Press release

2020-09-23

SynAct Pharma Initiates Phase II Study with AP1189 for the Treatment of ARDS in COVID-19 Patients

SynAct Pharma AB ("SynAct Pharma") today announced the initiation of a Phase II clinical study to evaluate the safety and efficacy of the company's lead candidate drug AP1189 in adults diagnosed with COVID-19 and with early signs of Acute Respiratory Distress Syndrome (ARDS). The patients will be enrolled at medical centers in Brazil and in a collaboration between SynAct Pharma, Queen Mary University, London, UK, and Universidade Federal de Minas Gerais, Belo Horizonte, Brazil, to explore resolution therapy as a novel option for the treatment of hyperinflammation associated with COVID-19. The study is fully financed and should be complete within six months.

"SynAct´s primary focus is to rapidly determine the safety and efficacy of AP1189 as a potential treatment for COVID-19. There is indeed a pressing need for treatment options in this devastating pandemic around the world," said Jeppe Øvlesen, CEO SynAct Pharma.

With the injection of SEK 32.4 million from the redemption of subscription rights in July 2020, it is estimated that SynAct Pharma has the funds to perform the COVID-19 Phase II study, in addition to the completion of the ongoing Phase II study with AP1189 in Rheumatoid Arthritis and the proof-of-concept study in Nephrotic Syndrome.

The trial design, which has been approved by the authorities in Brazil, is based upon strong scientific evidence supporting the role of AP1189 in modulating inflammatory responses. The first part of the study, which is an open-label study in 6 patients to evaluate the safety of the compound in a specific clinical setting, will be initiated as soon as medicine for the study has arrived at the clinical site. The second part of the study will evaluate the safety and efficacy of a two-week dosing regimen in patients with moderate manifestations of COVID-19, compared with standard care. The mortality rate of COVID-19-related ARDS is 45 percent, and ARDS is present in about 90 percent of COVID-19 deaths, according to a report from the U.S National Library of Medicine.

Approximately 54 patients will be randomized in a 2:1 ratio to receive AP1189 100 mg once daily, in addition to standard of care. The study is set up with the aim to characterize the compound's ability to promote inflammatory resolution in COVID-19 infected patients. The primary clinical objective of the study is to show reduction in time to respiratory recovery (i.e. time to normalization of oxygen saturation on ambient air).

During the COVID-19 pandemic, an increased understanding of the pathophysiology associated with the development of COVID-19 induced hyperinflammation has emerged, highlighting a key role of macrophages in lung tissue being responsible for the initiation of the inflammatory cascade eventually resulting in the development of ARDS.

"The mechanism of action of AP1189 is to promote inflammatory resolution through melanocortin receptor activation, thereby reducing the pro-inflammatory activity of macrophages and by stimulating so-called macrophage efferocytosis, a specific ability to clear inflammatory cells. This direct effect of AP1189 on macrophages suggests potential significant benefit in COVID-19 patients suffering from an exaggerated inflammatory response (hyperinflammation) which untreated leads to ARDS. The collaboration with Prof Mauro Teixeira of Universidade Federal de Minas and Prof Mauro Perretti of William Heavy Research Institute, Barts and the London School of Medicine, Queen Mary University, is indeed strategically important for the company," said Dr. Thomas Jonassen, MD, CSO SynAct Pharma.

"Induction of a hyperinflammatory response plays a key role of the affection of pulmonary function in Covid-19 infected patients. The aim of the current study is therefore to start treatment as soon as the patients are referred to hospital with the aim to investigate whether AP1189 can promote inflammatory resolution and thereby reduce time to recovery and reduce the risk of development of severe ARDS," said primary investigator Prof. Mauro Teixeira.

This information is such information that SynAct Pharma AB is obliged to publish in accordance with the EU Market Abuse Regulation. The information was submitted, through the agency of the below contact person, for publication on September 23, 2020.

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About SynAct Pharma AB

SynAct Pharma AB conducts research and development in inflammatory diseases. The company has a platform technology based on a new class of drug candidates aimed at acute deterioration in chronic inflammatory diseases with the primary purpose of stimulating natural healing mechanisms.

About AP1189

SynAct Pharma's drug candidate AP1189 is a melanocortin receptor agonist on MC1 and MC3 receptors and is in clinical phase II development for the treatment of active Rheumatoid Arthritis (RA) and Nephrotic Syndrome (NS): https://clinicaltrials.gov/ct2/show/NCT04004429?term=AP1189&draw=2&rank=1).

About RESOVIR

RESOVIR (Resolution in Viral infection) is a scientific collaboration established between Prof Mauro Teixeira, MD, PhD, Universidade Federal de Minas, Belo Horizonte, Brazil, Prof Mauro Perretti, PhD William Heavy Research Institute, Barts and the London School of Medicine, Queen Mary University, London, UK, and SynAct Pharma AB. Prof Perretti is a pioneer in understanding of the possibilities associated to promote inflammatory resolution though pharmacological targeting specific pathways as the melanocortin system and has played a profound role of the understanding of the therapeutic potential of the AP1189 compound as applied in ongoing Phase 2 study with the compound in Rheumatoid Arthritis. Prof Teixeira is a pioneer in investigating the potential of promoting inflammatory resolution in viral infection, with main focus on Dengue Virus and Influenza virus where viral-induced hyperinflammation, as with Covid-19, plays a significant role for development of severe life-treating organ affection.

About COVID-19

Coronavirus disease 2019 (COVID-19) is a pandemic disease caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Most COVID-19 cases (~80%) are mild respiratory illnesses. However, some require hospitalisation, mostly due to pneumonia, and can progress quickly to severe acute lung injury and acute respiratory distress syndrome (ARDS), which is associated with high mortality.[1,2,3,4] A viral-induced cytokine storm or “hyperinflammation” is hypothesised to be a major pathogenic mechanism of ARDS in these patients through modulation of pulmonary macrophages and dendritic cells and/or neutrophils.[5,6,7,8]

References:

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