NervGen Pharma's NVG-291-R Demonstrates Significant Functional Recovery in Department of Defense-Sponsored Preclinical Models of Traumatic Hearing Loss and Peripheral Nerve Injury

- Demonstrated significant hearing restoration in blast-induced sensorineural hearing loss models
- Promoted significant functional recovery and axonal regeneration in peripheral nerve injury models
- Reinforced NVG-291's broad therapeutic potential with new data across three distinct injury models

VANCOUVER – August 21, 2025 – NervGen Pharma Corp. (TSXV: NGEN) (OTCQB: NGENF), a clinical-stage biopharmaceutical company developing first-in-class neuroreparative therapeutics for spinal cord injury and other neurologic disorders, today announced positive preclinical results of two Department of Defense sponsored studies in models of blast-induced sensorineural hearing loss and peripheral nerve injury, reinforcing the broad therapeutic application of its first and potential best-in-class candidate, NVG-291.

Presented at the 2025 Military Health System Research Symposium, the studies show that NVG-291-R, the rodent variant of NVG-291, promoted significant functional recovery in models of blast-induced sensorineural hearing loss and peripheral nerve injury, two debilitating conditions affecting military and civilian populations.

These preclinical findings build on the recently announced CONNECT SCI Study topline results, the first proof-of-concept study to successfully demonstrate that pharmacological treatment with NVG-291 translates improvements observed in animal models into electrophysiological connectivity and clinically meaningful functional gains in individuals living with chronic spinal cord injury.

Novel Preclinical Findings in Blast-Induced Sensorineural Hearing Loss
Conducted by the U.S. Air Force's 59th Medical Wing in collaboration with the Uniformed Services University, Brooke Army Medical Center, NVG-291-R was investigated as a potential novel treatment for blast-induced sensorineural hearing loss.

- **Significant Hearing Restoration**: In a rat model exposed to shock waves, either a single high-pressure blast or a series of low-pressure blasts, daily subcutaneous NVG-291-R treatment led to statistically significant improvements in hearing thresholds across all frequencies by end-of-study at Day 30, preventing the profound and permanent hearing loss observed in untreated animals.

"Sensorineural hearing loss from blast exposure is one of the most common and debilitating injuries affecting our service members. Currently, we can only offer hearing aids or cochlear implants, which don't restore natural hearing," stated Colonel Michael Davis, MD, FACS Former Director, U.S. Combat Casualty Care Research Program, Defense Health Agency. "To see a systemic drug significantly improve hearing thresholds by potentially repairing the underlying nerve damage is a groundbreaking step forward. This could fundamentally change how we manage acute acoustic trauma on the battlefield and beyond."

Novel Preclinical Findings in Peripheral Nerve Injury
Researchers at Washington University School of Medicine in St. Louis investigated NVG-291-R as a potential novel treatment in clinically relevant rodent models of both moderate and severe peripheral nerve injury (PNI).

- **Improved Neuromuscular Function and Axonal Regeneration**: In moderate and severe models of PNI, daily subcutaneous NVG-291-R treatment led to statistically significant improvements in neuromuscular function and axonal regrowth. Increases in compound muscle action potentials and specific tetanic force were associated with a higher total number and density of axons distal to the injury site. Functional and regenerative gains were observed as early as 4 weeks post-injury.

"Peripheral nerve injuries can be life altering and are a major barrier to return-to-duty for our military personnel," said Dr. Wilson Ray, MD, a neurosurgeon and lead investigator from WashU Medicine. “Combat-sustained PNIs have increased in both frequency and severity in recent years, yet there remain no effective or reparative treatments. Our study showed a significant acceleration of functional recovery and clear histological evidence of axonal regrowth. These findings suggest that NVG-291 could play a critical role in improving outcomes for individuals with peripheral nerve damage in both military and civilian populations."

Preclinical Evidence Reinforces NVG-291’s Broad Therapeutic Potential
These findings in both the auditory and peripheral nervous systems further support the broad therapeutic potential of NVG-291 across multiple neurological conditions. These studies, presented at the 2025 Military Health System Research Symposium, reinforce NVG-291’s ability to accelerate nervous system repair in clinically relevant models of military-related nerve damage.

"We are demonstrating a consistent ability to promote nervous system repair, whether in the spinal cord, peripheral nerves, or the delicate structures of the inner ear," said Dr. Marc DePaul, Director of Research at NervGen Pharma. "These robust findings strengthen our commitment to advancing NVG-291 into further clinical studies and bringing a new class of restorative medicine to individuals in need."

About NVG-291
NervGen holds exclusive worldwide rights to NVG-291, a first- and potential best-in-class neuroreparative therapeutic peptide targeting nervous system repair. NVG-291’s technology is licensed from Case Western Reserve University and is based on academic studies that demonstrated the preclinical efficacy of NVG-291-R, the rodent variant of NVG-291, in animal models of spinal cord injury. These studies implicated multiple potential molecular and cellular mechanisms by which NVG-291-R promotes neurorepair and functional improvement in both central and peripheral nervous system injury models. The implicated mechanisms include the promotion of neuronal sprouting, or plasticity, remyelination, and promotion of a non-inflammatory phenotype in the microglial cells. NervGen has received Fast Track designation from the FDA and Orphan Designation from the EMA for NVG-291 in individuals living with spinal cord injury.

About NervGen
NervGen (TSXV: NGEN, OTCQB: NGENF) is a clinical-stage biopharmaceutical company dedicated to developing first-in-class neuroreparative therapeutics to promote nervous system repair in settings of neurotrauma and neurologic disease. The Company is evaluating the clinical efficacy of its lead candidate, NVG-291, in the Phase 1b/2a CONNECT SCI Study in spinal cord injury. Topline data from the chronic cohort (1-10 years post-injury) of this trial showed that NVG-291 met a primary endpoint and demonstrated strong and consistent trends across functional assessments. Comprehensive analysis of NVG-291's efficacy profile is ongoing. Enrollment in the subacute cohort (20-90 days post-injury) of the trial continues, and more information about participation in the subacute study is available at www.connectscistudy.com. For more information about NervGen, visit www.nervgen.com and follow NervGen on X and LinkedIn for the latest news on the company.

Contacts
Huitt Tracey, Investors
htracey@nervgen.com
604.537.2094

David Schull or Ignacio Guerrero-Ros, Ph.D., Media
Russo Partners
David.Schull@russopartnersllc.com
Ignacio.Guerrero-Ros@russopartnersllc.com
858.717.2310

Bill Adams, Chief Financial Officer
info@nervgen.com
778.731.1711

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

Cautionary Note and 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 (collectively, "forward-looking statements"). Such forward-looking statements 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 Company's potential best-in-class candidate, NVG-291; the potential broad therapeutic applications of NVG-291; the future growth of the Company; the Company's mission of transforming the lives of individuals living with spinal cord injury; the objectives, planned clinical endpoints, timing, expected rate of enrollment, and final results from our Phase 1b/2a clinical trial of NVG-291 in individuals with spinal cord injury; the future development plans and

benefits of NVG-291; the development plans and prospective target indications for NVG-300; and the creation of neuroreparative therapeutics to promote nervous system repair in settings of neurotrauma and neurologic disease. 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: its ability to obtain future funding on favorable terms, if at all; the accuracy of its financial projections; obtaining positive results in its clinical; its ability to obtain necessary regulatory approvals; its ability to arrange for the manufacturing of its product candidates and technologies; and general business, market and economic conditions. Many factors could cause the Company's 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, 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 most recently filed prospectus supplement, short form base shelf prospectus, annual information form, financial statements and management discussion and analysis all of which can be found on NervGen's profile on SEDAR+ at www.sedarplus.ca. 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 the Company has no intention and undertakes 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.