# **BRIEF19**

A daily review of covid-19 research and policy

#### RESEARCH BRIEFING

## Fluvoxamine shows promise in treating covid-19. Should it? Who cares?

There's a <u>new paper</u> in the *Journal of the American Medical Association*, published yesterday, called "Fluvoxamine vs Placebo and Clinical Deterioration in Outpatients With Symptomatic COVID-19." The upshot is that in this small pilot study, SARS-CoV-2 outpatients with mild illness who took fluvoxamine—a selective serotonin reuptake inhibitor approved for obsessive compulsive disorder and also used as an anti-depressant—had a lower likelihood of clinical deterioration15 days later.

We could take our usual *Brief19* approach and go through why this finding, while potentially interesting and exciting, does *not* mean that this treatment is "ready for primetime." Sure, the study was small (only 152 patients were randomized to receive either the drug or placebo). Yes, the number of hospitalizations in the placebo group was low meaning that a small number of events are responsible for the "statistical significance" of the results. Or, we could discuss conflicts of interest; indeed, the lead author of the paper has taken thousands of dollars from the company that makes the drug tested. We could relitigate a past controversy around this drug (which is no longer marketed for "social anxiety disorder," partly because one of the Columbine shooters was taking this drug at the time of that massacre). Usually, we'd just poke holes in the research methods in order to point out that most media headlines oversimplify things.

Instead, there's another concept I'd like to highlight. *Theory versus reality*. Ever since the pandemic began, I've been asked about dozens of potential treatments for covid-19. Not a week goes by that I do not receive unsolicited emails asking me (in some cases *begging me*) to stop what I'm doing and advocate for some untested treatment that the writer believes is *the secret silver bullet* that will end this pandemic mire. Some of the ideas are complete drivel. Others have at least some scientific rationale; a computer model unveiled some potential interaction between the compound and coronavirus; perhaps experts have pointed out an elegant theoretical mechanism; maybe the drug even inhibited the novel coronavirus when introduced to human or animal cells in a lab. But later, almost always, when tested in humans in genuine clinical trials, hopes are dashed.

That's why this fluvoxamine study interests me. The explanation for why this particular drug might work provided by the authors is every bit as hand-wavy as umpteen others that I've read in clinical trials that failed spectacularly. What makes this trial special? Nothing. Oh, except one thing. These data, preliminary though they are, appear to show signs that this drug might *actually work*. We can't say for sure. We'll need a far bigger study and a better set of outcomes. But this study is truly "hypothesis-generating."

Let's imagine we were forced to choose between two potential drugs. One comes with a beautifully worked out explanation for why it *should* work against SARS-CoV-2, but the emerging clinical data are disappointing. The other has a far less impressive theory behind its use, but early data suggests that it *is* both safe and effective. I'd take the ugly theory with the beautiful data over a beautiful theory with ugly data any day.

—Jeremy Samuel Faust, MD MS

#### **POLICY BRIEFING**

### Utah ramps up restrictions as cases swell.

On Monday Gary Herbert, Utah's Republican Governor, declared a <u>state</u> of emergency and issued a series of orders aimed at stopping the spike of new cases. On November 12, 3,824 new cases were reported in a state with a total population of 3.2 million people. That means that yesterday, more than 1 in 1000 of *all* Utah residents found out they were infected with SARS-CoV-2. The 14-day averages placed every county in the state in the "very high rate" category (the worst designation possible in the state's 7-tier color coding system), save for one bright spot, the southern county of Kane which is merely in the "high rate" category (the second worst designation possible).

Specifically, Governor Herbert has called for a mask mandate when individuals are outside, at work, or closer than six feet to individuals who do not live in the same household. Additionally, there is a two-week moratorium on extracurricular activities, save high school sports championships, and intercollegiate games as long as testing and distancing standards are applied.

In addition to the mask policy lasting "for the foreseeable future", future plans include weekly screening of students attending any university with in-person classes and a statewide expansion of testing of younger, asymptomatic individuals as well as employees under age 35. *The Associated Press* 

—Joshua Lesko, MD