

Over 48 million patients in the US, Europe and China suffer disabilities due to neuromotor dysfunction resulting from stroke, cerebral palsy, multiple sclerosis, brain and spinal cord injuries, and other neurological diseases. Genuine functional recovery often remains elusive for these patients, and there are no pharmacological or surgical interventions that can restore motor function. Treatment is primarily based on slow and incremental rehabilitation modalities that, while prolonged and costly, have limited success. Our non-invasive neurotherapy systems achieve sustainable favorable outcomes, and represent an **entirely new approach** to treatment.

A NEW ERA OF NON-INVASIVE NEUROTHERAPY

PathMaker is opening up a new era of **non-invasive neurotherapy**, with first-in-class systems that have successfully treated in clinical trials patients suffering from paralysis, weakness and spasticity. Whether from stroke, trauma or specific neurological disorders including multiple sclerosis PathMaker systems enable painless and sustained restoration of neuromotor function—satisfying a pervasive unmet medical need in patients with these conditions.

NON-INVASIVE MODULATION OF SPINAL CORD CIRCUITS

PathMaker Neurosystems is a patient-focused clinical-stage neurotechnology company built upon advances in non-invasive neuromodulation using **Coordinated Multi-site Neurostimulation**. Based on 10+ years of research by the leading academics in the field, our technology has been applied to treat successfully over a dozen patients affected by stroke, cerebral palsy and other neurological diseases. During 2016, we initiated parallel clinical trials in US (FDA approval) and in France (CE Mark approval). We plan to market internationally within two years our first commercial system that noninvasively treats a major neuromotor condition, spasticity:

First Product: Our **MyoRegulator™ PM-2200** system provides a breakthrough non-invasive treatment for muscle spasticity. Spasticity is a common condition seen in many patients suffering from stroke, cerebral palsy, multiple sclerosis, spinal cord injury and traumatic brain injury. **MyoRegulator** delivers our proprietary **DoubleStim™** treatment that suppresses hyperexcitable spinal circuits found in patients with spasticity and which severely limit recovery of motor control and muscle function. Using the **MyoRegulator** system to stimulate at spinal and peripheral sites, dysfunctional and previously untreatable muscles can be normalized. Patients with very limited therapeutic options can regain muscle control to restore meaningful function: a chronic, spastic balled fist unfolds for the first time after a short treatment series, and with sustained effect.

Second Product: Our **MyoAmplifier™ PM-3300** system provides an advanced non-invasive platform that integrates magnetic and electrical stimulation to treat patients with paralysis and muscle weakness, conditions seen in many patients suffering from stroke, cerebral palsy, multiple sclerosis, spinal cord injury, traumatic brain injury and other neurological disorders. **MyoAmplifier** delivers our proprietary **TripleStim™** treatment that provides simultaneous activation of primary motor cortex, spinal cord and peripheral nerves serving afflicted muscles to dramatically improve motor function in patients with paralysis or muscle weakness. Through this multi-site neurostimulation, **MyoAmplifier** actually amplifies descending cortical signals to drive stronger muscle response. Stronger muscle response enables reversal of paralysis and restoration of function and mobility. Already, over a dozen patients, previously non-responsive to conventional treatment, have achieved dramatically favorable and sustainable outcomes.