

A photograph of three individuals wearing the Exopulse suit. Two women stand on either side of a man who is seated in a wheelchair. All three are smiling and have their hands on their hips. They are wearing black, long-sleeved, full-body suits with white zippers and patches. The wheelchair has the 'ottobock' logo on the backrest. The background is a light blue studio setting with vertical light panels.

ottobock.

exopulse suit.

Explore the clinical evidence in spasticity & fibromyalgia.

Take a closer look at the suit's proven results.

This unique assistive device delivers near-full body neuromodulation that helps reduce spasticity symptoms typical of conditions like cerebral palsy (CP), multiple sclerosis (MS), and stroke – as well as symptoms of fibromyalgia.

A growing body of clinical evidence indicates that this innovative approach delivers quick relief for both user groups, and helps sustain that improvement over time.

Key highlights

- Significant reduction in both spasticity and spasticity-related pain
- Significant alleviation of multiple major symptoms of fibromyalgia
- Sustained symptom relief with regular pre-scribed use

exopulse suit for spasticity.

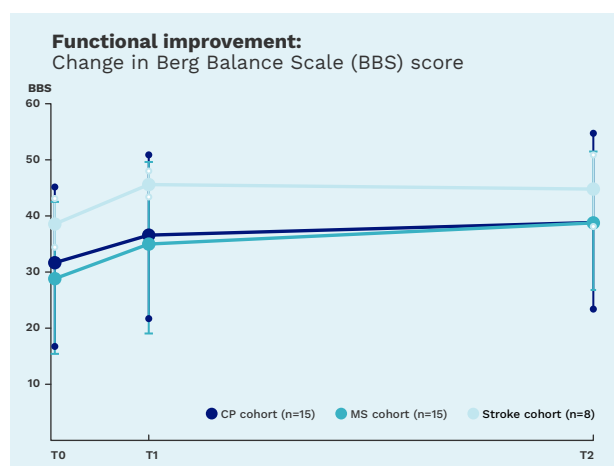
Clinical evidence in users with CP, MS, and stroke.

A step closer to the true potential of neuromodulation

Clinical results show the suit makes better mobility possible for patients with numerous neurological conditions who experience spasticity and related pain.

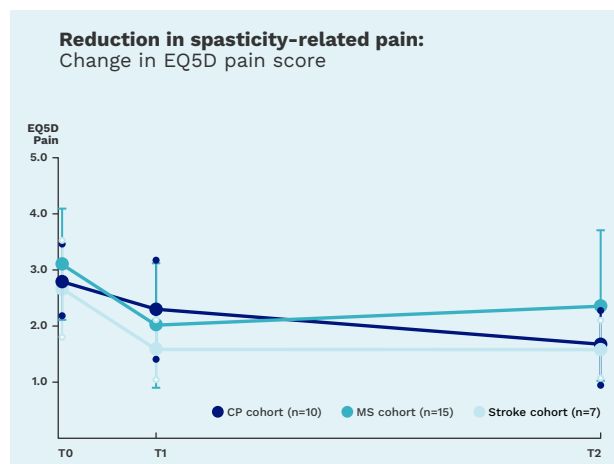
Suit users can move more freely.*,¹

- Patients with CP, MS, and stroke (n=72) had better balance and reduced their risk of falls after just 60 minutes in the suit.
- Regular, every-other-day stimulation helped users maintain their improvement.



Users also achieve swift, sustained relief from spasticity-related pain.**,¹

- In the same preliminary study, an hour in the suit helped significantly reduce pain symptoms in patients who reported them.
- Four weeks later, patients who regularly used the suit experienced continuing reduction in pain.



* Based on change in Berg Balance Scale (BBS) score in an open-label study of group-level response to suit stimulation in patients with CP (adult and pediatric), MS, and stroke. Results of this study were evaluated in 38 patients with impaired balance and an increased fall risk (n=15/15/8 CP/MS/stroke, baseline BBS score < 45). Patients in all cohorts reported significant improvement in BBS score after 60 minutes of stimulation (T1) and after 4 weeks of stimulation every other day (T2).

** Based on change in EQ5D pain levels in an open-label study of group-level response to suit stimulation in patients with CP (adult and pediatric), MS, and stroke. Change in pain levels was evaluated in a subset of 32 patients who reported spasticity-related pain at baseline (n=10/15/7 CP/MS/stroke, baseline EQ5D pain > 1). Patients in all cohorts reported significant improvement in EQ5D pain score after 60 minutes of stimulation (T1) and after 4 weeks of stimulation every other day (T2).



exopulse suit for fibromyalgia.

Clinical evidence from two recent studies.

Documented outcomes at multiple timepoints

Fibromyalgia's unpredictable presentation and symptoms can make it hard to identify optimal times to evaluate patients' progress. But with the suit, clear clinical evidence can help guide you.

Open-label study (n=50)

Rapid pain relief in 60 minutes²

- In a study of patients' response to a single hour of stimulation, some users reported feeling significantly less fibromyalgia-related pain after just one session in the suit.

Randomized, sham-controlled study (n=33)

Significant relief in just two weeks³

- **14 %** reduction in pain (Visual Analog Scale (VAS), $p < 0.05$)
- **17 %** reduction in fatigue (Fibromyalgia Impact Questionnaire, fatigue subscale (FIQ_{FATIGUE}), $p < 0.05$)
- **47 %** improvement in energy-related quality of life (SF-36_{ENERGY}, $p < 0.01$)
- **64 %** of users demonstrated improvement in global clinical impression

Increased relief with regular use³

- **25 %** reduction in pain (VAS, $p < 0.001$) after 4 weeks of daily stimulation
- **20 %** reduction in fatigue (FIQ_{FATIGUE}, $p < 0.001$)
- **54 %** improvement in energy-related quality of life (SF-36_{ENERGY}, $p < 0.001$)
- **78 %** of users demonstrated improvement in global clinical impression

Physical and psychological relief

After 4 weeks of daily stimulation, users also reported significant improvement in fibromyalgia-related symptoms of anxiety and depression.³



Ready to discover more?

Reach out to request a clinical demo.

We'll be happy to show how the suit helps alleviate symptoms of spasticity and fibromyalgia and create new possibilities for your patients' care. Book a clinical demo for your practice at **www.ottobock.com**.

References:

1. Hahn A, Moeller S, et al. Effects of a full-body electrostimulation garment application in a cohort of subjects with cerebral palsy, multiple sclerosis, and stroke on upper motor neuron syndrome symptoms. *Biomedical Engineering / Biomedizinische Technik*. 2024; 69(1):49-59.
2. Riachi N, Chalah MA, Ahdab R, Arshad F, Ayache SS. Effects of the TENS device, Exopulse Mollii Suit, on pain related to fibromyalgia: An open-label study. *Neurophysiol Clin*. 2023 Aug;53(4):102863.
3. Ayache S. A Multisite Stimulation Approach on Motor Functions and Pain in Multiple Sclerosis (MS) and Fibromyalgia - the French Experience. Presented at OTWorld; 14 May 2024; Leipzig, Germany.

Notification:

The information contained in this document is only intended for an audience outside the United States. Please note that the products described herein are not FDA approved.

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