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He Ako Hiringa Learning Always

New antiviral targets COVID-19

Nirmatrelvir with ritonavir (Paxlovid), the new oral antiviral medicine for adults with COVID-19, is now available for community use.[1]

Treatment has been shown to reduce the incidence of hospitalisation or death in people at higher risk of severe illness from COVID-19.[2] Patients must meet Pharmac access criteria and the prescription must be endorsed accordingly.[1] Note that Paxlovid cannot be dispensed to patients who do not fit the access criteria.

Interaction possibility strong

Nirmatrelvir is a SARS-CoV-2-3CL protease inhibitor that inhibits viral replication, while ritonavir inhibits cytochrome P450 3A-mediated metabolism of nirmatrelvir, extending the half-life to allow twice daily dosing.[2]

Ritonavir's strong inhibition of CYP 3A4 and 2D6 enzymes may increase blood levels of many concomitant medicines, potentially causing toxicity.[2] Both Paxlovid antivirals are CYP3A substrates so drugs that inhibit or induce CYP3A may, respectively, increase or decrease Paxlovid concentrations. Thus, there is potential for serious drug–drug interactions and adverse events, loss of virological response, and development of resistance.[2]

For certain patients it will not be safe or appropriate to use Paxlovid. Drug interactions that can, however, be safely managed should not preclude Paxlovid use.[3] Strategies for managing interactions include adjusting or temporarily stopping co-medicine doses, using alternative co-medicines, and increasing monitoring of adverse events or co-medicine drug levels.[2,3]

Because many patients may be taking interacting medicines, decisions about prescribing Paxlovid must be made carefully and consider individual patient condition, medical history, comorbidity, all current drug use, and potential risks/benefits of treatment.[3] Good communication between prescriber, dispenser and patient is essential.

Inform patients, and if necessary whānau, of the potential for Paxlovid interactions with other medicines, including OTC and complementary, and recreational drugs. Alert patients to signs and symptoms of adverse effects and follow up with written instruction if necessary. Discuss any co-medication changes with patients and notify dispensers.

Visit tinyurl.com/HAH-Paxlovid for comprehensive information.

References are available with the online bulletin

aHAH MOMENT!

Paxlovid practicalities

Co-packaged nirmatrelvir with ritonavir (Paxlovid) is a new oral antiviral medicine for treating adults with COVID-19, who meet access criteria, in the community.[1]

Supplied as two individual medicines packaged together, the Paxlovid recommended dose is nirmatrelvir 300mg (two 150mg tablets) with ritonavir 100mg (one tablet), taken twice daily for five days, starting within five days of symptom onset.[2] The nirmatrelvir component should be halved in patients with moderate renal impairment, which will require dispensers to break into the packaging.

There is potential for multiple drug–drug interactions with commonly prescribed medicines, which warrants careful consideration of patient suitability and clear communication.[2]