# New COVID pill may be improvement over Paxlovid, Chinese trial suggests

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COVID-19 patients could soon have a new antiviral pill they can take to

guard against severe disease.

The treatment, called VV116, worked as well as Paxlovid in people who were at high risk of severe disease in a phase 3 trial in China.

The trial was a "great success," study co-author Ren Zhao, a professor at Shanghai Jiao Tong University School of Medicine, said in a news release announcing the results.

Similar to the antiviral infusion remdesivir, but in pill form, VV116 has not yet been approved by the U.S. Food and Drug Administration.

It may first need more study in a larger, diverse group of patients to look for rare side effects and see how it fares against Omicron variants that have emerged since the trial was conducted, medical experts suggested.

The results of the trial were published Dec. 28 in the *New England Journal of Medicine*.

"You have a medication that looks to be just as good as Paxlovid, but less cumbersome," Dr. Panagis Galiatsatos, an assistant professor of medicine at Johns Hopkins Medicine in Baltimore, told NBC News.

The trial found fewer reported side effects for patients, with about 67% of people who took it reporting side effects, compared to 77% of those who took Paxlovid, as well as fewer reactions with other medications such as those that treat insomnia, seizures or high blood pressure.

"It looks like we might have another tool in the toolbox," Galiatsatos noted.

Fewer patients in the trial had elevated levels of triglycerides (fat in blood that increases risk of heart disease or stroke) at 11% compared to

21% with Paxlovid.

Reduced side effects is "a big deal," Galiatsatos said.

In the VV116 trial, more than 380 people took the medication for about five days. A group of similar size took Paxlovid instead.

The VV116 patients recovered (defined as no symptoms for two consecutive days) four days after starting the treatment. For Paxlovid patients, recovery happened in five days.

About 98% of patients had recovered within four weeks and none developed severe COVID-19, the findings showed.

Though Paxlovid patients sometimes have a rebound of symptoms in the days or weeks after treatment, that doesn't happen with the infusion remdesivir, which this new pill is similar to, the researchers noted.

Gilead Sciences is testing a similar pill based on its infusion remdesivir, NBC News reported.

A standard phase 3 drug trial typically includes as many as 3,000 people, though the Paxlovid late-stage trial had 2,200 participants, NBC News reported. This Chinese trial was much smaller.

"Rare side effects you're only going to pick up when you launch into a bigger population," Galiatsatos said. "It's like playing the lottery: 1 in 100 aren't going to win, but one in a million will, because you increase your odds of seeing a rare event occur."

Paxlovid can cause liver damage, mostly in patients who already have liver problems. It also can react negatively with statins and heart medications.

"Paxlovid is still a great drug, but there's a variety of reasons to keep it from truly reaching everyone that it needs to," Galiatsatos said.

Antivirals stop a virus from replicating and are less sensitive to changes in the coronavirus, such as new variants, NBC News reported.

**More information:** Zhujun Cao et al, VV116 versus Nirmatrelvir–Ritonavir for Oral Treatment of Covid-19, *New England Journal of Medicine* (2022). DOI: 10.1056/NEJMoa2208822

The U.S. Centers for Disease Control and Prevention has more on treatments for COVID-19.