

December 2019

Shift Pharmaceuticals is pleased to announce the Company has received a research grant from The Gwendolyn Strong Foundation to further our development of Ev^{1.11}, our lead candidate for the treatment of Spinal Muscular Atrophy (SMA). Since its beginning, the Foundation's goal has been to "fill the gaps and do what isn't being done" with regarding to SMA research & development, funding 30 different researchers at 15 institutions around the globe. "We're excited to support Dr. Chris Lorson and the Shift Pharmaceuticals team," said Victoria Strong, Executive Director of the Gwendolyn Strong Foundation. "We're thrilled to see the possibilities of this progressive approach to continue our Foundation's push to change the SMA landscape."

Shift Pharmaceuticals is also pleased to announce our initial funding from the National Institute of Neurological Disorders and Stroke. TITLE: Multi-dose pre-clinical studies in rat for E1-targeting antisense oligonucleotides. This funding comes in the form of a Phase 1 Small Business Innovative Resource grant.

ABOUT SHIFT PHARMACEUTICALS

Overland Park, KS – Shift Pharmaceuticals (a privately held company) is developing Antisense Oligonucleotides as drug candidates for a variety of genetic disorders. Our first candidate (E1^{v1.11}) targets patients born with Spinal Muscular Atrophy (SMA). SMA occurs in 1:11,000 live births with devastating effects, often proving fatal for most patients under the age of 2. SMA is the leading genetic cause of infantile death worldwide and is marked by severe neurodegeneration and skeletal muscle wasting. Shift was co-founded by serial entrepreneur Dr. Steve O'Connor and world-leading SMA research expert Dr. Chris Lorson. The company has licensed the core intellectual property from The University of Missouri, where the initial discovery and development was performed by Dr. Lorson. For more information, visit www.shiftpharmaceuticals.com.

ABOUT THE GWENDOLYN STRONG FOUNDATION

The <u>Gwendolyn Strong Foundation</u> works to fill in the gaps needed to create real change and build a more inclusive future for those with disabilities. They provide practical family support, fund research, and are building the first inclusive playground in Santa Barbara. They work to inspire courage, foster inclusion and create a kinder world around the globe.



ABOUT THE NATIONAL INSTITUTES OF HEALTH (NIH)

<u>The National Institutes of Health (NIH)</u>, a part of the U.S. Department of Health and Human Services, is the nation's medical research agency — making important discoveries that improve health and save lives.

"The research reported in this release will be supported by the National Institute Of Neurological Disorders And Stroke of the National Institutes of Health under Award Number R43NS113643. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health."

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