Viral rebound uncommon after molnupiravir, nirmatrelvir-ritonavir therapy

December 9 2022, by Elana Gotkine

Patients with COVID-19 taking molnupiravir or nirmatrelvir-ritonavir

rarely have viral rebound, and rebound is not associated with increased mortality risk, according to a study published online Dec. 6 in *JAMA Network Open*.

Grace Lai-Hung Wong, M.D., from The Chinese University of Hong Kong, and colleagues examined the incidence of viral rebound in patients with COVID-19 treated with nirmatrelvir-ritonavir and molnupiravir. The cohort study identified 41,255 hospitalized patients with COVID-19 and assessed 12,629 patients with serial cycle threshold (Ct) values. Viral rebound was defined as Ct value >40 that decreased to ≤40.

Of the 12,629 patients, 92.5, 5.9, and 1.5 percent were oral antiviral nonusers, molnupiravir users, and nirmatrelvir-ritonavir users, respectively. The researchers found that oral antiviral users were older, had more comorbidities, and had lower complete vaccination rates compared with nonusers.

The mean baseline Ct value was slightly higher in users of nirmatrelvir-ritonavir than nonusers and molnupiravir users (22.2 percent versus 21.0 and 20.9 percent, respectively). Viral rebound occurred in 0.6, 1.0, and 0.8 percent of nonusers, nirmatrelvir-ritonavir users, and molnupiravir users, respectively. Of the 76 patients with rebound, death from COVID-19 occurred in 12 of 68 nonusers, one of six molnupiravir users, and neither of the nirmatrelvir-ritonavir users.

"The study findings support that additional treatment is not necessary for COVID-19 rebound," the authors write. "In view of the ongoing outbreak worldwide, these two novel oral antivirals should be prescribed to more patients with COVID-19 in the early phase of the infection, with minimal concerns about viral rebound."

Several authors disclosed financial ties to the pharmaceutical industry.

More information: Grace Lai-Hung Wong et al, Incidence of Viral Rebound After Treatment With Nirmatrelvir-Ritonavir and Molnupiravir, *JAMA Network Open* (2022). DOI: 10.1001/jamanetworkopen.2022.45086