

Algernon re-purposes Ifenprodil drug against COVID-19

04 May 2020 | News

Received approval from the Ministry of Food and Drug Safety in South Korea, as well as ethics approval



Canada based Algernon Pharmaceuticals Inc., a clinical stage pharmaceutical development company, is pleased to announce that it has received approval from the Ministry of Food and Drug Safety in South Korea, as well as ethics approval, for an investigator-led, Phase 2 COVID-19 clinical study of its re-purposed drug NP-120 (Ifenprodil), an NMDA receptor antagonist.

The Lead Principal Investigator is Dr. Dong Sik Jung, Professor, in the Division of Infectious Disease of Dong-A University Hospital, Busan.

The 40-patient, 4-week trial, is designed to test the effect of Ifenprodil in COVID-19 infected patients with severe pneumonia. Patients are randomized in a 1:1 fashion to receive either standard of care (SOC) or SOC with Ifenprodil. The primary endpoint will be the rate at which their lung function improves by measuring oxygen levels in the blood (PaO₂/FiO₂). Secondary endpoints will include mortality, rate of mechanical ventilation, and patient reported effects on cough and breathlessness (dyspnea).

Enrollment in the phase 2 clinical trial is expected to begin on May 8, 2020.

“This first human trial of Ifenprodil in COVID-19 patients is a major step forward with our new acute lung injury clinical research program,” said Christopher J. Moreau CEO of Algernon. “Positive Phase 2 data would be an important milestone as we continue to investigate Ifenprodil’s therapeutic potential as a treatment for COVID-19, in addition to advancing our idiopathic pulmonary fibrosis and chronic cough program.”

The Company cautions that while it is preparing to begin a Phase 2 clinical trial shortly in South Korea, it is not making any express or implied claims that NP-120 (Ifenprodil) is an effective treatment for acute lung injury (ALI), the COVID-19 virus, or any other medical condition at this time.

NP-120 (Ifenprodil) is an N-methyl-D-aspartate (NMDA) receptor antagonist specifically targeting the NMDA-type subunit 2B (Glu2NB). Ifenprodil prevents glutamate signalling. The NMDA receptor is found on many tissues including lung cells and T-cells, neutrophils.

The Company believes NP-120 can reduce the infiltration of neutrophils and T-cells into the lungs where they can release glutamate and cytokines respectively. The latter can result in the highly problematic cytokine storm that contributes to the loss of lung function and ultimately death as has been reported in COVID-19 infected patients.