FibroGenesis Files Expanded Patent Coverage for its Fibroblast Cell Therapy to treat Coronavirus (COVID-19) ARDS

Company Reports Potent Synergy Between its Fibroblast-Based Cell Therapy and Hydroxychloroquine

HOUSTON, April 1, 2020 /PRNewswire/ -- FibroGenesis, a Texas-based regenerative medicine company focused on tissue regeneration and chronic disease reversal using Human Dermal Fibroblasts (HDFs), today announced the filing of United States Provisional Patent Number 63/002,134 titled, "Peptides and Adjuvants for Augmentation of Fibroblast Therapy for Coronavirus."

The claims in the patent include utilization of fibroblast cells along with adjuvants such as peptides and hydroxychloroquine which stimulates the production of natural interferon to suppress the viral infection and corresponding "cytokine storm." In one embodiment, the invention provides methods of preventing infection, propagation, and pathology caused by the COVID-19 virus. Also included are claims to modify fibroblasts to express enhanced levels of "therapeutic cytokines."

"As we continue our accelerated preclinical program, we are discovering the superiority of fibroblasts over mesenchymal stem cells and the data is leading us toward multiple treatment options for the patient," commented Tom Ichim, Ph.D., Chief Scientific Officer of FibroGenesis. "By including adjuvants such as peptides and hydroxychloroquine in our treatment we've seen added potency."

"We are working to expand our discoveries in the lab and accelerate the clinical development into a cure for COVID-19 using our advanced fibroblast cell therapy," said Pete O'Heeron, Chief Executive Officer, FibroGenesis. "The war we are fighting, with this invisible enemy, will likely require a cocktail-based approach for victory. At FibroGenesis we are following the lead of Thomas Edison when he discovered the filament for the lightbulb; we are testing as many therapeutic combinations as possible, in search of the most efficient and effective cure. Enhancing the natural production of interferon combined with our previous work can be seen as a possible advancement toward a cure."

About COVID-19 Induced ARDS

Acute respiratory distress syndrome (ARDS) is a type of severe acute lung dysfunction affecting all or most of both lungs and can be a severe complication of viral infections including COVID-19.

It is known that ARDS is often associated with fluid accumulation in the lungs. When this occurs, the elastic air sacs (alveoli) in the lungs fill with fluid and the function of the alveoli is impaired. The result is that less oxygen reaches the bloodstream, depriving organs of the oxygen required for normal function and viability. Severe shortness of breath, the main symptom of ARDS, usually develops within a few hours to a few days after the precipitating injury or infection. There are currently no effective pharmacologic therapies for treatment or prevention of ARDS. Protective lung ventilator strategies remain the mainstay of available treatment options. Due to the significant morbidity and mortality
associated with ARDS and the lack of effective treatment options, new therapeutic agents for the treatment of ARDS are needed.

**About FibroGenesis**

Based in Houston, Texas, FibroGenesis, is a regenerative medicine company developing an innovative solution for chronic disease treatment using human dermal fibroblasts. Currently, FibroGenesis holds 186 U.S. and international issued patents/patents pending across a variety of clinical pathways, including Disc Degeneration, Multiple Sclerosis, Parkinson's, Chronic Traumatic Encephalopathy, Cancer, Diabetes, Liver Failure and Heart Failure. Funded entirely by angel investors, FibroGenesis represents the next generation of medical advancement in cell therapy.