



New Hope for Treating Neurodegenerative Diseases

(NAPS)—Scientists have searched for decades without success for ways to repair the devastating damage caused by neurodegenerative diseases, but there are now new compounds in clinical development that offer hope.

The Problem

When there is a mass die-off of neurons in the body, the central nervous system misfires like a faulty circuit board—one that cannot be fixed without replacing the blown fuses. This major physiological malfunction tends to trigger the onset of some of the hardest-to-treat neurodegenerative diseases, including Alzheimer's disease and multiple sclerosis (MS).

These are terrible afflictions that affect millions of North Americans. They also cost the healthcare system billions of dollars a year, mostly spent on managing physical and mentally debilitating symptoms that inexorably get worse.

What's more, current treatments can only "modify" (slow down or mitigate) the destructive effects on the human body caused by the mass death of neurons in the brain or spine.

The Search For A Solution

With that all said, many people may be relieved to learn of a small Canadian-headquartered biotech start-up that offers new hope to tens of millions of sufferers of neurodegenerative diseases. With Phase 1 clinical trials already underway, NervGen Pharma believes it's on-track to become a big breakthrough thanks to its blockbuster drug candidate—NVG-291.

NVG-291 is a peptide (a small protein) that works by targeting the protein tyrosine phosphatase sigma (PTPσ) receptor that blocks nerve repair following injury, whether from trauma or conditions such as MS or Alzheimer's disease. NervGen targets nerve cell repair, while promoting plasticity to create new neural pathways.

NVG-291 is the brainchild of Dr. Jerry Silver, a renowned spinal cord injury and regenerative medicine researcher whose pioneering work addresses a diversity of conditions defined by a damaged central nervous system. These include degenerative diseases, spinal cord damage, stroke and traumatic brain injury.

Researchers are currently conducting trials in healthy volunteers. This will transition to studies for several of these medical ailments. In particular, the company has stepped up its interest in NVG-291's ability to tackle Alzheimer's disease.

The company works with Dr. Ksenia Kastanenka of Massachusetts General Hospital—which has a long history of supporting cutting-edge research



Dr. Silver, renowned spinal cord injury and regenerative medicine researcher, studies new treatments for MS and Alzheimer's.

and innovation in medical research—to study NVG-291 in animal models of Alzheimer's disease.

It's also preparing to enter a Phase 1b clinical trial for Alzheimer's patients in 2022 following ongoing Phase 1 safety trials for the drug candidate.

An Expert's Opinion

According to NervGen's CEO, Paul Brennan, "The multiple preclinical studies that we are conducting, as well as our planned Phase 1b study, are important milestones for our Alzheimer's program, which, if successful, will provide a meaningful benefit to patients and significant potential for NervGen.

"What differentiates NVG-291 from other drugs in development is that it leverages multiple mechanisms for repairing nerve damage, while most others focus on a single approach. Alzheimer's disease is a complex condition and likely caused by multiple factors. We believe that a systems approach to treating the disease is an important distinction."

Brennan adds, "All told, NVG-291's ability to remyelinate and enhance plasticity is a one-two knockout punch for repairing a damaged central nervous system, which is the end result on a diversity of neurodegenerative diseases, as well as traumatic brain and spinal injuries. NVG-291 could herald a revolutionary new paradigm in treating all of these chronically debilitating conditions."

The company's continued strides toward launching this new class of drugs offers renewed hope to millions.

Learn More

For further facts on the research and clinical trials, go to www.nervgen.com.