



## NERVGEN PHARMA AND MASSACHUSETTS GENERAL HOSPITAL COLLABORATE ON PRECLINICAL STUDIES IN ALZHEIMER'S DISEASE

### Dr. Ksenia Kastanenka to Study NVG-291's Potential to Promote Repair in Alzheimer's Disease Models

**Vancouver, Canada.** August 9, 2021 – **NervGen Pharma Corp. (TSX-V: NGEN) (OTCQX: NGENF)** ("NervGen" or the "Company"), a clinical stage biotech company dedicated to creating innovative solutions for the treatment of nervous system damage, announced today it has entered into a research collaboration with Dr. Ksenia Kastanenka of Massachusetts General Hospital (MGH) to study the effects of NervGen's lead compound, NVG-291, in validated animal models of Alzheimer's disease.

"We are very happy to be collaborating with Massachusetts General Hospital and Dr. Kastanenka to study the mechanism of our technology in an Alzheimer's disease model," stated Dr. Daniel Mikol, NervGen's Chief Medical Officer. "As the original and largest teaching hospital for Harvard University, and one of the largest funded research hospitals in the United States, MGH has a long history of supporting cutting edge research and innovation in medical research. While substantial data in various models of central nervous system damage support the fundamental role of chondroitin sulfate proteoglycans (CSPGs) and protein tyrosine phosphatase (PTP $\sigma$ ) in inhibiting endogenous neural repair mechanisms, Dr. Kastanenka's cutting-edge methodology for studying neurodegeneration will provide important insights into the potential opportunity for PTP $\sigma$  inhibition in Alzheimer's disease."

Dr. Kastanenka is an Assistant Investigator in Neurology at the Massachusetts General Research Institute, and an Assistant Professor of Neurology at Harvard Medical School. She is a proven research expert in the field of neurodegeneration with special emphasis on Alzheimer's disease. Dr. Kastanenka's laboratory focuses on studying the disease progression and mechanisms of action of Alzheimer's therapeutics and uses leading-edge laboratory technologies, including *in vivo* animal models of disease, optogenetics, multiphoton microscopy, calcium imaging, and voltage-sensitive dye imaging.

"NervGen has a very promising approach for the treatment of Alzheimer's disease," stated Dr. Jeff Cummings, Director Emeritus of the Cleveland Clinic Lou Ruvo Center for Brain Health; Director of the Chamber-Grundy Center for Transformative Neuroscience at the University of Nevada, Las Vegas; and member of NervGen's Alzheimer's Disease Clinical Advisory Board. "There is an urgent need for new therapeutics to achieve meaningful cognitive stability and possibly even improvements in Alzheimer's patients. NervGen's drug candidate leverages a unique biology with multimodal effects relevant to the successful treatment of Alzheimer's disease."

"NervGen is committed to developing NVG-291 as a potential neurorestorative therapy for Alzheimer's disease patients, and we look forward to starting our Phase 1b clinical trial in Alzheimer's disease patients in 2022," stated Paul Brennan, NervGen's President & CEO. "This study with Dr. Kastanenka and other preclinical studies that we are conducting in Alzheimer's disease models are important steps to increase our understanding of the role of CSPGs in the pathophysiology of Alzheimer's disease, and the potential effect that PTP $\sigma$  inhibition may have in enabling central nervous system repair."



### **About NVG-291**

NVG-291 modulates protein tyrosine phosphatase (“PTP $\sigma$ ”), the key receptor for chondroitin sulfate proteoglycans (“CSPGs”). PTP $\sigma$  and CSPGs have been shown to impede repair following injury to the nervous system, whether a result of trauma, such as in the case of spinal cord injury or traumatic brain injury, or disease-specific mechanisms, such as Alzheimer’s disease or multiple sclerosis. NVG-291 promotes neural repair mechanisms such as axonal regeneration; remyelination; plasticity; autophagy (a cellular self-cleaning mechanism that removes unnecessary or dysfunctional components); and a non-inflammatory phenotype in microglia cells, the innate immune cells of the central nervous system.

A Phase 1 trial of NVG-291 in healthy subjects is ongoing and, upon completion of the multiple ascending dose portion of the trial, NervGen intends to initiate a Phase 1b trial in Alzheimer’s disease patients. Concurrently, the Company also plans to initiate Phase 2 trials in spinal cord injury and multiple sclerosis with each of these trials planned to start in 2022.

### **About NervGen**

NervGen is restoring life’s potential by creating innovative solutions for the treatment of nervous system injury due to trauma or disease as a result of underlying inflammation and/or neurodegeneration. The Company is initially developing drugs for the treatment of multiple sclerosis, spinal cord injury and Alzheimer’s disease.

### **About Alzheimer’s Disease**

Alzheimer’s disease is a progressive neurologic disorder that causes the brain to shrink (atrophy) and brain cells to die. Alzheimer’s disease is the most common cause of dementia – a continuous decline in thinking, behavioral and social skills that affects a person’s ability to function independently.

Approximately 5.8 million people in the United States age 65 and older live with Alzheimer’s disease. Of those, 80% are 75 years old and older. Out of the approximately 50 million people worldwide with dementia, between 60% and 70% are estimated to have Alzheimer’s disease.

The early signs of the disease include forgetting recent events or conversations. As the disease progresses, a person with Alzheimer’s disease will develop severe memory impairment and lose the ability to carry out everyday tasks.

Symptomatic medications are available that may temporarily improve cognition, including acetylcholinesterase and N-methyl-D-aspartate receptor inhibitors. These treatments can sometimes help people with Alzheimer’s disease maximize function and maintain independence for a time. Different programs and services can help support people with Alzheimer’s disease and their caregivers.

There is no treatment that cures Alzheimer’s disease or has a clinically meaningful benefit on disease progression. In advanced stages of the disease, complications from severe loss of brain function – such as dehydration, malnutrition or infection – result in death.

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#### **Cautionary Note Regarding Forward-Looking Statements**

This news release may contain “forward-looking information” and “forward-looking statements” within the meaning of applicable Canadian and United States securities legislation. Such forward-looking statements and information herein include, but are not limited to, the Company’s current and future plans, expectations and intentions, results, levels of activity, performance, goals or achievements, or any other future events or developments constitute forward-looking statements, and the words “may”, “will”, “would”, “should”, “could”, “expect”, “plan”, “intend”, “trend”, “indication”, “anticipate”, “believe”, “estimate”, “predict”, “likely” or “potential”, or the negative or other variations of these words or other comparable words or phrases, are intended to identify forward-looking statements. Forward-looking statements include, without limitation, statements relating to: the preclinical and clinical development of NVG-291; our belief that the multi-modal mechanism of action of NVG-291 offers the opportunity for a completely new paradigm to treat Alzheimer’s disease; our belief that data generated in the proposed study will provide important insights into the potential opportunity for PTP $\sigma$  inhibition in Alzheimer’s disease; our plans to evaluate the therapeutic potential of NVG-291 in patients in Phase 1b and Phase 2 clinical trials upon successful completion of the Phase 1 trial; the urgent need for new therapeutics to achieve meaningful cognitive stability and possibly even improvements in Alzheimer’s patients; the belief that inhibiting the activity of PTP $\sigma$  is a promising target for reducing the clinical effects of nervous system damage through multiple mechanisms; and the creation of innovative solutions for the treatment of nervous system damage and neurodegenerative diseases.

Forward-looking statements are based on estimates and assumptions made by the Company in light of management’s experience and perception of historical trends, current conditions and expected future developments, as well as other factors that we believe are appropriate and reasonable in the circumstances. In making forward-looking statements, the Company has relied on various assumptions, including, but not limited to: the Company’s ability to manage the effects of the COVID-19 pandemic; the accuracy of the Company’s financial projections; the Company obtaining positive results in its clinical and other trials; the Company obtaining necessary regulatory approvals; and general business, market and economic conditions.

Many factors could cause our actual results, level of activity, performance or achievements or future events or developments to differ materially from those expressed or implied by the forward-looking statements, including without limitation, a lack of revenue, insufficient funding, the impact of the COVID-19 pandemic, reliance upon key personnel, the uncertainty of the clinical development process, competition, and other factors set forth in the “Risk Factors” section of the Company’s Annual Information Form, Prospectus Supplement, financial statements and Management Discussion and Analysis which can be found on SEDAR.com. All clinical development plans are subject to additional funding.



Readers should not place undue reliance on forward-looking statements made in this news release. Furthermore, unless otherwise stated, the forward-looking statements contained in this news release are made as of the date of this news release, and we have no intention and undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by applicable law. The forward-looking statements contained in this news release are expressly qualified by this cautionary statement.