

FibroGenesis Reports Breakthrough in Prevention of COVID-19 Blood Clotting

Laboratory Studies Suggest PneumoBlast™ COVID-19 Cell Therapy Reduces Coagulopathy

HOUSTON, August 12, 2020 (GLOBE NEWSWIRE) -- FibroGenesis, a clinical stage company developing fibroblast based therapeutic solutions for unmet medical needs, announced today new data supporting utilization of its PneumoBlast™ product in treatment of COVID-19. Laboratory experiments comprised of admixing PneumoBlast™ with activated monocyte or endothelial cells demonstrated significant inhibition of tissue factor expression. Tissue factor is the key molecule inducing blood clotting in COVID-19 patients. Monocytes are cells which normally protect the body against pathogens. In the case of COVID-19, monocytes enter the lungs and cause coagulation. Endothelial cells are cells which make up the inside of the blood vessel and regulate substance flow between the bloodstream and surrounding tissues.

It was observed that treatment of activated monocytes with PneumoBlast™ resulted in a 77% reduction of tissue factor expression as compared to untreated monocytes ($p < 0.001$). Mixture of mesenchymal stem cells with activated monocytes resulted in a 13% inhibition of tissue factor expression ($p = 0.01$). Furthermore, in activated endothelial cells, PneumoBlast™ decreased expression of tissue factor by 80% ($p < 0.001$), whereas mesenchymal stem cells resulted in a 30% ($p = 0.01$) reduction.

It is believed that a significant cause of morbidity and mortality in COVID-19 occurs because of unrestrained blood clotting. Studies have shown the high propensity for clotting in COVID-19 patients is associated with inflammation. The Company previously demonstrated PneumoBlast™ reduces proteins necessary for inflammation, such as TNF-alpha. The current study shows PneumoBlast™ can also work downstream of inflammation and directly suppress the clotting cascade.

“This data is truly stunning,” said Tom Ichim, Ph.D., Chief Scientific Officer of FibroGenesis. “Currently one of the major obstacles to successful treatment of COVID-19 is the unusually high level of unregulated coagulation, which in many cases is not resolved by standard anticoagulants. The ability of PneumoBlast™ cells to reduce blood clotting potential in both monocytic and endothelial cells speaks volumes about the multifactorial mechanisms by which we believe our product will work on COVID-19.”

“We are thankful for our team of clinical collaborators and scientists who are exploring and identifying novel mechanisms by which PneumoBlast™ appears to be effective against COVID-19,” commented Pete O’Heeron, President and CEO of FibroGenesis. “We are the first cell therapy company to address the issue of coagulation in COVID-19. We see this, as another indication of the superiority of fibroblasts compared to stem cells.”

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 235+ 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, Colitis and Heart Failure. Funded entirely by angel investors, FibroGenesis represents the next generation of medical advancement in cell therapy.

Visit www.Fibro-Genesis.com.