Ivy Brain Tumor Center and Salarius Pharmaceuticals Launch Collaborative Partnership to Develop New Cancer Treatment for Glioblastoma

Comprehensive pre-clinical study will test first-in-class investigational therapy Seclidemstat

PHOENIX, AZ / HOUSTON, TX – August 26, 2019 - The Ivy Brain Tumor Center at the Barrow Neurological Institute and Salarius Pharmaceuticals, Inc. (Nasdaq: SLRX), today announced a collaborative partnership to test Salarius' therapeutic candidate, Seclidemstat, for the treatment of glioblastoma. The organizations will launch what they believe is the most comprehensive pre-clinical study to date, evaluating the effect of targeting LSD1 (lysine-specific histone demethylase 1A), a key enzyme that has increased expression in tumors of brain cancer patients.

Seclidemstat is a reversible LSD1 inhibitor that works by inhibiting LSD1's enzymatic and protein-scaffolding functions. It is currently being tested by Salarius in a Phase 1 study for refractory or relapsed Ewing's sarcoma and a Phase 1 study for Advanced Solid Tumors. Seclidemstat is among the most clinically advanced reversible LSD1 inhibitors in development, and its potential effect on glioblastoma represents a promising new therapeutic treatment option.

"Seclidemstat is highly differentiated LSD1 inhibitor with unique properties that may enable efficacy in a broader range of cancer types. Seclidemstat and/or its analogs have shown the potential for synergies with chemotherapies and other targeted agents. This gives us hope that Seclidemstat may be effective in treating a number of aggressive cancers, including glioblastoma," said Dr. Nader Sanai, director of the Ivy Brain Tumor Center. "Our shared goal with Salarius is to address the lag in new drug development for malignant brain tumors by accelerating early-phase clinical trials for first-in-class agents like Seclidemstat."

The Ivy Brain Tumor Center's advanced pre-clinical capabilities include well-characterized patient-derived xenograft animal models and state-of-the-art pharmacokinetics and pharmacodynamics core facilities. A key component to this latest endeavor will be to leverage the Ivy Center's core capabilities in collaboration with Salarius to perform in-house survival studies, advanced animal imaging, toxicology assessment, and *in vivo* pharmaco-metabolic analyses.

Should the pre-clinical phase provide sufficient evidence for positive drug effects, the program will move to the subsequent clinical evaluation of Seclidemstat. This will take place within the context of a Phase 0 clinical trial, in which researchers will quickly learn if the new regimen is having the desired impact on a patient's individual tumor.

"Salarius is well positioned and highly-motivated to provide a new therapeutic option for a number of cancers with high unmet medical need," said David Arthur, President and Chief Executive Officer of Salarius Pharmaceuticals. "We are inspired by the Ivy Brain Tumor Center's unwavering commitment to pursuing advances in glioblastoma treatment and look forward to this creative and vital research partnership."

For more information about the Ivy Brain Tumor Center and the drug development partnership, please visit, www.ivybraintumorcenter.org.

Ivy Brain Tumor Center at the Barrow Neurological Institute in Phoenix, AZ is a non-profit translational research program that employs a bold, early-phase clinical trials strategy to identify new treatments for aggressive brain tumors, including glioblastoma. The Ivy Center's Phase 0 clinical trials program is the largest of its kind in the world and enables personalized care in a fraction of the time and cost associated with traditional drug development. Unlike conventional clinical trials focusing on single drugs, its accelerated trials program tests therapeutic combinations matched to individual patients. Learn more at IvyBrainTumorCenter.org. Follow the Ivy Brain Tumor Center on Facebook, Instagram, Twitter and LinkedIn.

Salarius Pharmaceuticals, Inc. is a clinical-stage oncology company targeting the epigenetic causes of cancers and is developing treatments for patients that need them the most. Epigenetics refers to the regulatory system that affects gene expression. In some cancers, epigenetic regulators often become dysregulated and incorrectly turn genes "on" or "off" leading to cancer progression. The company's lead candidate, Seclidemstat, is currently in clinical development for treating Ewing sarcoma, for which it has Orphan Drug designation and Rare Pediatric Disease Designation by the U.S. Food and Drug Administration. Salarius believes that Seclidemstat is one of only two reversible inhibitors of the epigenetic modulator LSD1 currently in human trials, and that it could have potential for improved safety and efficacy compared to other LSD1-targeted therapies. Salarius is also developing Seclidemstat for a number of cancers with high unmet medical need, with a second Phase 1 clinical study in advanced solid tumors, including prostate, breast and ovarian cancers. Salarius receives financial support from the National Pediatric Cancer Foundation to advance the Ewing sarcoma clinical program and is also the recipient of an $18.7M Product Development Award from the Cancer Prevention and Research Institute of Texas (CPRIT). For more information, please visit salariuspharma.com.

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