New COVID-19 treatment trial results published

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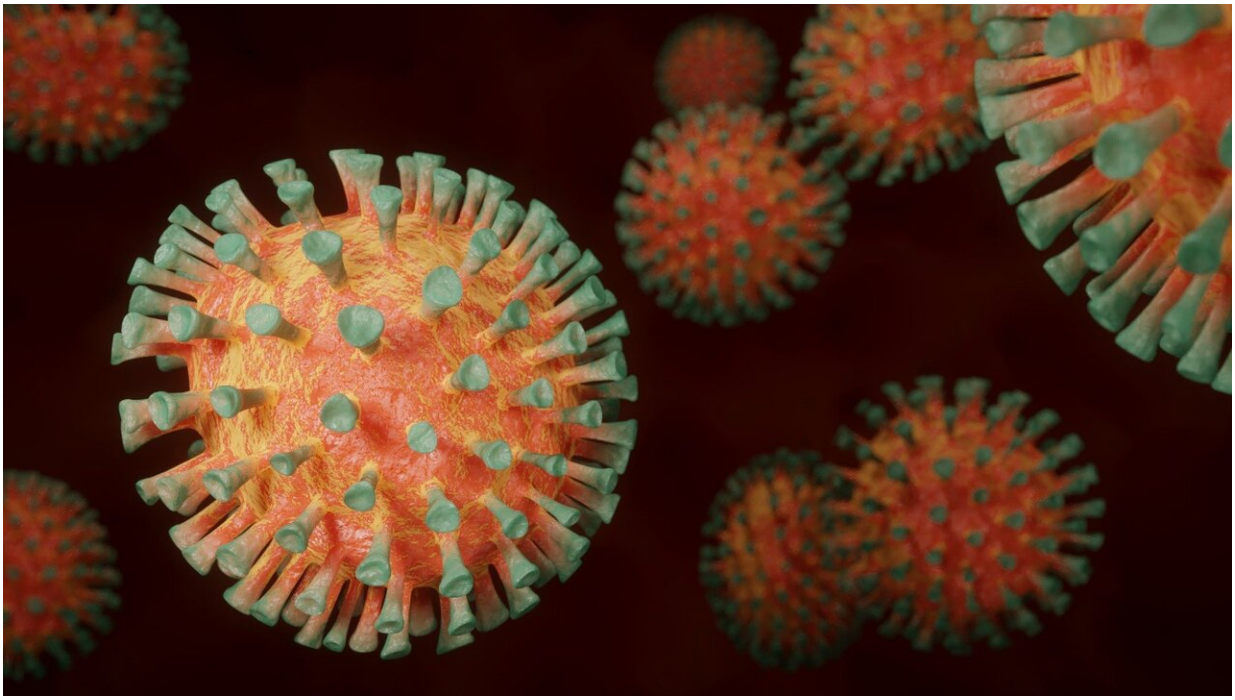

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A clinical trial involving COVID-19 patients hospitalized at UT Health San Antonio and University Health, among roughly 100 sites globally, found that a combination of the drugs baricitinib and remdesivir reduced time to recovery, according to results published Dec. 11 in the *New England Journal of Medicine*. Six researchers from UT Health San Antonio and University Health are coauthors of the publication because

of the San Antonio site's sizable patient enrollment in the trial.

The Adaptive COVID-19 Treatment Trial 2 (ACTT-2), which compared the combination therapy versus remdesivir paired with an inactive placebo in hospitalized COVID-19 patients, was supported by the National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health.

Significantly, patients on high oxygen by nasal canula or receiving breathing assistance with a mask when they were enrolled in the study had a time to recovery of 10 days with combination treatment versus 18 days with remdesivir and placebo.

Investigators also saw a difference in patient survival. The 28-day death rate was 5.1% in the combination therapy group and 7.8% in the remdesivir placebo group.

"We are making progress in the treatment of COVID-19," said principal investigator Thomas Patterson, MD, professor and chief of infectious diseases in the Joe R. and Teresa Lozano Long School of Medicine at UT Health San Antonio. "Remdesivir markedly improved recovery of critically ill patients in the first ACTT study, and baricitinib further helped patients in this second study."

Remdesivir is a direct-acting antiviral drug, whereas baricitinib is an anti-inflammatory medicine.

"I think this combination is good for a couple of reasons," Dr. Patterson said. "Baricitinib, as opposed to other anti-inflammatory drugs, has activity itself against the virus. Second, it is a pretty specific inhibitor of the inflammation."

Baricitinib is approved for the treatment of patients with active

rheumatoid arthritis. The U.S. Food and Drug Administration issued an emergency use authorization on Nov. 19, 2020, for baricitinib, in combination with remdesivir, for the treatment of suspected or laboratory-confirmed COVID-19 in hospitalized adults and pediatric patients 2 years of age or older requiring supplemental oxygen, invasive mechanical ventilation or extracorporeal membrane oxygenation.

"We do these clinical trials to accomplish a goal, and that is to save lives," Dr. Patterson said. "At the beginning of the pandemic, we were losing a lot of patients who we are now saving, so we are getting closer to our goal."

More information: Andre C. Kalil et al, Baricitinib plus Remdesivir for Hospitalized Adults with Covid-19, *New England Journal of Medicine* (2020). DOI: 10.1056/NEJMoa2031994

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