

Risk for progression to severe COVID-19 lower with nirmatrelvir + ritonavir

March 1 2022



For patients with symptomatic COVID-19, treatment with nirmatrelvir



plus ritonavir results in a lower risk for progression to severe COVID-19, according to a study published online Feb. 16 in the *New England Journal of Medicine*.

Jennifer Hammond, Ph.D., from Pfizer in Collegeville, Pennsylvania, and colleagues conducted a phase 2 to 3 randomized controlled trial involving symptomatic, unvaccinated, nonhospitalized adults at high risk for progression to severe COVID-19. A total of 2,246 patients were randomly assigned to 300 mg nirmatrelvir plus 100 mg ritonavir or placebo every 12 hours for five days (1,120 and 1,126, respectively).

In the planned interim analysis of 774 patients treated within three days after symptom onset, the incidence of COVID-19-related hospitalization or death by day 28 was lower in the nirmatrelvir versus the placebo group (incidence, 0.77% [zero deaths] versus 7.01% [seven deaths]; relative risk reduction, 89.1%). In the final analysis involving 1,379 patients in the modified intention-to-treat analysis who commenced treatment within three days after symptom onset and did not receive monoclonal antibodies, efficacy was maintained, with a difference of -5.81% (relative risk reduction, 88.9%). At day 5 of treatment, the viral load was lower with nirmatrelvir plus ritonavir versus placebo, with an adjusted mean difference of $-0.868 \log_{10}$ copies/mL when treatment was initiated within three days of symptom onset. Through day 34, there were no deaths noted in recipients of nirmatrelvir; there were 13 among placebo recipients.

"Treatment with nirmatrelvir plus ritonavir early in COVID-19 illness can decrease progression to <u>severe disease</u> and quickly reduce SARS-CoV-2 viral load," the authors write.

Several authors disclosed financial ties to <u>pharmaceutical companies</u>, including Pfizer, which manufactures nirmatrelvir and funded the study.



More information: Jennifer Hammond et al, Oral Nirmatrelvir for High-Risk, Nonhospitalized Adults with Covid-19, *New England Journal of Medicine* (2022). DOI: 10.1056/NEJMoa2118542

Eric J. Rubin et al, The Potential of Intentional Drug Development, *New England Journal of Medicine* (2022). DOI: 10.1056/NEJMe2202160

© 2022 HealthDay. All rights reserved.

Citation: Risk for progression to severe COVID-19 lower with nirmatrelvir + ritonavir (2022, March 1) retrieved 6 May 2024 from <u>https://medicalxpress.com/news/2022-03-severe-covid-nirmatrelvir-ritonavir.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.