



# PoNS<sup>®</sup> Portable Neuromodulation Stimulator

## WHAT IS PoNS<sup>®</sup>?

PoNS is an innovative medical device that delivers a mild electrical stimulation to the surface of the tongue.

The PoNS device is indicated for use as a short term treatment of gait deficit due to mild to moderate symptoms of multiple sclerosis and is to be used as an adjunct to a supervised therapeutic exercise program for adults 22 years of age and over by prescription only.



## MULTIPLE SCLEROSIS

**1 Million**

Americans estimated to be affected by MS<sup>1</sup>

**70%**

Of diagnosed people report having difficulty walking<sup>2</sup>

## THE SCIENCE BEHIND PoNS<sup>3,4</sup>

### In The Tongue:

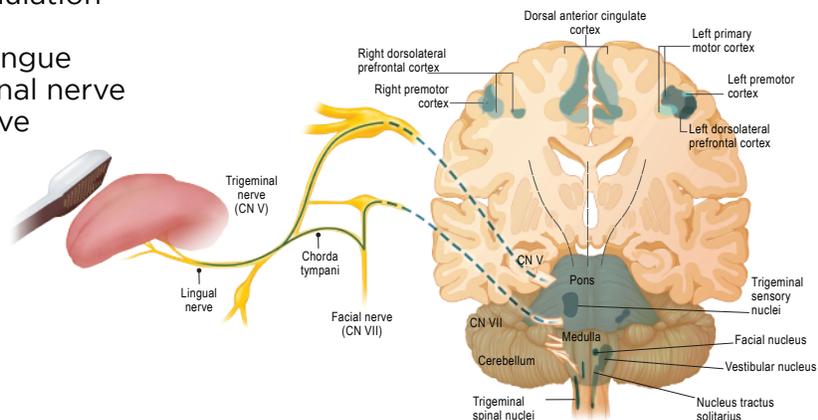
When the PoNS device is on, translingual neurostimulation (TLNS) is initiated.

- TLNS delivers electrical impulses through the tongue
- This stimulates the lingual branch of the trigeminal nerve and the chorda tympani branch of the facial nerve

### In The Brain:

This stimulation triggers a flow of neural impulses to the brain structures that control gait.

- Engaging neural networks initiates a cascade of activity in the brain when combined with physical activity
- Providing a sustained neuromodulatory effect resulting in neuroplastic changes



## THE STUDIES BEHIND PoNS

### TYLER ET, AL.<sup>5</sup>

All subjects in the active PoNS + PT group experienced at least a 4-point improvement in the Dynamic Gait Index (DGI)

*average 7.95*

### LEONARD ET, AL.<sup>6</sup>

Gait imagery revealed brain activation in the bilateral premotor regions at baseline and in the left motor region after 14-weeks of PoNS Therapy.

### REAL WORLD EVIDENCE<sup>7</sup>

42 people with MS treated with PoNS in Canada

58% of people had at least a 4-point improvement in their Functional Gait Assessment

## 14-WEEKS OF PoNS THERAPY

PoNS Therapy is a comprehensive 14-week program combining in-clinic (primarily in the first two weeks) and in-home use of the PoNS device guided by a PoNS Trainer to focus on targeted therapeutic exercises.

**Tailored PT:** Therapeutic activities used in combination with PoNS may include gait training, balance training, breathing and awareness exercises, as well as additional neurorehabilitative exercises.

## BECOME A PoNS TRAINER AND HELP INDIVIDUALS WITH MS GET BACK IN STEP WITH LIFE

- **FREE** online course, no more than 3-hours
- **On-demand, complete at your own pace**
- Learn the Mechanism of Action for PoNS
- Learn how to use the PoNS device
- Learn how to utilize the PoNS software and interpret the data



## LEARN MORE ABOUT THE PoNS TRAINING PROGRAM TODAY!

Visit: [www.ponstherapy.com/training/](http://www.ponstherapy.com/training/) or email [training@heliusmedical.com](mailto:training@heliusmedical.com)

**CONTRAINDICATIONS:** The PoNS<sup>®</sup> device delivers electrical stimulation directly to the surface of the tongue. Precautions for use are similar to those for transcutaneous electrical nerve stimulation (TENS).

Electrical stimulation should not be used: If there is an active or suspected malignant tumor, in areas of recent bleeding or open wounds, in areas that lack normal sensation. PoNS has not been tested on, and thus should not be used by, individuals who are pregnant. Do not use the PoNS<sup>®</sup> device if you are sensitive to nickel, gold or copper.

### REFERENCES

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3. Ptito A, Skinner K. The evolution of translingual neurostimulation – from science fiction to fact. Presented at The 9th Annual Traumatic Brain Injury Conference; May 16-17, 2019; Arlington, Virginia, USA.
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6. Leonard G, Lapierre Y, Chen JK, Wardini R, Crane J, Ptito A. Noninvasive tongue stimulation combined with intensive cognitive and physical rehabilitation induces neuroplastic changes in patients with multiple sclerosis: a multimodal neuroimaging study. *Mult Scler J Exp Transl Clin.* 2017;3 (1):1-9.
7. Helius Medical, Inc Portable Modularization Stimulator (PoNS) Real World Evidence Study, August 2, 2020

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