

# ENDECE neural

neurological drug development

## Company Overview

- ENDECE Neural is a private biotechnology company at the forefront of developing therapies to repair and potentially reverse damage caused by devastating demyelinating diseases such as multiple sclerosis (MS)



*MS is a chronic, unpredictable disease of the central nervous system that affects more than **2.3 million people** worldwide*

- Scientists at ENDECE Neural have identified multiple pathways that are involved in repairing the myelin sheath, which is the insulating cover that protects the nerves in the brain and spinal cord



*For decades, researchers have been searching for ways to repair the myelin sheath, an elusive process called **remyelination***

- ENDECE Neural is a wholly owned subsidiary of ENDECE, LLC, a drug discovery company that owns a library of more than 40 proprietary compounds with potential efficacy against a variety of diseases



## Recent Developments

- Studies in animal models suggest that NDC-1308, ENDECE Neural's lead compound, significantly induces remyelination in demyelinated nerves and causes a dramatic upregulation of genes in signaling pathways involved in myelin sheath production
- ENDECE Neural's ongoing validation studies, supported in part by a research grant from the National Multiple Sclerosis Society, have resulted in reproducible data in a mouse model of MS in which the neurotoxicant cuprizone was used to remove the myelin sheath from the axons (nerve fibers) of mice.

# Quick Facts

## Management Team

- ❑ James Yarger, Ph.D.  
*Chief Executive Officer*
- ❑ Jean Yarger  
*Chief Administrative Officer*
- ❑ Steve Weitman, M.D., Ph.D.  
*Chief Medical Officer*
- ❑ Steven H. Nye, Ph.D.  
*Vice President, Discovery*

## Scientific Advisory Board

- ❑ Bruce Trapp, Ph.D.  
*Professor and Chairman,  
Department of Neurosciences,  
Cleveland Clinic Foundation*
- ❑ Jeffrey Cohen, M.D.  
*Director, Experimental  
Therapeutics Program and Clinical  
Neuroimmunology Fellowship,  
Mellen Center for Multiple  
Sclerosis Treatment and Research,  
Cleveland Clinic*

## Location

Mequon, Wisconsin

## Year Founded

2011

## Funding

privately funded

## Website

[www.endeceneural.com](http://www.endeceneural.com)

# Lead Therapeutic Compound

- ENDECE Neural's lead compound, NDC-1308, is a novel chemical entity designed to address one of the root causes of MS by inducing oligodendrocyte progenitor cells (OPCs) – the precursors of myelin – to mature into oligodendrocytes, the cells that synthesize and maintain the myelin sheath
- By upregulating the genes that promote the differentiation of OPCs into mature oligodendrocytes, NDC-1308 appears to induce restoration and repair of the lost myelin sheath that is believed to result in the devastating symptoms of MS
- NDC-1308 is a small molecule that readily crosses the blood-brain barrier, allowing it to reach the tissues in the brain and spinal cord where promoting myelin production is needed
- Currently in pre-clinical trials, NDC-1308 is being developed for potential use either alone or in combination with other MS therapeutics that primarily slow the progression of the disease
- The manufacturing process for NDC-1308 active pharmaceutical ingredient (API) production has been scaled up in compliance with good manufacturing practices (GMP).
- ENDECE Neural has developed the manufacturing process for formulated NDC-1308, which is stable.

