

Form 51–102F3

MATERIAL CHANGE REPORT

**Item 1. Name and Address of Company**

Algernon Pharmaceuticals Inc. (the “Company”)  
Suite 915 – 700 West Pender Street  
Vancouver, BC Canada V6C 1G8

**Item 2. Date of Material Change**

June 3, 2020

**Item 3. News Release**

The news release with respect to the material change referred to in this report was issued by the Company on June 4, 2020 and distributed through the facilities of Stockwatch. The news release was filed on SEDAR and is available at [www.sedar.com](http://www.sedar.com).

**Item 4. Summary of Material Change**

Algernon receives U.S. FDA clearance for multinational phase 2b/3 human study to evaluate Ifenprodil as a potential therapeutic for COVID-19

**Item 5.1. Full Description of Material Change**

The Company announced that it has received, on June 3rd, 2020, clearance from the U.S. FDA for its recently submitted Investigational New Drug (IND) application for its planned multinational Phase 2b/3 study of its re-purposed drug NP-120 (Ifenprodil) as a potential therapeutic treatment for patients with COVID-19. Ifenprodil is an NMDA receptor antagonist.

The clinical study for Ifenprodil is entitled, “A Randomized Open Label Phase 2b/3 Study of the Safety and Efficacy of NP-120 (Ifenprodil) for the Treatment of Confirmed COVID-19 Infected Hospitalized Patients.” As part of the multinational Phase 2b/3 COVID-19 clinical study, Algernon has already received clearance in Canada and has also filed for ethics approval in Australia.

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

**Phase 2b/3 Study Summary:**

Once local ethics approvals have been received, the trial will begin as a Phase 2b study of an aggregate of 100 patients and with positive preliminary data, the clinical trial will move directly from a Phase 2b into a Phase 3 trial. The data will determine the number of expected patients needed to reach statistical significance in the Phase 3 trial.

Patients will be randomized in a one-to-one manner and will either be treated using an existing standard of care, or standard of care plus a 20mg dose of Ifenprodil taken three times a day for two weeks.

Over the testing period, doctors will observe whether there is an improvement in a number of secondary endpoints, including mortality, blood oxygen levels, time spent in intensive care and time to mechanical ventilation.

**About NP-120 (Ifenprodil)**

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, T-cells, and 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.

**Item 5.2. Disclosure for Restructuring Transactions**

Not applicable.

**Item 6. Reliance on subsection 7.1(2) of National Instrument 51-102**

Not applicable.

**Item 7. Omitted Information**

None.

**Item 8. Executive Officers**

The following senior officer of the Company is knowledgeable about the material change and this material change report and may be contacted:

Christopher J. Moreau, Chief Executive Officer  
604.398.4175 ext 701

**Item 9. Date of Report**

June 9, 2020.