical continence device only)
Acute and ongoing treatment of stress, urge or mixed urinary incontinence and where the following results may improve
urinary control: Inhibition of the detrusor muscles through reflexive mechanisms and strengthening of pelvic floor muscles
Incontinence treatment for assessing EMG activity of the pelvic floor and accessory muscles (abdominal or gluteal)
TENS
Symptomatic relief and management of chronic (long-term), intractable pain
Adjunctive treatment in the management of post-surgical pain and post traumatic acute pain
EMG
Biofeedback, relaxation muscle training and muscle re-education
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

as required by section 21 CFR 807.92

Levator Elite (Model LE9011)

Date of Submission: 02/25/2022

Submitter's Name: Shenzhen Dongdixin Technology Co., Ltd.

Address: Floor 1-2, No.3 Building, Fanshen Xusheng Industrial

Estate Xilixiaobaimang 518108 Nanshan District,

Shenzhen P. R. China

E-mail: yuansp@dundex.com

Tel: +86(755) 27652471

FAX: +86(755) 27652674

Contact: Siping Yuan



1. Proposed Device:

Proprietary Name: Levator Elite(Model LE9011) Classification Name: Stimulator, Muscle, Powered

Regulation #: 21 CFR 890.5850

Panel: Physical Medicine Regulatory Class: Class II

Product Code: IPF, KPI, GZJ, HCC

2. Predicate Device:

Predicate Device	510(k)	Trade Name	Manufacturer
Predicate Device1 K201290 Medline DeNovo 4Pro		Medline Industries Inc	
		Electrical Stimulation Device	
Predicate Device2 K201014		MyOnyx System	Thought Technology Ltd.

3. **Device Description:**

Levator Elite(Model LE9011) is a single channel, hand-held, non-sterile, battery-powered, multi-patient device intended to be used by adult patients under the supervision of a trained clinical healthcare provider. The device contains EMG biofeedback, TENS (Transcutaneous Electrical Nerve Stimulation), ETS (EMG triggered stimulation) and NMES (Neuromuscular Electrical Stimulator). Each of them has pre-set and custom programs. The parameters of the device are controlled by the buttons, the levels of intensity are adjustable to the needs of the patient and treatments prescribed by their healthcare providers.

The device is designed to provide safe and effective electrical stimulation by sending small electrical currents to underlying nerves and muscle groups via electrode pads applied on the skin or through a vaginal probe/rectal probe (for incontinence treatment protocols only). It can be used with or without linkage to a PC. Connecting the device with the PC via USB cable, the data can be transmitted between PC and device (It needs purchase the PC software Nu-Tek System and USB connection cable).

For EMG biofeedback, EMG is for detecting the signal of muscle, which display muscle strength via EMG biofeedback bar graph or waveform format viewed on the LCD screen of the unit. Surface EMG is used for recording from superficial muscles in clinical or kinesiological protocols, where intramuscular electrodes are used for investigating deep muscles or localized muscle activity.

For NMES, NMES is the elicitation of muscle contraction using electric impulses. The impulses are generated by a device and delivered through the electrodes in direct proximity to the muscles to be stimulated or via the probe. The impulses mimic the action potential coming from the central nervous system, causing the muscles to contract. NMES is both a form of electrotherapy and of muscle training. Neuromuscular Stimulation has been used to stimulate muscle and nerve fibers for muscle strengthening, maintenance of



muscle mass and strength during prolonged periods of immobilization, selective muscle retraining.

For ETS (i.e. EMG triggered stimulation), ETS involves initiating a voluntary contraction for a specific movement until the muscle activity reaches a threshold level. As soon as the EMG activity reaches a target threshold then an assisting electrical stimulus begins which helps to support the contracted muscle. A microprocessor connected to the surface electrodes, vaginal probe or rectal probe monitors the EMG activity levels as well as administers the neuromuscular stimulation. The target threshold could be set to automated regime, when it goes up and down depending on the running muscle performance.

For TENS, the device provides a non-invasive, low-risk nerve stimulation in order to reduce pain (both acute and chronic). In TENS, mild electrical impulses are transmitted through the skin via surface electrodes to relieve muscle pain by modifying the body's pain perception. TENS does not cure problematic physiological conditions: it only helps to control the pain perception.

LE9011 consists of the following elements:

- Main device
- Pedestal
- · Lead wire
- Electrode pad
- · Vaginal probe
- Rectal probe (optional)
- PC Software(optional)
- USB Cable(optional)

4. Indications for Use:

NMES

- Relaxation of muscle spasms
- Prevention or retardation of disuse atrophy
- Increasing local blood circulation
- Muscle Re-education
- Immediate post-surgical stimulation of calf muscles to prevent venous thrombosis
- Maintaining or increasing range of motion

EMG Triggered Stimulation (ETS) mode (nonimplanted electrical continence device only):

- Acute and ongoing treatment of stress, urge or mixed urinary incontinence and where
 the following results may improve urinary control: Inhibition of the detruser muscles
 through reflexive mechanisms and strengthening of pelvic floor muscles
- Incontinence treatment for assessing EMG activity of the pelvic floor and accessory muscles (abdominal or gluteal)



TENS

- Symptomatic relief and management of chronic (long-term), intractable pain
- Adjunctive treatment in the management of post-surgical pain and post traumatic acute pain

EMG

 Biofeedback, relaxation muscle training and muscle re-education



5. Comparison of Technological Characteristic Comparison of proposed device and predicate device

No.	Item	Proposed device	Primary Predicate device	Secondary Predicate	S.E. Discussion
				device	
1	510K#	K213043	K201290	K201014	N/A
2	Device Name	Levator Elite(Model LE9011)	Medline DeNovo 4Pro	MyOnyx System	N/A
	and Model		Electrical Stimulation Device		
3	Manufacturer	Shenzhen Dongdixin Technology	Medline (Sponsor)	Thought Technology	N/A
		Co., Ltd.	Verity (Manufacturer)	Ltd.	
4	Product Code	IPF	IPF	KPI	Similar, the proposed
		KPI	KPI	HCC	device does not have FES
		нсс	HCC		function.
		GZJ	GZJ		
			GZI		
5	Classification	Class II	Class II	Class II	Same
	Code				
6	Regulation	21 CFR 890.5850	21 CFR 890.5850	21 CFR 876.5320	Similar, the proposed
	Number	21 CFR 876.5320	21 CFR 876.5320	21 CFR 882.5050	device does not have FES
		21 CFR 882.5050	21 CFR 882.5050		function.
		21 CFR 882.5890	21 CFR 882.5890		
			21 CFR 882.5810		
7	Indications for	NMES	For EMG mode:	The MyOnyx System is	Similar, the proposed
	use	 Relaxation of muscle spasms 	- Relaxation muscle training and	indicated for acute	device does not have FES
		 Prevention or retardation of 	muscle re-education	and ongoing	function.
		disuse atrophy		treatment of stress,	
		 Increasing local blood 	For NMES (also known as STIM)	urge, or mixed urinary	
		circulation	mode:	incontinence, where	
		Muscle Re-education	- Relaxation of muscle spasms	urinary control may be	
		Immediate post-surgical	- Prevention or retardation of	improved through	
		stimulation of calf muscles to	disuse atrophy	electrical stimulation	
		prevent venous thrombosis	- Increasing local blood	that strengthens the	



Maintaining	or increasing c	circulation	pelvic floor muscles or	
range	-	- Immediate post-surgical	inhibits the detrusor	
of motion	S	stimulation of calf muscles to	muscle through	
		prevent venous thrombosis	reflexive mechanisms.	
EMG Triggered	Stimulation (ETS) -	- Maintaining or increasing	The system also uses	
(nonimplanted	electrical r	range of motion	EMG-based or	
continence dev	ice only):	- Muscle Re-Education	pressure-based	
Acute and or	going treatment		biofeedback to help	
of stress, urg	e or mixed urinary F	For TENS mode:	control and	
incontinence	and where the -	- Symptomatic relief and	strengthen the pelvic	
following res	ults may improve r	management of chronic	floor muscles in the	
urinary contr	ol: Inhibition of ((long-term), intractable pain	treatment of urinary	
	•	- Adjunctive treatment in the	incontinence.	
reflexive med	chanisms and r	management of post-surgical		
strengthenin	g of pelvic floor p	pain and post traumatic acute		
muscles	ŗ	pain		
• Incontinence				
	•	For EMG Triggered Stimulation		
·	, ,	(ETS) mode (nonimplanted		
muscles (abd	,	electrical continence device only):		
TENS	-	-Acute and ongoing treatment		
Symptomatic	relief and o	of stress, urge or mixed urinary		
managemen	t of chronic i	incontinence and where the		
(long-term),i	-	following results may improve		
Adjunctive tr	eatment in the υ	urinary control: Inhibition of the		
management		detruser muscles through		
		reflexive mechanisms and		
pain		strengthening of pelvic floor		
		muscles		
EMG		-Incontinence treatment for		
Biofeedback,	relaxation muscle a	assessing EMG activity of the		



		training and muscle re-education	pelvic floor and accessory muscles (abdominal or gluteal)		
			For FES - Helps to relearn voluntary motor functions of the extremities		
8	Prescription vs. OTC	Prescription Use	Prescription Use	Prescription Use	Same
9	Sterile vs. Non-Sterile	Non-Sterile	Non-Sterile	Non-Sterile	Same
10	Waveforms	Symmetrical Biphasic	Symmetrical Biphasic DC zero[TENS and HAN (TENS)] Symmetrical Biphasic [NMES]	Symmetrical, rectangular, bipolar, biphasic	Same
11	Target Population	Adult	Adult	Adult	Same
12	Power Source	DC 6V, 4*AA batteries	4x AA NiMh 4.8V Rechargeable Battery pack	Internal Battery (not user replaceable): Rechargeable (3200mAh) Li-ion Polymer battery certified to IEC 62133 – up to 8 hours of autonomous device operation; External 15W, 5V Medical Grade (Class II Double Insulated) Power Supply /Battery Charger	Different, but the proposed device has passed the testing according to the requirement of IEC60601-1. The difference does not raise any safety issue.



13	Electrical Type	Type BF	Type BF	Type BF	Same
14	Patient Leakage Current (μA) -Normal condition	1uA	N/A Battery Operated Device (<100 μA patient leakage)	/	Different, but the proposed device has passed the testing according to the requirement of IEC60601-1. The difference does not raise any safety issue.
15	Patient Leakage Current (µA) -Single fault condition	N/A	N/A Battery Operated Device (<100 µA patient leakage)	/	Same
16	Number of Output Modes	Two Muscle stimulator: Electrodes TENS (Transcutaneous electrical nerve stimulator): Electrodes	Two Muscle stimulator: Electrodes TENS (Transcutaneous electrical nerve stimulator): Electrodes	One Muscle stimulator: Electrodes	Same with primary predicate device.
17	Number of Output Channels	1	4	4	Different, the number of output channels is the feature of device, doesn't affect the safety and effectiveness.
18	Synchronous or Alternating?	N/A, one channel	Synchronous and Alternating	/	Different, the proposed device has one channel.
19	Method of Channel Isolation	N/A, one channel	Each channel is the middle of an H bridge. Each channel is in a high impedance state except when it is activated for a specific output pulse		
20	Regulated	Constant current	Constant current on all four	Constant current	Same



	Current or Regulated Voltage?		channels		
21	Software/Firmw are/ Micro processor Control?	Yes	Yes	Yes	Same
22	Automatic Overload Trip	Yes	No Device can withstand indefinite short circuit	Yes	Different, but the proposed device has passed the testing according to the requirement of IEC60601-1. The difference does not raise any safety issue.
23	Automatic No Load contact Trip	Yes	Yes	Yes	Same
24	Automatic Shut off	Yes	Yes	Yes	Same
25	User Override Control?	Yes	Yes	Yes	Same
26	Indicator Display: - On/Off - Low Battery? - Voltage/ Current Level?	Yes	Yes	Yes	Same
27	Compliance with Voluntary Standards?	Yes IEC 60601-1:2005+A1:2012 IEC60601-1-2 IEC 60601-1-6 IEC 60601-2-10	Yes IEC 60601-1:2005+A1:2012 IEC60601-1-2 IEC 60601-1-6 IEC 60601-2-10	Yes IEC/ES 60601-1 (Ed. 3.1) IEC 60601-1-6 IEC 60601-2-10	Similar



		T			1
			FCC PART 15 Subpart B:2008	IEC 60601-2-40	
			Class B	IEC 60601-1-2 (4th Ed.)	
			FCC CFR Title 47 Part 15 Subpart		
			С		
28	Compliance	Yes. leads with conductive	Yes. leads with conductive	Yes.	Same
	with 21 CFR	connection to a	connection to a		
	898?	patient are constructed such that	patient are constructed such		
		no	that no		
		conductive connection remote	conductive connection remote		
		from the	from the		
		patient can contact earth or	patient can contact earth or		
		hazardous	hazardous		
		voltages	voltages		
29	Weight (grams.)	158g without batteries	160 grams (0.35 lbs) without	272g	Different, the different
	3 1 (8 1 1 7		batteries and		weight and dimension
			other accessories		doesn't affect the safety
30	Dimensions	139×68×32mm	96×160×36mm	155×83×20.95mm	and effectiveness.
	(mm.)				
31	Housing	Plastic	Plastic	Polycarbonate and	Same with primary
	Materials &	(Injection Molded ABS)	(Injection Molded ABS)	ABS blend;	predicate device.
	Construction	(, 5555	(, 550.55	Plexiglass tinted front	produced devices
	2011311 4011011			panel, aluminum ring	
				for structural support	
NMES	S Waveform			Tot structural support	
1	Shape	Symmetrical Biphasic	Symmetrical rectangular		Similar
	Shape	Symmetrical Diphasic	Biphasic [TENS and HAN		Similar
			(TENS)]		
			Symmetrical rectangular		
			Biphasic [NMES]		
2	May Output	45V @5000			Sama
2	Max Output	45V @500Ω	45V @500Ω		Same
	Voltage (V)	70V @2kΩ	70V @2kΩ		



	±10%	70V @10kΩ	70V @10kΩ (open lead detected above 0.5	
			[mA])	
3	Max Output	90mA @500Ω	90mA @500Ω	
	Current (mA)	35mA @2kΩ	35 mA @2kΩ	
	±10%	7mA @10kΩ	7 mA @10kΩ	
			(open lead detected above 0.5 [mA])	
4	Pulse Width	50-450μs	50-450μs in 10μs step to 100μs and thereafter 25μs up to 450μs	 Same
5	Frequency (Hz)	2-100Hz	2-100Hz in 1Hz steps from 2 to 20Hz	 Same
			thereafter in steps of 5Hz up to 100Hz	
6	Net Charge (μC/pulse)	0 μC	0 μC	 Same
7	Maximum	40.5μC [90mA for 450μs]	40.5(μC) [90mA for 450μs]	 Same
	Phase Charge (μC) 500Ω			
8	Average	27mA	Not publicly available	 Same
	Current(I_{RMS} , 500 Ω)			
9	Maximum	Electrode pad: 1.42 mA/cm²	1.42mA /sq cm for electrode of	 Same
	Average		19sq cm	
	Current Density 500Ω			
10	Maximum	Electrode pad: 19 mW/cm²	19[mW/cm²] @ 500Ω for	 Same
	Average Power		Electrode of 19sq cm	
	Density			
11	On Time (sec)	2-99 secs	2-99 secs	 Same
12	Off Time (sec)	2-99 secs	2-99 secs	 Same



13	Treatment Time(min)	1-99 minutes	2-99 minutes		Similar			
TENS	TENS Waveforms							
1	Shape	Symmetrical Biphasic	Symmetrical rectangular Biphasic [TENS and HAN (TENS)]		Same			
2	Max Output Voltage (V) ±10%	40V @500Ω 70V @2kΩ 70V @10kΩ	40V @500Ω 70V @2kΩ 70V @10kΩ (open lead detected above 0.5 [mA])		Same			
3	Max Output Current (mA) ±10%	80mA @500Ω 35 mA @2kΩ 7 mA @10kΩ	80mA @500 Ω 35 mA @2k Ω 7 mA @10k Ω (open lead detected above 0.5 [mA])					
4	Pulse Width	50-450μs	50-450μs in 5μs steps		Same			
5	Frequency (Hz)	2-120Hz	2-120Hz in 1Hz steps from 2 to 20Hz thereafter in steps of 5Hz up to 100Hz		Same			
6	Net Charge (μC/pulse)	0 μC	0 μC		Same			
7	Maximum Phase Charge (μC) 500Ω	36μC [80mA for 450μs]	not publicly available		Same			
8	Average Current(I_{RMS} , 500 Ω)	26.3mA	not publicly available		Same			
9	Maximum Average	Electrode pad: 1.38 mA/cm ²	not publicly available		Same			



	Command Damaito			
	Current Density			
10	500Ω	51 . 1 . 140 . 141 . 2		1
10	Maximum	Electrode pad:18 mW/cm ²	not publicly available	 Same
	Average Power			
	Density	,	,	-
11	On Time (sec)	N/A	N/A	 Same
12	Off Time (sec)	N/A	N/A	 Same
13	Treatment	1-99 minutes	0-99 minutes	 Similar
	Time(min)			
Incon	ntinence Programs	(For vaginal probe only)		
1	Shape	Symmetrical Biphasic	Symmetrical Rectangular	 Same
			Biphasic	
2	Max Output	45V @500Ω	40V @500Ω	 Same
	Voltage (V)	70V @2kΩ	70V @2kΩ	
	±10%	70V @10kΩ	70V @10kΩ	
			(open lead detected above 0.5	
			[mA])	
3	Max Output	90mA @500Ω	90mA @500Ω	
	Current (mA)	35 mA @2kΩ	35 mA @2kΩ	
	±10%	7mA @10kΩ	7 mA @10kΩ	
			(open lead detected above 0.5	
			[mA])	
4	Pulse Width	50-450μs	50-450μs in 5μs steps	 Same
5	Frequency (Hz)	2-120Hz	2-120Hz in 1Hz steps from 2 to	 Same
			20Hz thereafter in steps of 5Hz	
			up to 100Hz	
6	Net Charge	0 μC	0 μC	 Same
	(μC/pulse)			
7	Maximum	40.5μC [90mA for 450μs]	40.5(μC) [90mA for 450μs]	 Same
	Phase Charge			



	(μC) 500Ω				
8	Average Current(I_{RMS} , 500 Ω)	29.5mA	not publicly available		Similar. The difference is because that our vaginal probe has a different
9	Maximum Average Current Density 500Ω	Vaginal probe NT1041: 3.9mA/cm ²	Everyway Incontinence Stimulation Electrode: 4.2mA/cm ²		surface area, which leads to slightly different max current/power density
10	Maximum Average Power Density	Vaginal probe NT1041: 57mW/cm²	Everyway Incontinence Stimulation Electrode: 56mW/cm²		
11	On Time (sec)	2-99 s	2-99 secs		Same
12	Off Time (sec)	2-99 s	2-99 secs		Same
Incor	ntinence Programs	(For rectal probe only)			
1	Stimulator Output	0-100mA		0-100mA	Same
2	Waveforms	Symmetrical Biphasic		Symmetrical, rectangular, bipolar, biphasic	
3	Charge/Pulse at 500ohms	80μC (100mA for 400μs)		80μC (100mA for 400μs)	
4	Frequency	5-80Hz		5-80Hz	
5	Pulse Width	150-400μs		150-400μs	
6	Ramps	0.1-9.9 seconds		0.1 – 9.9 seconds (0.1s increase)	Same
7	Duty Cycle	On (sec): 2-20 Off (sec): 2-50		On (sec): 2-20 Off (sec): 2 -50	Same
8	Average Current(I _{RMS} ,	25.3mA		not publicly available	Same



	500Ω)									
9	Maximum Average Current Density 500Ω(Rectal probe)	6.76 mA/ cm ²		not publicly available	Same					
10	Maximum Average Power Density (Rectal probe)	86mW/cm²		not publicly available	Same					
Biofe	Biofeedback(EMG)									
1	EMG Range in μV	0-2000μV	0- 2000 in steps of 0.1μV to 20μV and thereafter steps of 1μV up to 2000μV	0-4420 μV	Same with primary predicate device.					
2	EMG Bandwidth	20-500 Hz	10- 370Hz	20-500 Hz	Similar with primary predicate device, and the proposed device is equivalent with secondary predicate device.					
3	EMG Signal Procession	Root Mean Square (RMS)	Root Mean Square (RMS)	Root Mean Square (RMS)	Same					
4	EMG Detection	Bipolar	Bipolar	Bipolar	Same					
5	Work Period (sec)	2-99 s	2-99 s	2 - 20 seconds	Same with primary predicate device.					
6	Rest Period (sec)	2-99 s	2-99 s	2 - 50 seconds	Same with primary predicate device.					
7	Session Duration(min)	1-99 minutes	1-99 minutes	1-120 minutes	Same with primary predicate device.					
8	Feedback Modes	Line graph, Bar graph,	Line graph, Bar graph,	Line graph, Bar graph,	Similar					



Digital	al display,	Digital display,	Digital display,	
Signal	l linked animations	Signal linked animations	Signal linked	
Voice	•		animations	
			Voice	



6. Performance Data:

The following performance data are provided in support of the substantial equivalence determination:

6.1 Biocompatibility testing

The Levator Elite (Model LE9011) itself has no direct or indirect contact with the patient. The accessories (Electrode pad, Vaginal probe and Rectal probe) would be the primary patient-contacting components, as they have direct contact with the patient at the treatment site. The biocompatibility evaluation for the accessories (Electrode pad, Vaginal probe and Rectal probe) was conducted in accordance with the International Standard ISO 10993-1 "Biological Evaluation of Medical Devices – Part 1: Evaluation and Testing Within a Risk Management Process". The testing included the following tests:

- Cytotoxicity
- Sensitization
- Irritation

6.2 Electrical safety and electromagnetic compatibility (EMC)

Electrical safety and EMC testing were conducted on the subject device. The system complies with the IEC 60601-1, IEC60601-1-11 and IEC 60601-2-10 standards for safety and the IEC 60601-1-2 standard for EMC.

6.3 Software Verification and Validation Testing

Software verification and validation testing were conducted and documentation was provided as recommended by FDA's Guidance for Industry and FDA Staff, "Guidance for the Content of Premarket Submissions for Software Contained in Medical Devices." The software for this device was considered as a "Moderate" level of concern.

6.4 Output waveform Testing

For each program, oscilloscope tracing diagrams describing the electrical output waveform was provided to verify the output specifications of the device according to IEC 60601-2-10.

7. Conclusions

The intended use and basic technological characteristics of the Levator Elite (Model LE9011) is substantially equivalent with those of the Predicate device K201290 and K201014. Any technological differences do not raise new questions regarding safety and effectiveness.