NEWS RELEASE

Galactica Pharmaceuticals Announces the Online Publication of Newest COVID-19 Data at bioRxiv

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VILLANOVA, Pa.--(BUSINESS WIRE)-- Galactica Pharmaceuticals, Inc., a biopharmaceutical company focused on developing novel fusion protein molecules, announced today the online publication of its recent COVID-19 in vivo animal data at bioRxiv. Based on three studies in both the mouse and hamster COVID models, Galactica's investigational RAGE (Receptor for Advanced Glycation End Products) fusion protein is the first and only molecule to have demonstrated both a statistically significant survival benefit and reduction in viral load. The full study, "Anti-Viral and Anti-Inflammatory Therapeutic Effect of RAGE-Ig Protein Against Multiple SARS-CoV-2 Variants of Concern Demonstrated in K18-hACE2 Mouse and Syrian Golden Hamster Models" can be found at **www.galacticapharma.com**.

If these very encouraging preclinical data are replicated in human studies, we anticipate that in the treatment of COVID-19 patients, Galactica's RAGE protein could potentially:

- Save the lives of many hospitalized COVID-19 patients;
- Enable COVID-19 patients to be discharged from ICU units and hospitals faster by simultaneously reducing their viral load;
- Reduce the likelihood that infected patients will spread the virus to others.

"Having studied this molecule in eight in vivo animal studies across various disease areas and generated strong data in each one, we remain optimistic that our RAGE protein may prevent the vast majority of COVID-related deaths. We look forward to advancing our RAGE investigational drug into a Phase I/II COVID clinical trial in the coming months. Our investigational drug is expected to initially target hospitalized COVID patients requiring ventilation or expected to do so imminently," said Lawrence Brown, Galactica's Chief Executive Officer.

“As COVID-19 continues to mutate and prove fatal for certain patient populations, it is imperative that we develop new, effective therapeutics to treat these vulnerable patients,” said Lbachir BenMohamed, Ph.D., Galactica's preclinical COVID investigator. ”Millions of recovered COVID patients are still experiencing long- term COVID symptoms, often for many months post-recovery. Given the unique anti-inflammatory and anti-viral dual benefit of Galactica’s investigational drug, it will be interesting to observe whether this molecule is effective against long COVID symptoms in human populations.”

The expected primary endpoint of Galactica’s initial Phase I/II COVID clinical trial is survival. If that endpoint is met, Galactica expects to seek Emergency Use Authorization (EUA) from the United States Food and Drug Administration to quickly make the drug available to hospitalized COVID-19 patients.

About RAGE

RAGE (Receptor for Advanced Glycation End Products) is the AGEs-specific multi-ligand receptor involved in inflammatory responses to various chronic inflammatory lung diseases. RAGE is known to be highly expressed in the lungs, especially in the alveolar epithelial cells (AECs), in comparison to other organs of the human body. The RAGE pathway has been reported in the pathogenesis of lung diseases such as chronic obstructive pulmonary disease (COPD), interstitial lung diseases, and ARDS. In recent years, the therapeutic intervention of the RAGE pathway has been demonstrated to benefit patients suffering from ARDS, COPD, pulmonary fibrosis, and other pathologies associated with the pulmonary system.

RAGE has also been postulated to contribute to diabetic complications by binding a variety of molecules, including AGEs, HMGB1, S100, and integrins. Such interactions lead to inflammatory processes, including the upregulation of adhesion molecules, generation of cytokines and reactive oxygen species, and upregulation of monocyte chemoattractant protein 1, at least in part through the activation of NF-κB. The mechanisms by which RAGE inhibitors have been postulated to work include by being a scavenger for soluble AGEs, by acting as a competitive antagonist for membrane-bound RAGEs and for the full-length biologically active RAGEs, and by binding HMGB1 to prevent its interaction with membrane RAGEs.

About Galactica Pharmaceuticals, Inc.

Galactica is an “IND-ready” biopharmaceutical company focused exclusively on the development of its novel, proprietary RAGE fusion protein. While the initial indication is expected to be the treatment of lung inflammation and Cytokine Storm symptomatic of COVID-19, the molecule is also under development for the treatment of diabetes and diabetic complications and both the dry and wet forms of macular degeneration. Learn more: **www.galacticapharma.com**.

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