Paxlovid associated with lower risk of hospital admission

A Kaiser Permanente study finds COVID-19 patients treated quickly with Paxlovid have a 90% lower risk of hospitalization and death.

PASADENA, Calif. — A Kaiser Permanente study confirms the benefit of nirmatrelvir-ritonavir, also known as Paxlovid, as an early-stage treatment to prevent hospitalization for people with mild to moderate COVID-19, regardless of prior immunity or age. The study was published March 15, 2023, in Lancet ID.

“Among Kaiser Permanente members in Southern California who tested positive for coronavirus infection, receiving Paxlovid within 5 days of the start of COVID-19 symptoms was associated with substantial reductions in the risk of hospital admission or death,” said Sara Tartof, PhD, the senior author of the study and an epidemiologist with the Kaiser Permanente Southern California Department of Research & Evaluation. “These findings are even more notable because in this population with high levels of vaccination, we still see additional benefits of this treatment.”

Paxlovid is an oral therapeutic drug aimed at reducing the risk for severe outcomes of coronavirus infection. It is manufactured by Pfizer Inc. It currently has emergency use authorization by the U.S. Food and Drug Administration for adults and children 12 and older who are at high risk for progression to severe COVID-19.

The study analyses included patients with positive results from coronavirus tests undertaken in outpatient settings between April 8 and October 7, 2022. In the study population, 7,274 people had received Paxlovid, and 126,152 had not received Paxlovid. It was a time dominated by the omicron subvariants BA.2, BA.4, and BA.5. Overall, 86% of the 133,426 participants had received 2 COVID-19 vaccine doses, and 61% had received 3 or more.

The study found:

- Effectiveness in preventing hospital admission or death within 30 days after a positive test was 80% for people who were dispensed Paxlovid within 5 days after symptom onset.
  - Within the subgroup of patients who were dispensed Paxlovid on the day of their positive COVID-19 test, effectiveness was 90%.
  - Effectiveness declined to 44% for patients who received Paxlovid 6 or more days after symptom onset or for cases not experiencing acute clinical symptoms.
Overall, for patients who received Paxlovid at any time within their clinical course, effectiveness was 54%.

- Effectiveness in preventing intensive care unit admission, mechanical ventilation, or death within 60 days after a positive COVID-19 test was 89% for patients who were dispensed Paxlovid 0 to 5 days after symptom onset, and 84% for people who were dispensed Paxlovid treatment at any time.

“Our data showed that the sooner people take Paxlovid upon symptom onset, the more effective the medication can be,” Tartof said. “However, there is still some benefit to treatment 6 or more days after symptom onset. People should talk with their doctors about the best approach for them.”

About Kaiser Permanente

Kaiser Permanente is committed to helping shape the future of health care. We are recognized as one of America’s leading health care providers and not-for-profit health plans. Founded in 1945, Kaiser Permanente has a mission to provide high-quality, affordable health care services and to improve the health of our members and the communities we serve. We currently serve approximately 12.6 million members in 8 states and the District of Columbia. Care for members and patients is focused on their total health and guided by their personal Permanente Medical Group physicians, specialists, and team of caregivers. Our expert and caring medical teams are empowered and supported by industry-leading technology advances and tools for health promotion, disease prevention, state-of-the-art care delivery, and world-class chronic disease management. Kaiser Permanente is dedicated to care innovations, clinical research, health education, and the support of community health.