



## ***RF Exposure Evaluation Report***

***For Theranica Bioelectronics Ltd.***

### **Equipment Under Test:**

***Nerivio transceiver***

***Model: FGD000075***

***FCC ID: 2AOH8-NM***

***From The Standards Institution  
Of Israel***

***Industry Division***

***Electronics & Telematics Laboratory***

***EMC Branch***



## 1. Applicant information

Applicant:	Theranica Bioelectronics Ltd..
Address:	45 Ha-Omanut St., Netanya, 4250438 Israel
Sample for test selected by:	The customer
The date of tests:	1, 6 April 2020

### Equipment under test information

<b>Description of Equipment Under Test (EUT):</b>	Nervio transceiver
<b>Model:</b>	FGD000075
<b>Software version of radio unit:</b>	FW Version 3.2.0.1
<b>Hardware version:</b>	ELC-PCA-010-3.0
<b>Manufactured by:</b>	Theranica Bio-Electronics Ltd.

## 2. Test performance

<b>Location:</b>	SII EMC Section
<b>Purpose of test:</b>	To prove the safety of radiation harmfulness to the human body for our product
<b>Test specifications:</b>	FCC KDB 447498 D01 General RF Exposure Guidance v06

This Test Report contains 4 pages and may be used only in full.	This Test Report applies only to the specimen tested and may not be applied to other specimens of the same product.
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## 3. Summary of test:

Using the general SAR test exclusion guidance in Section 4.2.4 of KDB 447498 D01 v06, we show the device meeting the SAR exemption.

Electronics and  
Telematics Laboratory

August 30, 2020

Name: Eng. Yuri Rozenberg  
Position: Head of EMC Branch.

Name: Michael Feldman.  
Position: Test engineer.



#### 4. Equipment under test description.

\*The applicant provided description.

##### 4.1 General description

Nerivio (NM, the EUT) is a wearable, battery-powered device for the acute treatment of migraines with or without aura. Nerivio is operated via a mobile application. The device is worn on a user's upper arm and delivers transcutaneous electrical nerve stimulation ("TENS") via weak electrical pulses to achieve migraine pain inhibition via conditional pain modulation (CPM). Treatments with Nerivio are intended to be self-administered by the user at onset of a migraine attack. The NM uses standard BLE 4.2 for communication utilizing off-the-shelf Cypress controller.

##### EUT technical characteristics

Transmitter technical characteristics:		Note
Assigned frequency band	2400 MHz – 2483.5 MHz	-
Operating frequency range:	2402 MHz – 2480 MHz	-
DTS transmitter:	BLE 4.2	-
Types of modulation:	GFSK	-
Declare temperature range:	0°C - 40°C	Normal indoor use
Antenna information		
Type	Manufacturer/Model	Antenna gain, dBi
BT PCB printed antenna	Cypress. MIFA PCB printed	1.6



## 5. FCC and ISED Exemption Limits for Routine Evaluation

### FCC SAR test exclusions per KDB 447498

KDB 447498 D01 General RF Exposure Guidance v06 Section: 4.3.1.

Standalone SAR test exclusion considerations states:

For 100 MHz to 6 GHz and test separation distances  $\leq 50$  mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

$$\left[ \frac{\text{max. power of channel, including tune-up tolerance, mW}}{(\text{min. test separation distance, mm})} \cdot \sqrt{f(\text{GHz})} \right] \leq 3.0 \text{ for 1-g SAR, and } \leq 7.5 \text{ for 10-g extremity SAR, 30 where}$$

- $f(\text{GHz})$  is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison
- The values 3.0 and 7.5 are referred to as numeric thresholds.

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  mm, and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is  $< 5$  mm, a distance of 5 mm according to 4.1 f) is applied to determine SAR test exclusion.

### SAR Test Exclusion Threshold

Freq. [GHz]	d [mm]	Max. power [mW]	Calculation result	FCC Limit @ 5 mm [mW]	SAR Exclusion applicable (Yes/No)
2.4	5	0.66	0.205	3.0	Yes

**Summary:** SAR test exclusion threshold is  $< 3$  for separation distance of 5 mm. Therefore, SAR test is not required.