Neuralstem Stem Cells Survive and Differentiate Into Neurons in Rats With Stroke

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ROCKVILLE, Md., Sept. 14 /PRNewswire-FirstCall/ -- Neuralstem, Inc. (NYSE Amex: CUR) announced that its spinal cord stem cells survived in rat brains affected by stroke and differentiated predominantly into neurons. The transplanted animals showed significant improvement in some motor skill and strength measurements. The study entitled, "Intracerebral Implantation of Adherent Human Neural Stem Cells To Reverse Motor Deficits in Chronic Stroke Rats," was presented earlier today by senior study author, Dr. Shinn-Zong Lin, M.D., Ph.D., at the Stem Cells USA & Regenerative Medicine Conference (http://www.terrapinn.com/2010/stemcellusa/conf.stm), in Philadelphia, PA. Dr. Lin is a Professor of Neurosurgery and Vice Superintendent at China Medical University Hospital of Taiwan.

"This animal study shows the potential promise of this cell line in treating post-stroke symptoms," Dr. Lin commented. "Four weeks after transplantation, the rats treated with Neuralstem's cells showed significantly decreased asymmetric body swing, increased vertical movements and increased grip strength, compared with the control group."

"Dr. Lin's findings represent a significant milestone for Neuralstem. They are the first to show how our human spinal cord-derived stem cell product, NSI-566RSC, currently in a clinical trial for ALS, and which we expect to be in another clinical trial for spinal cord injury, also works in the stroke brain," said Dr. Karl Johe, Ph.D., Neuralstem's Chief Scientific Officer and Chairman of the Board of Directors. "Our proposed treatment for paralysis due to stroke will involve transplantation near the motor tracts close to the stroke lesion in the brain in order to promote regeneration and repair. While the trial protocol for ALS and chronic spinal cord injury involves transplantation into the spinal cord, and that for stroke will involves transplantation into the brain, we are nevertheless targeting the circuitry that controls motor function in each indication. We are developing clinical programs for stroke in both the U.S. and Taiwan, and hope to start our first trial in 2011."

About Neuralstem

Neuralstem's patented technology enables the ability to produce neural stem cells of the human brain and spinal cord in commercial quantities, and the ability to control the
differentiation of these cells constitutively into mature, physiologically relevant human
neurons and glia. Neuralstem is in a FDA-approved Phase I safety clinical trial for
Amyotrophic Lateral Sclerosis (ALS), often referred to as Lou Gehrig's disease.

In addition to ALS, the company is also targeting major central nervous system diseases,
including traumatic spinal cord injury, ischemic spastic paraplegia, and Huntington's
disease. The company has also submitted an IND (Investigational New Drug) application
to the FDA for a Phase I safety trial in chronic spinal cord injury.

Through its proprietary screening technology, Neuralstem has discovered and patented
compounds that may stimulate the brain's capacity to generate new neurons, possibly
reversing the pathologies of some central nervous system conditions. Neuralstem plans to
initiate clinical trials with its lead compound to treat major depression and potentially other
diseases, such as schizophrenia, Alzheimer's disease, traumatic brain injury,
posttraumatic stress syndrome, and stroke.

For more information, please go to www.neuralstem.com

Cautionary Statement Regarding Forward Looking Information

This news release may contain forward-looking statements made pursuant to the "safe
harbor" provisions of the Private Securities Litigation Reform Act of 1995. Investors are
cautioned that such forward-looking statements in this press release regarding potential
applications of Neuralstem's technologies constitute forward-looking statements that
involve risks and uncertainties, including, without limitation, 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, 2009, and in its quarterly
report on Form 10-Q for the period ended June 30, 2010.

SOURCE Neuralstem, Inc.