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LETTER TO THE EDITOR

Authors' Reply to Mazza et al.: "Fluvoxamine for the Early Treatment of SARS-CoV-2 Infection: A Review of Current Evidence"

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Dear Editor,

We appreciated the thoughtful letter by Dr. Mazza positing that the antidepressant effect of fluvoxamine could make it a useful treatment for patients experiencing depression in the wake of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2; coronavirus disease 2019 [COVID-19]) infection [1]. This highlights two important points: (1) the critical need to find effective treatments for the neuropsychiatric sequelae of COVID-19 and (2) the potential to repurpose selective serotonin reuptake inhibitors (SSRIs) and other psychotropics towards this goal.

Neuropsychiatric problems are common after COVID-19, including mood and anxiety disorders, cognitive impairment, psychosis, and stroke. A large electronic health record database study found that one in three COVID-19 survivors experienced neuropsychiatric illness after 6 months, including 17% with new-onset anxiety disorder and 14% with new-onset depression [2]. Etiologies include central inflammation, delirium, post-intensive care unit syndrome, cerebrovascular accidents, and psychosocial stress.

Dr. Mazza recently showed that "COVID depression" may be particularly responsive to SSRIs, suggesting that these drugs may have a role in reducing the substantial morbidity of post-COVID neuropsychiatric syndromes [3]. Serotonin reuptake inhibitors (SRIs) have manifold effects on human physiology, including anti-inflammatory and neurorestorative effects in some studies [4]. Some SRIs have secondary molecular targets, such as the sigma-1 receptor, which motivated our repurposing of fluvoxamine (a strong activator of this receptor) for acute COVID-19.

More studies are needed to confirm and extend the findings of Mazza et al. [1] in COVID-depression and other neuropsychiatric manifestations of this disease.

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Declarations

Conflict of interest Dr. Reiersen and Dr. Lenze are listed on a patent application related to methods of treating COVID-19 that was filed by Washington University in St. Louis. Dr Facente has no conflicts of interest that are directly relevant to the content of this letter.

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