



Collaboration. Acceleration. Results.

Nature Biotechnology Study Highlights New Myelin Specific Approach to Treat Multiple Sclerosis

Scientists from the Myelin Repair Foundation and Northwestern University Show Improvement with a Novel, Targeted Treatment for MS in the Animal Model

SARATOGA, Calif. – November 19, 2012 – The [Myelin Repair Foundation](#) (MRF) today announced the results of a new peer-reviewed research study published in [Nature Biotechnology](#) highlighting a targeted, novel approach for multiple sclerosis (MS). By utilizing the Myelin Repair Foundation’s [Accelerated Collaboration Research™ \(ARC™\)](#) model designed to speed academic research to commercialization, the MRF’s Drug Discovery Advisory Board and Dr. Stephen Miller’s laboratory at [Northwestern University](#) identified a new approach for this platform technology that is applicable to MS. This second generation technology enhances the potential to garner pharmaceutical industry interest and ultimately, to reach patients. By utilizing this patient-oriented approach, this study demonstrated improved tolerance of myelin in the immune response in animal MS models.

Multiple sclerosis is a disease of the immune system that attacks the myelin on the nerves, resulting in blocked brain signals that can cause loss of motor skills, coordination and cognitive ability. Unlike current MS therapies that non-discriminately suppress the entire immune system, this study highlights the effectiveness of an antigen-coupled nanoparticle treatment that stimulates immune tolerance to myelin only, halting the autoimmune attacks in animal MS models. Furthermore, by attaching antigens to a nanoparticle instead of the patient’s own immune cells, the potential for manufacturing this treatment in the biopharmaceutical industry is improved, making it easier for this potential MS therapeutic to reach the clinic. This new approach was identified collaboratively by the Myelin Repair Foundation’s Drug Discovery Advisory Board, Dr. Michael Pleiss, a member of the Myelin Repair Foundation’s internal research team and Dr. Stephen Miller’s laboratory from Northwestern University.

An earlier generation of this technology is currently in [Phase 1 clinical trials](#). The trial has produced encouraging results.

“We are thrilled to collaborate alongside the Myelin Repair Foundation to collectively identify a new targeted pathway to treat MS, one that is designed to be easily manufactured to reach the clinic,” said MRF Investigator Dr. Stephen D. Miller, professor in microbiology-immunology at Northwestern’s Feinberg School. “By leveraging the extensive drug discovery experience at the Myelin Repair Foundation, we conducted our research in a way that would interest the biopharma industry so one day, our research could benefit MS patients.”

“At the Myelin Repair Foundation, we believe scientific research must prioritize patients. Working collaboratively with Dr. Miller’s forward-thinking team focused on improving the lives of MS patients is extremely rewarding and fruitful,” said Chief Research Officer Dr. Jay Tung, Ph.D. from the Myelin Repair Foundation. “As this novel and innovative MS-specific treatment moves forward, we want to ensure a clear pathway into clinical trials to patients waiting for new MS treatments.”

The Myelin Repair Foundation holds exclusive licensing rights to this new treatment approach, for all therapeutic indications, including multiple sclerosis.

About the Myelin Repair Foundation

The Myelin Repair Foundation (MRF) (<http://www.myelinrepair.org>) is a Silicon Valley-based, non-profit research organization focused on accelerating the discovery and development of myelin repair therapeutics for multiple sclerosis. Its [Accelerated Research Collaboration™](#) (ARC™) model is designed to optimize the entire process of medical research, drug development and the delivery of patient treatments.

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