



Spero Therapeutics Receives Grant from National Institutes of Health to Explore Novel Treatment Combinations for Tuberculosis

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CAMBRIDGE, Mass., May 4, 2017—Spero Therapeutics, LLC, a biopharmaceutical company founded to develop novel therapies for the treatment of bacterial infections, today announced that it has received a grant from the National Institutes of Health (NIH) to conduct additional preclinical studies of SPR720, the Company's novel oral bacterial gyrase inhibitor, for the treatment of tuberculosis (TB). The non-dilutive grant of \$564,718 is part of the NIH's Small Business Innovation Research (SBIR) program (Grant Number: 1R44AI131749-01).

As part of this research program, Spero will collaborate with the Central New York Research Corporation to assess the safety and efficacy of SPR720 in combination with rifampin and other existing standard-of-care drugs in preclinical models of both drug-susceptible TB and multidrug resistant (MDR) TB. The goal of the research is to assess novel combinations that could potentially shorten the duration of treatment and identify new drug combinations that would be effective against MDR TB.

"We are pleased with the progress we have made in characterizing the utility of SPR720 in non-tuberculous mycobacteria since acquiring the compound last year and we are excited to expand our research to TB," said Ankit Mahadevia, M.D., Chief Executive Officer of Spero. "Our strategy is focused on discovering, developing and commercializing antibiotics in areas of unmet need. Like NTM, TB has high rates of mortality and current treatment options are becoming less effective as the rate of multidrug resistance continues to grow."

The World Health Organization reports that about one-third of the world's population has been infected by TB bacteria, *Mycobacterium tuberculosis*. In 2015, 10.4 million people around the world became sick with TB and 1.8 million people died from the disease. MDR TB has become widespread, affecting an estimated 480,000 people in 2015. MDR TB requires longer courses of treatment and costs healthcare systems significantly more than treating susceptible TB. Almost 10 percent of MDR TB cases were extensively drug resistant (XDR), where bacteria is resistant to most of the effective second line drugs as well as first-line.

About SPR720

SPR720 is a novel oral bacterial gyrase (GyrB) inhibitor that possesses good in vitro antibacterial activity, particularly against Gram-positive pathogens such as *Mycobacterium*. Spero is currently investigating the potential of SPR720 in tuberculosis (TB) as well as non-tuberculous mycobacteria (NTM) lung disease, a rare and often chronic fatal infection for which there are no approved treatments. Spero in-licensed the rights to SPR720 and a portfolio of other antibacterial compounds from Vertex Pharmaceuticals in 2016.

About Spero

Spero Therapeutics is a global multi-asset clinical-stage biopharmaceutical company headquartered in Cambridge, Massachusetts dedicated to developing a novel and highly differentiated pipeline of antibacterials focused on unmet needs of patients with drug resistant bacterial infections. Spero Therapeutics is advancing two lead programs in parallel, SPR741 and SPR994. SPR741, also called Potentiator, is a platform approach to combination therapy to treat serious and life-threatening multidrug resistant Gram-negative infections, such as Enterobacteriaceae and *Acinetobacter baumannii*, including carbapenem resistant strains. SPR741 increases the spectrum and potency of more than two dozen classes of Gram-positive antibiotics to include activity against multidrug resistant Gram-negative infections when used in combination. SPR994 is a novel oral agent that has demonstrated potent in-vitro activity against a wide variety of Gram-negative bacteria, including extended spectrum beta lactamases (ESBLs), and Gram-positive bacteria. Spero Therapeutics also has a robust preclinical pipeline including SPR720, which is a preclinical oral therapeutic candidate for mycobacteria infections including nontuberculous mycobacteria (NTM) lung disease, a rare and often chronic fatal infection. In addition, Spero Therapeutics has a variety of other discovery stage antimicrobials focused on drug resistant infections.

For more information, please visit <https://sperotherapeutics.com>

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