SpringWorks Therapeutics Receives FDA Orphan Drug Designation for MEK Inhibitor (PD-0325901) for the Treatment of Neurofibromatosis Type 1

STAMFORD, Conn – November 5, 2018 – SpringWorks Therapeutics, a clinical-stage biopharmaceutical company focused on developing life-changing medicines for patients with severe rare diseases and cancer, today announced that the U.S. Food and Drug Administration (FDA) has granted Orphan Drug designation for PD-0325901, an investigational, oral, small molecule selective inhibitor of MEK1 and MEK2, for the treatment neurofibromatosis type 1.

Neurofibromatosis type 1, or NF1, is a rare genetic disorder that is caused by mutations in the NF1 gene, and that affects both children and adults. NF1 mutations can result in a loss of activity in the protein neurofibromin, which can lead to MAPK pathway overactivation, uncontrolled cellular growth, and tumor formation.[1] NF1 is a heterogeneous condition that frequently causes plexiform neurofibromas, which are painful, disfiguring tumors of the peripheral nervous system. It is estimated that there are approximately 100,000 patients in the United States living with NF1.[2]

“There is an urgent need for an effective treatment for patients with NF1. We are pleased that the FDA has granted Orphan Drug designation for our MEK inhibitor, recognizing its potential to improve the outlook for patients and families facing NF1,” said Saqib Islam, Chief Executive Officer of SpringWorks Therapeutics. “We look forward to working closely with the FDA as we prepare to initiate a Phase 2b study of PD-0325901 in patients with NF1-associated plexiform neurofibromas, a severe form of NF1 that causes tumors to grow on nerves throughout the body, which can cause severe pain, disfigurement, loss of range of motion, and shortened lifespan.”

The FDA, through its Office of Orphan Products Development (OOPD), grants orphan drug designation to drugs and biologic products that are intended for treatment of rare diseases or disorders that affect fewer than 200,000 people in the United States. Orphan drug status is intended to facilitate drug development for rare diseases and may provide certain benefits and incentives to drug developers, including seven years of market exclusivity if the drug is approved, FDA assistance in clinical trial design, and tax credits for qualified clinical trial costs.[3]

SpringWorks expects to initiate a Phase 2b single-arm, open-label study of PD-0325901 in patients with neurofibromatosis type 1-associated plexiform neurofibromas (NF1-associated PN) in the first half of 2019.

About Neurofibromatosis Type 1

Neurofibromatosis type 1, or NF1, is a rare genetic disorder that is caused by mutations in the NF1 gene, and that affects both children and adults. Throughout their lifetime, about 30

to 50 percent of NF1 patients progress to a more severe form of the disease that results in the development of plexiform neurofibromas (PN), which are progressive peripheral nerve sheath tumors that cause severe pain, morbidity, and can significantly shorten lifespan.[4-6] The clinical course of NF1-associated PN is heterogeneous with varying manifestations and severity across patients.

It is estimated that NF1 affects 1 in 3,000 individuals worldwide, and that there are approximately 100,000 patients in the United States living with this disease.[2] Most patients with NF1-associated PN are treated with surgical removal of the tumors, sometimes requiring amputation; however, surgery has variable success rates and a high rate of recurrence has been observed because of the aggressive nature of these tumors.[7] There are no therapies currently approved for the treatment of NF1-associated PN.

About PD-0325901
PD-0325901 is an investigational, oral, small molecule, selective inhibitor of MEK1 and MEK2, proteins that play key roles in the MAPK pathway. The MAPK pathway is critical for cell survival and proliferation, and overactivation of this pathway has been shown to help enable tumor growth. By blocking activity of the MAPK pathway, PD-0325901 may help arrest uncontrolled cellular growth associated with many types of tumors.

PD-0325901 has been tested in several Phase 1 and Phase 2 clinical trials, and approximately 260 subjects have been exposed to treatment. SpringWorks is evaluating PD-0325901 as a monotherapy for the treatment of patients with neurofibromatosis type 1-associated plexiform neurofibromas (NF1-associated PN). In addition, given the critical role that the MAPK pathway plays in the growth and proliferation of a large number of tumor types, SpringWorks is also pursuing PD-0325901 in combination with other rational anti-cancer agents across a range of solid tumors.

About SpringWorks Therapeutics
At SpringWorks Therapeutics, a clinical-stage biopharmaceutical company, we are driven to develop life-changing medicines for patients with severe rare diseases and cancer. Since our launch in 2017, we have worked to identify, re-prioritize, and advance promising science, beginning with our licensed clinical therapies from Pfizer Inc. We pioneer efficient pathways for drug development, leveraging shared-value partnerships with patient advocacy groups, innovators in industry and academia, and investors so that together, we can unlock the full potential of science for patients. Two of our therapies will be entering pivotal studies in the first half of 2019: nirogacestat, a gamma secretase inhibitor for the treatment of desmoid tumors, and PD-0325901, a MEK 1/2 inhibitor for neurofibromatosis type 1 patients with plexiform neurofibromas. PD-0325901 also holds promise as the backbone for combination therapies to treat metastatic solid tumors. Our pipeline also includes two earlier-stage assets for neurological and hematological conditions. At SpringWorks, we ignite the power of promising science to unleash new possibilities for patients. For more information, please visit www.springworkstx.com.

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