

Summary for Patients: Outpatient Treatment of Confirmed COVID-19

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Correction: This article was updated on 18 April 2023 to account for corrections made in Sommer et al. A correction has been published (doi: 10.7623/L23-0098).

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What is the problem and what is known about it so far?

Various pharmacologic therapies, including antiviral drugs, corticosteroids, and other repurposed medications, have emerged as possible treatment options for outpatients with COVID-19.

Why did the researchers do this particular study?

The aim of this living, rapid review was to systematically collate and assess the evidence on the benefits and harms of COVID-19 treatments of interest to support the American College of Physicians in developing practice points on the use of COVID-19 treatments in adult outpatients.

Who was studied?

Across 26 studies, the number of participants in studies ranged from 18 to 5607. The median ages varied from 26 to 77 years. Trials were conducted in the United States, Canada, Argentina, Brazil, Colombia, Spain, Italy, the Middle East, or multiple countries. All studies were conducted before the Omicron variant became the dominant strain. In all studies, SARS-CoV-2 infection status was confirmed by a diagnostic test.

How was the study done?

The researchers searched the Epistemonikos COVID-19 L-OVE Platform up to 4 April 2022 and the COVID-NMA initiative website, with a surveillance search on 17 August 2022. Two trained reviewers independently screened studies against predefined eligibility criteria. One reviewer abstracted data, assessed risk of bias, and assessed overall strength of the evidence, with verification by a second reviewer. Statistical methods were used to combine information across studies.

What did the researchers find?

Three antiviral medications and 3 monoclonal antibodies were effective, although all studies were conducted before the emergence of the current Omicron variant. Nirmatrelvir-ritonavir probably reduced hospitalizations and death. Molnupiravir may reduce death. Remdesivir may improve recovery and reduce hospitalizations. Casirivimab-imdevimab reduced time to recovery and probably reduced hospitalizations. Regdanvimab probably improved recovery. Sotrovimab may reduce hospitalizations. Lopinavir-ritonavir and azithromycin may have increased harms, and hydroxychloroquine may result in lower recovery rates. Other treatments had insufficient evidence or no benefit compared with placebo.

What were the limitations of the study?

All studies were conducted before the emergence of the currently dominant Omicron variant.

What are the implications of the study?

Three antiviral medications may improve outcomes for outpatients with mild to moderate COVID-19, although the effect may be different with the current Omicron variant. There is no or insufficient evidence for a benefit with other antiparasitic, antibiotic, or immunosuppressive medications. The review will be updated as new information becomes available.

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