



Balancing Life's Tough Times™



Contacts:

Paratek Pharmaceuticals, Inc.

Kate Boxmeyer

617-275-0040 x238

kboxmeyer@paratekpharm.com

Families of SMA

Lenna Scott

847-975-4171

lenna@fsma.org

Families of Spinal Muscular Atrophy and Paratek Pharmaceuticals Announce Drug Discovery Collaboration for Spinal Muscular Atrophy

Libertyville, IL and Boston, MA, May 17, 2006 —Families of Spinal Muscular Atrophy (FSMA) and Paratek Pharmaceuticals, Inc. today announced a joint collaboration to develop a promising drug candidate for the treatment of Spinal Muscular Atrophy (SMA), the leading genetically inherited cause of death of children under the age of two years. The collaboration will focus on optimizing and advancing into the clinic a novel small molecule within Paratek's library derived from the tetracycline class of compounds.

Spinal Muscular Atrophy is an often-fatal genetic disorder resulting from the loss of both copies of the Survival Motor Neuron (SMN1) gene. This causes a chronic deficiency in the production of the SMN protein, which is essential to the proper functioning of the motor neurons in the spinal cord and to the control of muscles in the limbs, neck and chest.

“This new drug development collaboration will focus on optimizing the drug features of a newly identified lead compound that directly influences SMN2 gene splicing,” said Dr. Jill Jarecki, FSMA Research Director. “FSMA-sponsored research has contributed to the identification of the SMN1 gene as well as a second disease-modifying copy of the gene called SMN2. Normally, the SMN2 gene produces reduced amounts of SMN protein due to a defect in mRNA splicing. This project aims to develop a SMA drug that safely and effectively restores the proper amount of SMN protein in the body in order to slow or reverse the disease process by correcting the splicing of SMN2 gene.”

“Paratek is excited about this collaboration for several reasons. First, we already have a compound with validated activity in hand,” said Dr. Ken Tanaka, Vice President of Research and Development for Paratek. “In addition, this project is of great scientific

interest, as the compound has been shown to directly regulate SMN splicing and should lead to a greater biological understanding of the underlying disease process. With our chemistry expertise and the splicing assay capabilities at Cold Spring Harbor, we believe we have the right resources and team in place to lead us to a novel drug for treating SMA.”

The Krainer laboratory at Cold Spring Harbor will be assessing additional Paratek compounds from Paratek’s collection for effects on SMN2 splicing. In parallel, Paratek will be developing new proprietary compounds based on this initial lead. In related work, the FSMA scientific advisory board has recently awarded Dr. Michelle Hastings of Cold Spring Harbor Laboratory a two-year grant to investigate the molecular mechanism of this class of compounds.

“FSMA is excited to be funding this drug discovery effort,” said Audrey Lewis, Executive Director of FSMA. “We believe that this compound will work differently from the other SMN-increasing compounds that FSMA is developing, providing our community with an additional pathway to potentially treat this disease.”

About Paratek Pharmaceuticals, Inc.

Paratek Pharmaceuticals, Inc. is engaged in the discovery and commercialization of new therapeutics that treat serious and life-threatening diseases, with a particular focus on the growing worldwide problem of antibiotic resistance. Paratek is advancing novel compounds that can circumvent or block bacterial resistance. Paratek’s lead compound, MK-2764/PTK 0796, is a broad spectrum antibiotic with oral and IV formulations for the treatment of the most common community and hospital bacterial infections, including those caused by resistant strains such as MRSA. This project is being advanced in collaboration with Merck & Co., Inc. In addition to its tetracycline-derived antibacterials, Paratek is developing small molecule drugs that can prevent infection by interfering with Multiple Adaptational Response (MAR) mechanisms in bacteria.

Outside the antibacterial therapeutic area, Paratek has also established an effort to exploit its novel tetracycline derivatives and their unique mechanism of action in selected anti-inflammatory and neurodegenerative conditions, including a collaboration to develop novel non-antibacterial tetracycline derivatives for multiple sclerosis with Serono SA. Paratek has an active chemical synthesis effort to produce novel and diverse small molecules, with the goal of developing non-antibacterial compounds with improved activity in serious inflammatory and neurodegenerative diseases based upon a growing body of clinical and basic research supporting this approach.

Paratek is privately held and headquartered in Boston, Massachusetts, USA. For more information, visit Paratek’s website at www.paratekpharm.com.

About Families of SMA

FSMA is the largest international organization dedicated solely to eradicating SMA by promoting and supporting research in both the private and public sector, helping families cope through informational programs and support, and educating the public

and the medical community about SMA. The organization, originally founded in 1984 by small group of parents, has grown to more than 32 chapters and affiliates worldwide and more than 5,000 member families and is a founding member of the International Alliance for Spinal Muscular Atrophy. FSMA receives the majority of its funding through volunteer efforts, funding over \$25 million to date, and continues to increase its funding commitments each year with \$15 million in new research planned over the next three years. For more information visit the website www.curesma.org or call 1-800-886-1762.