



## **FibroGenesis Files Patent Using its Fibroblast Cell Therapy for Coronavirus (COVID-19) ARDS**

March 10, 2020 Houston, TX--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 62/986,339 titled, "Fibroblast and TLR Activated Fibroblast Treatment of Viral Induced Acute Respiratory Distress Syndrome".

The claims in the patent include utilization of universal donor cell therapies for treatment of Acute Respiratory Distress Syndrome (ARDS), which is one of the major causes of Coronavirus associated deaths. The disclosure addresses the unmet need by providing a novel therapeutic agent in the treatment of ARDS using fibroblasts as toll-like receptors which activates fibroblasts as a means of dampening ARDS, while producing factors such as inteferons to stimulate anti-viral immunity.

"We have known about the regenerative and anti-inflammatory properties of fibroblasts, but our research continues to discover many other benefits of this 'super-cell', commented Tom Ichim, Ph.D., Chief Scientific Officer of FibroGenesis. "COVID-19 mortality centers around ARDS and we are finding compelling data to potentially cure this deadly condition with fibroblasts. We have demonstrated that our cells are capable of producing interferon. Hypothetically, this endows our cells not only with the ability to suppress ARDS, but also allows the cells to possess a direct anti-viral effect."

"As we continue to expand our clinical knowledge of fibroblasts, we are finding their therapeutic benefit across a broad chronic disease platform", said Pete O'Heeron, Chief Executive Officer, FibroGenesis. "Discovering fibroblasts can potentially cure the leading cause of death from COVID-19, encouraging us to expedite the clinical testing needed to validate their benefit."

### **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. When afflicting older patients with co-morbidities such as diabetes, asthma or heart disease, it can result in a high death rate.

ARDS is a serious condition with associated high mortality that afflicts approximately 200,000 people in the United States each year, leading to approximately 75,000 deaths. A number of clinical trials of treatments for ARDS have been conducted and to date none have been proved highly effective; therefore, there is a great need for new, more effective treatments.

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. While inhibition of fibrin formation mitigated injury in some preclinical models of ARDS, anticoagulation therapies in humans do not attenuate ARDS and may even increase mortality. 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 and new treatment methods for 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 184 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.

Visit [www.Fibro-Genesis.com](http://www.Fibro-Genesis.com).

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