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# **Endonovo Therapeutics Inc. to Move Forward with a Clinical Research Study Conducted by the Regents of the University of New Mexico**

Los Angeles, CA, April 18, 2018 (GLOBE NEWSWIRE) -- [Endonovo Therapeutics, Inc.](#) (OTCQB: ENDV) ("Endonovo" or the "Company"), a commercial-stage developer of non-invasive wearable Electroceutical™ devices, today announced an agreement to commence a clinical research study entitled Pulsed Electromagnetic Field (PEMF) Reduction of cerebrospinal fluid (CSF) and Serum Biomarkers after Traumatic Brain Injury with the University of New Mexico Health Sciences Center, School of Medicine, Department of Neurosurgery.

Pulsed electromagnetic fields (PEMF) have demonstrated anti-inflammatory and pro-regenerative effects in animals and humans. We used the FDA-approved Sofpulse to study effects of PEMF on infarct size and post-stroke inflammation following distal middle cerebral artery occlusion (dMCAO) in mice. An electromagnetic field was applied within 30-45 min after ischemic brain damage and utilized twice a day for 21 consecutive days. Ischemic infarct size was assessed using MRI and histological analysis. At 21 days after dMCAO, the infarct size was significantly (by 26%) smaller in PEMF-treated animals as compared to controls.

Neuroinflammation in these animals was evaluated using specialized cytokine/chemokine PCR array. We demonstrated PEMF significantly influenced expression profile of both pro and anti-inflammatory factors in the hemisphere ipsilateral to ischemic damage. Importantly, expression of gene encoding major pro-inflammatory cytokine IL-1 $\alpha$  was significantly reduced, while expression of major anti-inflammatory IL-10 was significantly increased. PEMF application significantly down regulated genes encoding members of the major pro-apoptotic tumor necrosis factor (TNF) superfamily indicating the treatment could have both anti-inflammatory and anti-apoptotic effects. Both reduction of infarct size and influence on neuroinflammation could have a potentially important positive impact on the post stroke recovery process, implicating PEMF as a possible adjunctive therapy for stroke patients.

Mr. Alan Collier, Endonovo Chief Executive Officer, states, "It has always been our plan to complete a single center, prospective, controlled, clinical trial of PEMF to evaluate the effects of PEMF in patients with brain injury and external ventricular drain in an intensive care unit setting. This clinical study is an extension of a safety trial and will be open to all patients who have or are fitted with an external ventricular drain to remove excess cerebrospinal fluid."

The Study performed under this Agreement will be under the direction of Edwin Nemoto,

PhD, Principal Investigator ("PI"). Dr. Nemoto states, "Inflammation is the primary process of injury propagation after traumatic brain injury (TBI) and suppression of inflammation is the proven mechanism of action of the Endonovo Therapeutics, Inc. pulsed electromagnetic fields (PEMF) device. We are studying the effectiveness of this PEMF device in suppressing the release of brain injury, blood brain barrier and inflammatory biomarkers in the cerebrospinal fluid and blood for up to one week after severe TBI with neurologic outcome follow up at one and three months."

#### About Targeted-Pulsed Electromagnetic Fields (tPEMF)

Targeted-Pulsed Electromagnetic Fields (tPEMF) use radiofrequency waves at 27.12 MHz to deliver electromagnetic energy to tissues. The Company's tPEMF technology works by restoring key electrochemical process that initiate the anti-inflammatory and growth factor cascades necessary for healing to occur. tPEMF technology has been shown to accelerate the production of the endogenous constitutive nitric oxide synthase systems (cNOS): the anti-inflammatory system, resulting in increased blood and lymph flow, and decreased pain and edema.

The Company's tPEMF technology has been evaluated in 5 randomized controlled clinical trials and has demonstrated significant reductions in pain, edema and use of pain medication.

In pre-clinical studies of neuroinflammation and brain injury, the Company's tPEMF technology has demonstrated significant reduction of neuroinflammation, including a 5-fold reduction of IL-1 beta, a master regulator of neuroinflammation, when compared to untreated animals. Furthermore, in pre-clinical studies of angiogenesis (promotion of new blood vessels), the Company's tPEMF technology demonstrated a 500 percent increase in angiogenesis at 8 weeks.

An [Overview of the Company's tPEMF Technology](#) can be found in the presentations page on the Investor Section of the Company's website.

#### About Endonovo Therapeutics

Endonovo Therapeutics, Inc. is a clinical-stage developer of non-invasive electroceuticals for the treatment of Central Nervous System (CNS) Disorders, including traumatic brain injury and multiple sclerosis. The Company's non-invasive electroceuticals use targeted-Pulsed Electromagnetic Fields (tPEMF) to induce micro-currents in tissues to target proinflammatory, fibrogenic and regenerative signaling pathways for the treatment of cardiovascular and cerebrovascular diseases, as well as for the treatment of chronic kidney and liver disease. Endonovo Therapeutics' is developing a pipeline of electroceutical-based therapies for the treatment of cardiovascular disease, cerebrovascular disease, peripheral artery disease, chronic kidney disease, and non-alcoholic steatohepatitis (NASH).

The Company's tPEMF technology using short wave radiofrequency at 27.12 MHz has been FDA-cleared and has a CE Mark for the treatment of soft tissue injuries and post-operative pain and edema, as well as CMS National Coverage for the treatment of chronic wounds. Endonovo is developing a clinical pipeline using tPEMF for the treatment of central nervous system (CNS) disorders, including post-concussion syndrome, mild traumatic brain injury (mTBI), acute sports-related concussions and multiple sclerosis.

## Safe Harbor Statement

This press release contains information that constitutes forward-looking statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. All statements, trends, analysis, and other information contained in this press release including words such as "anticipate," "believe," "plan," "estimate," "expect," "intend," and other similar expressions of opinion, constitute forward-looking statements. Any such forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from any future results described within the forward-looking statements. Risk factors that could contribute to such differences include those matters more fully disclosed in the Company's reports filed with the Securities and Exchange Commission. The forward-looking information provided herein represents the Company's estimates as of the date of the press release, and subsequent events and developments may cause the Company's estimates to change. The Company specifically disclaims any obligation to update the forward-looking information in the future. Therefore, this forward-looking information should not be relied upon as representing the Company's estimates of its future financial performance as of any date subsequent to the date of this press release.

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Source: Endonovo Therapeutics, Inc.