

March 13, 2018



# Neuralstem Announces Publication of a Study in *Nature Medicine* Showing Benefits of NSI-566 in a Primate Model of Spinal Cord Injury

- NSI-566 shown to have restorative function in primate paralysis model -

- NSI-566 transplantation resulted in measurable improvement in forelimb function -

GERMANTOWN, Md., March 13, 2018 (GLOBE NEWSWIRE) -- Neuralstem, Inc. (Nasdaq:CUR), a biopharmaceutical company focused on developing novel treatments for nervous system diseases, highlighted the publication of a manuscript in *Nature Medicine* showing that NSI-566, Neuralstem's lead cell therapy candidate, provided meaningful improvement in forelimb function in a non-human primate model of acute spinal cord injury. The full manuscript can be found [here](#).

The manuscript, entitled 'Restorative Effects of Human Neural Stem Cell Grafts on the Primate Spinal Cord,' involved a study to evaluate the potential benefits of transplanting NSI-566 into rhesus monkeys two weeks after they received a hemisection lesion of the cervical spinal cord.

## Key Findings:

- NSI-566 was observed to extend hundreds of thousands of axons long distances from the graft site which appear to form synaptic connections with host neurons, including motor neuron populations;
- Host corticospinal axons regenerate into the NSI-566 graft;
- Grafting of NSI-566 led to a measurable improvement in forelimb function in injured animals.

The study was led by researchers at the University of California San Diego School of Medicine and builds on their previous work showing that grafted NSI-566 cells promote locomotor recovery in rats subjected to severe spinal cord injury.

"This study strengthens our conviction that NSI-566 could potentially confer a benefit in patients with motor deficits from spinal injury and supports our ongoing efforts in addressing conditions involving paralysis, such as ALS and stroke," said Richard Daly, Neuralstem's Chairman and CEO.

## About NSI-566

Neuralstem's stem cell therapy product candidate, NSI-566, is a spinal cord-derived neural

stem cell line. Neuralstem is currently evaluating NSI-566 in three indications: ischemic stroke, Amyotrophic Lateral Sclerosis (ALS), and chronic spinal cord injury (cSCI).

Neuralstem is conducting a Phase 1 safety study for the treatment of paralysis from chronic motor stroke at the BaYi Brain Hospital in Beijing, China. In addition, NSI-566 was evaluated in a Phase 1 safety study to treat paralysis due to chronic spinal cord injury as well as Phase 1 and Phase 2a dose escalation, safety trials for ALS. Subjects from all three indications are currently in long-term observational follow-up periods to continue to monitor safety and possible therapeutic benefits.

## **About Neuralstem**

Neuralstem is a clinical-stage biopharmaceutical company developing novel treatments for nervous system diseases of high unmet medical need. The Company has two lead development candidates:

- NSI-189, is a small molecule in clinical development for major depressive disorder (MDD) and in preclinical development for Angelman syndrome, irradiation-induced cognitive impairment, Type 1 and Type 2 diabetes, and stroke.
- NSI-566 is a stem cell therapy being tested for treatment of paralysis in ischemic stroke, Amyotrophic Lateral Sclerosis (ALS) and chronic spinal cord injury (cSCI).

Neuralstem's diversified portfolio of product candidates is based on its proprietary neural stem cell technology.

## **Cautionary Statement Regarding Forward Looking Information**

This news release contains "forward-looking statements" made pursuant to the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements relate to future, not past, events and may often be identified by words such as "expect," "anticipate," "intend," "plan," "believe," "seek" or "will." Forward-looking statements by their nature address matters that are, to different degrees, uncertain. Specific risks and uncertainties that could cause our actual results to differ materially from those expressed in our forward-looking statements include risks inherent in the development and commercialization of potential products, uncertainty of clinical trial results or regulatory approvals or clearances, need for future capital, dependence upon collaborators and maintenance of our intellectual property rights. Actual results may differ materially from the results anticipated in these forward-looking statements. Additional information on potential factors that could affect our results and other risks and uncertainties are detailed from time to time in Neuralstem's periodic reports, including the Annual Report on Form 10-K for the year ended December 31, 2016, and Form 10-Q for the three and nine months ended September 30, 2017, filed with the Securities and Exchange Commission (SEC), and in other reports filed with the SEC. We do not assume any obligation to update any forward-looking statements.

## **Contact:**

Kimberly Minarovich  
Argot Partners (Investor Relations)

212-600-1902  
neuralstem@argotpartners.com



Source: Neuralstem, Inc.