

Cionic Neural Sleeve

The Neural Sleeve is FDA-cleared bionic clothing for mobility, designed to help individuals with difficulty walking or lower extremity weakness due to diagnoses like MS, stroke, cerebral palsy, and other upper motor neuron disorders.

The Neural Sleeve uses adaptive algorithms to deliver functional electrical stimulation (FES) to the four major muscle groups of the leg sequenced to an individual's gait, and delivers neuromuscular electrical stimulation (NMES) through a library of exercises.



The Cionic Neural Sleeve NS-100 may also:



Facilitate muscle re-education



Prevent disuse atrophy



Improve range of motion



Increase local blood flow

Thoughtfully Designed, from Software to Soft Goods

Software-steerable stimulation	Closed-loop system integrates electromyography (EMG) and kinematic data. Adaptive algorithms analyze and recalibrate every step to provide real-time adjustments to stimulation
Multiple Treatment Modalities	Variety of programs designed to target different needs and mobility levels <ul style="list-style-type: none"> • FES Gait: range of protocols for various gait patterns • FES Cycle: stationary bike protocol • NMES: exercise library for muscle strengthening
CIONIC App	The intuitive iOS and Android application acts as both a telehealth platform between the user/provider and CIONIC, as well as the command center for the Neural Sleeve experience
Progress Tracking and Metrics	Daily, weekly, and monthly progress tracking, including gait speed, stride length, steps, and activity levels
Comprehensive Treatment	24 total electrodes for standard sizes - 6 per muscle group, with option for individual electrode configuration as needed

Patient Considerations

- For home use, patient needs to be able to ambulate independently, with or without an assistive device
- Does not exclude patients who would use the device for seated exercises in-home and are working toward independent ambulation in physical therapy

Contraindications

- Implanted demand-type cardiac pacemakers or defibrillators
- Use over malignant tumors
- Use over an existing thrombosis
- Use over a fracture or dislocation, or where movement is contraindicated

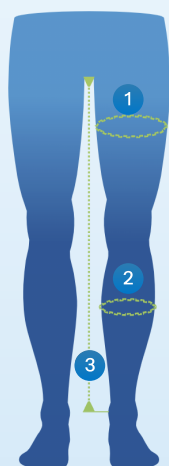


Other Considerations & Precautions

- Limited hand dexterity for donning/doffing
- Recent or uncontrolled seizures
- Edema or swelling that could impact effectiveness of stimulation
- Areas of skin on the leg(s) that are frequently open or infected
- Significant medial-lateral ankle instability

Taking Accurate Measurements

Use a measuring tape to help your patients take accurate measurements while standing



- 1 Upper Leg**
Measure the circumference of the thigh, 11" from the center of your kneecap (should be close to the widest part of the thigh)
- 2 Lower Leg**
Measure the circumference of the widest part of the calf
- 3 Inseam**
Measure the distance between the groin and the ankle

Current Sizing Chart:

-	Thigh Min	Thigh Max	Shank Min	Shank Max	Min Inseam
S2	17	19.9	11.5	13	26
S4	20	22.9	13	15.9	26.5
S6	23	27	16	19	28.5
S2: S4	17	19.9	13	15.9	26.5
S4: S2	20	22.9	11.5	13	26.5
S6: S4	23	27	13	15.9	27.5
S6: S4 Petite	23	27	13.5	17	25