



Summary of Clinical Trial Results



RECOVER
VITAL

**Viral Persistence
(PAXLOVID)**

What was the trial about?

People living with Long COVID continue to experience a variety of symptoms months or years after having COVID-19. Research has shown that some people with Long COVID have evidence of virus staying in their body, known as viral persistence.

Researchers studied whether PAXLOVID (a combination of nirmatrelvir and ritonavir, an antiviral drug approved to treat mild-to-moderate COVID-19) could also help people with Long COVID. Nirmatrelvir and ritonavir work together to stop the virus that causes COVID-19 from making more copies of itself in the body. People typically take this medication for 5 days when a person first experiences COVID symptoms.

The goal of the study was to see if an extended treatment (15 or 25 days) could help reduce Long COVID symptoms. Patients, caregivers, and community members helped design the study so it would reflect what matters most to people living with Long COVID.

THE TRIAL INVOLVED:



959
adults with
Long COVID



69
sites across
the U.S.



Data collected from
July 2023 to March 2025

What did researchers find?

- On average, people taking PAXLOVID (nirmatrelvir and ritonavir) for a longer time did not have a greater improvement in symptoms than people taking ritonavir only. This means that there was no clear sign of improvement from taking this antiviral treatment for 15 or 25 days for Long COVID symptoms.
- People in all three study treatment groups improved at similar rates. There were no meaningful differences between the groups. Each group included about 320 participants.
- While viral persistence may contribute to Long COVID symptoms, this trial did not find that PAXLOVID (nirmatrelvir and ritonavir) reduced symptoms.
- PAXLOVID (nirmatrelvir and ritonavir) was generally safe to use for a longer time. The most common side effects were mild, like nausea or diarrhea, and less than 5% of participants experienced any of these symptoms.

Participants were put into 1 of 3 symptom groups based on their answers to surveys about their symptoms:



Cognitive dysfunction
(trouble thinking clearly or "brain fog")



Exercise intolerance
(shortness of breath, muscle weakness, or extreme tiredness that causes a person to stop physical activity), including post-exertional malaise (a worsening of symptoms after even minor physical, mental, or emotional activity)



Autonomic dysfunction
(dizziness, fast heart rate, or blood pressure changes)

Once the participants were separated into symptom groups, they were assigned by chance to 1 of 3 study treatment groups:

1. 25 days of PAXLOVID (nirmatrelvir and ritonavir)
2. 15 days of PAXLOVID (nirmatrelvir and ritonavir) plus 10 days of ritonavir and a placebo pill for nirmatrelvir (which should have had no effect)
3. 25 days of ritonavir and a placebo pill for nirmatrelvir

What did participants do?



Completed regular surveys, lab tests, and other symptom assessments



Followed the same pill-taking schedule and received the same number of pills, regardless of their assigned study treatment group



Visited a research site 4 to 5 times and were followed for a total of 6 months

Why is this research important?

The findings from this trial indicate that this antiviral drug, at these doses and durations, did not improve Long COVID symptoms. This trial contributes important findings to the science of studying Long COVID and viral persistence and provides more information about how to better characterize and measure Long COVID symptoms in the future. The RECOVER-VITAL team of researchers, clinicians, and community partners is deeply grateful to all participants whose time and commitment made this study possible.



Learn more at: trials.recovercovid.org

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This research summary was completed in August 2026. Newer information may now be available. This summary reflects results from one clinical trial. Other studies may find different results.