

Extended Paxlovid May Help Some People with Long COVID

An up-close look at how patients respond to the drug at different times and doses adds nuance to a recent finding that Paxlovid does not work for long COVID.

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An extended course of Paxlovid appears to help some patients with long COVID, according to a case series by UC San Francisco researchers that suggests this treatment option holds promise for some of those struggling with debilitating symptoms.

These results are at odds with recent research that has failed to show the antiviral can alleviate persistent symptoms of the disease. The authors said more study is needed to find out which patients may benefit from the drug and how long it should be given.

The Centers for Disease Control and Prevention (CDC) estimates that 17.6 million Americans, or 1 in 13 adults, have long COVID. These individuals experience symptoms for months or even years after their initial COVID-19 infection that range from brain fog and headaches to respiratory and cardiovascular issues.

“We are about five years into the pandemic, and yet there are not yet any federally-approved treatments for long COVID,” said [Alison Cohen, PhD, MPH](#), an assistant professor of epidemiology and biostatistics at UCSF and first author of the paper. “This is not a silver bullet, but it may help a lot of people in a meaningful way.”

The study appears January 6 in the Nature publication [Communications Medicine](#).

Interviews with patients reveal the drug helps some

In June, a randomized controlled clinical trial of a 15-day course of nirmatrelvir/ritonavir, the drug combination marketed as Paxlovid, concluded that it was safe, although it did not lessen long COVID symptoms. The researchers noted that further research may show benefits at different doses or for people with specific symptoms.

The UCSF team collaborated with long COVID patients, some of whom are members of the Patient-Led Research Collaborative, a group of people with long COVID and other associated chronic conditions who are also researchers. The researchers took a closer look at what happened when

people took a longer course of Paxlovid to see if it might work in people with specific symptoms or at different times in their disease. They also examined the experiences of people who contracted different strains of SARS-CoV-2.

They found that five of the 13 patients in the study experienced sustained improvements in their symptoms. Others experienced temporary reprieves; and some had no improvement. Treatment lengths varied, but many took Paxlovid for 15 days.

For example, a 56-year-old man who developed long COVID at the start of the pandemic was plagued for more than two years with fatigue, headaches, photosensitivity, brain fog, exercise intolerance, elevated heart rate and joint pain. He took Paxlovid for five days in September of 2022 with no change in his symptoms. Three months later, he took it for 15 days and reported that both his cognitive and his physical symptoms improved.

And a 45-year-old woman who developed long COVID in January of 2022 experienced fatigue, breathing difficulties, chest pain, weight loss and migraines for months after her infection. A five-day course of Paxlovid in October of 2022 gave her a three-day reprieve from her symptoms. But when she took a 15-day course the following month, it did not affect her symptoms.

With more than 200 symptoms ascribed to the condition, long COVID has remained difficult to define, diagnose or treat. Researchers are still trying to understand the biological mechanisms that underlie the disorder; and UCSF has launched the [world's first long COVID tissue bank](#).

"If we've learned one thing over the last four years, it's that long COVID is complex, and figuring out why some people benefit so remarkably from antiviral treatment while others don't is one of the most important questions for the field," said [Michael Peluso, MD](#), MD, principal investigator of the UCSF long COVID research program and an infectious disease researcher in the UCSF School of Medicine, who is a co-author of the study. "We are going to need to embrace that complexity to get answers for the millions of people suffering from this condition."

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