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Aleksandra Wawrzyniak, BA Clinical Trial Manager New Research Finds That, For The First Time Ever, Stem Cell Treatments Improve Disability Status for Multiple Sclerosis Patients With Progressive Disease

Preliminary analysis of FDA-approved study conducted by the Tisch MS Research Center of New York found that stem cell treatments substantially improved muscle strength and disability scores, particularly among patients with lower levels of disability

New York, NY – April 13, 2022 – New research conducted by the Tisch MS Research Center of New York has found that multiple stem cell treatments may result in substantial improvement in muscle strength of MS patients. According to a preliminary analysis of results from the FDA-approved study, these stem cell treatments are the first-ever treatments that improve neurological outcomes in secondary progressive MS (SPMS) and primary progressive MS (PPMS) patients.

At the onset of the study, researchers calculated each patient's universallyaccepted disability scale (EDSS score), which was measured before their first treatment and again after their sixth stem cell treatment. All patients had an EDSS score between 3 and 6.5, with patients at a score of 3 able to walk well (despite some muscle weakness), and patients at a 6 or 6.5 requiring assistive devices to ambulate. At the onset of the treatments, 60% of patients had an EDSS score of less than 6, while 40% had a score of 6 or 6.5 and required either a cane or walker to ambulate.

Following the stem cell treatments, upper limb dexterity and walking speed improved for 36% of patients, while 30% noted improved muscle strength. While the patient's age and type of MS did not impact treatment response, level of disability at the start of the study was the most important clinical determinant of a patient's outcome. In fact, for patients with an EDSS score below 6 before the trial, 58% saw improved muscle strength, and 52% had improved disability scores (EDSS) whereas less than 10% of patients with an EDSS score 6 or above showed improvement.

"This study has found, for the first time ever, a treatment that's successful in reversing established disabilities in patients who are in the early stages of Secondary Progressive and Primary Progressive MS," said Dr. Saud A. Sadiq, Director and Chief Research Scientist at the Tisch MS Research Center of New York. BOARD OF DIRECTORS Philip Weisberg, CFA Chairman Lee J. Seidler Chairman Emeritus

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"These findings are unprecedented for the treatment of MS patients. While in the past patients could have experienced loss of mobility and muscle strength each year due to their MS, this stem cell treatment has opened the possibility that such life-altering symptoms may not occur at all if the treatment is administered early in their disease progression. Furthermore, this study also has potential implications as a therapy for other neurological diseases in the future," Dr. Sadiq added.

The study is an FDA-approved, phase II, double-blind, placebo-controlled crossover-study involving 50 total patients – including 40 with SPMS and 10 with PPMS. The analysis encompasses 36 patients, all of whom have completed six stem cell treatments.

All 50 patients will receive either six placebo or six stem cell treatments, injected at two-month intervals for a year, and then receive the reciprocal treatment in the following year. A complete statistical analysis of this study will be done shortly after the trial is completed at the end of 2022.

About the Tisch MS Research Center of New York

The mission of the Tisch Multiple Sclerosis Research Center of New York is to conduct groundbreaking medical research to ensure unparalleled care and positive outcomes for MS patients. Its integrated relationship with the International Multiple Sclerosis Management Practice (IMSMP) accelerates the pace at which research discoveries translate from lab bench to bedside. The Center aims to identify the cause of MS, understand disease mechanisms, optimize therapies, and repair the damage caused by MS while offering patients access to the best and most advanced treatments possible.