IC Designer to Aid Stroke Victims

AMI Semiconductor, a leading designer and manufacturer of state-of-the-art integrated mixed-signal and structured digital products for the automotive, medical, and industrial markets, has been selected by Northstar Neuroscience Inc., a medical device company, to design and manufacture the application specific integrated circuit (ASIC) for the Northstar Stroke Recovery System.

Allen Wyler, MD, a neurosurgeon who is Northstar Neuroscience's medical director, commented on Northstar's investigational therapy: "After a stroke, the brain attempts to compensate for the damaged area by reorganizing through a process known as neuroplasticity. However, many survivors of stroke remain impaired for the rest of their lives. We have spent years developing a device system which is intended to help improve function in stroke survivors months or even years after their strokes."

Initial research has demonstrated that cortical stimulation of healthy brain tissue near the area damaged by the stroke, in combination with rehabilitation, may facilitate neuroplasticity and improve function. Northstar's stroke therapy device involves the precise delivery of low levels of electricity to the surface of the brain (the cortex) via an implanted stimulator system. Results from two feasibility studies presented at medical congresses this year assessed the safety of cortical stimulation in the rehabilitation of chronic stroke patients and suggest a greater improvement in recovery of hand/arm function compared to controls. The company is currently enrolling patients in a larger pivotal clinical study to confirm these results. *Information:* www.amis.com *[1]*.

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