

# TREATMENT OF COVID-19 USING FLUVOXAMINE MALEATE

# <u>Lenze, Eric, Reiersen, Angela</u> <u>Poranki, Deepika</u> T-019712

*Value Proposition:* Novel method for treating short- and long-term symptoms of COVID-19 using a selective serotonin reuptake inhibitor (SSRI) and a sigma-1 receptor (S1R) agonist.

## **Technology Description**

Researchers at Washington University in St. Louis have developed a novel method for treating COVID-19 using fluvoxamine maleate, a selective serotonin reuptake inhibitor (SSRI) and a sigma-1 receptor (S1R) agonist. Research has shown that some patients with COVID-19 experience deterioration around week two of the illness, due to an excessive inflammatory response. This may lead to severe disease, sometimes including respiratory deterioration, need for hospitalization, death, and long-term symptoms after the acute phase of COVID-19 has passed.

The use of Fluvoxamine maleate may be able to prevent or ameliorate the body's excessive inflammatory response, preventing respiratory deterioration and other short- and long-term complications of COVID-19. Additionally, this novel method can reduce Post-Acute Sequelae of SARS-CoV-2 infection (PASC).

#### **Stage of Research**

Conducted a double-blind, randomized controlled trial of fluvoxamine versus placebo in 80 outpatients with COVID-19.

#### Publications

Dodds MG, Doyle EB, Reiersen AM, Brown F, Rayner CR. <u>Fluvoxamine for the treatment of COVID-19</u>. Lancet Glob Health. 2022 Mar;10(3).

Prasanth MI, Wannigama DL, Reiersen AM. <u>A systematic review and meta-analysis, investigating dose and time of</u> <u>fluvoxamine treatment efficacy for COVID-19 clinical deterioration, death, and Long-COVID complications</u>. Sci Rep. 2024 Jun 12;14(1).

Wannigama DL, Hurst C...Reiersen AM, Abe S, Ishikawa H; <u>COVID-EarlyMed Trial Team. Early treatment with fluvoxamine</u>, <u>bromhexine</u>, <u>cyproheptadine</u>, <u>and niclosamide to prevent clinical deterioration in patients with symptomatic COVID-19: a</u> <u>randomized clinical trial</u>. EClinicalMedicine. 2024 Mar 14;70:102517.

## Applications

• Treatment of COVID-19

#### **Key Advantages**



- Prevents respiratory deterioration
- Inhibits short- and long-term complications of COVID-19

Patents

Patent application filed

Related Web Links - Angela Reiersen Profile