Australian Government
Department of Health and Aged Care

Use of Paxlovid (nirmatrelvir/ ritonavir) in residential aged care

This guide outlines the key considerations of using Paxlovid (nirmatrelvir/ritonavir) in residential aged care clinical practice.

Paxlovid (nirmatrelvir/ritonavir) can be effective in treating people with mild to moderate COVID-19 who have a high risk of progressing to severe disease, when started within five days of symptom onset.

The drug must be prescribed by an authorised prescriber who has assessed the suitability of this treatment for a resident, prior to administration.

Who is the medicine for?

Paxlovid (nirmatrelvir/ritonavir) can be considered for use in COVID-19 positive adults:

- with mild-moderate COVID-19 and no need for supplemental oxygen due to COVID-19
- with increased risk of progression to hospitalisation or death, and
- where treatment can be started quickly and no later than five days after the onset of symptoms.

Eligibility

If the above criteria are met and a resident tests positive for COVID-19, they may be eligible for antiviral treatments if they are:

- 70 years and older, regardless of risk factors and with or without symptoms.
- 50 years or older with two additional risk factors for developing severe disease.
- Aboriginal or Torres Strait Islander, 30 years or older and with one additional risk factor for developing severe disease.
- 18 years of age or older, with moderate to severe immunocompromise, or who have been previously hospitalised from COVID-19 and subsequently re-infected.

Risk factors for these groups include:

- living in residential aged care
- living with disability with multiple conditions and/or frailty (but not limited to living in supported accommodation)
- neurological conditions like stroke or dementia and demyelinating conditions e.g, multiple sclerosis, Guillain-Barre Syndrome
- chronic respiratory conditions including COPD, moderate or severe asthma
- obesity or diabetes (type I or II requiring medication)
- heart failure, coronary artery disease, cardiomyopathies
- kidney failure or cirrhosis
- living remotely with reduced access to higher level healthcare.

Alternative medications

Lagevrio® (molnupiravir), an orally administered antiviral treatment, or certain intravenously administered therapeutics, may be alternatives where Paxlovid (nirmatrelvir/ritonavir) is not suitable or available.

Clinical considerations

Side effects

The most common side effects reported for Paxlovid (nirmatrelvir/ritonavir) include changes in taste; diarrhoea; vomiting; and headache.

It is recommended that residents receiving Paxlovid (nirmatrelvir/ritonavir) be closely monitored for these side effects.

Interactions

Paxlovid interacts with many different medicines. Prescribers and dispensers should refer to the Paxlovid product information and carefully review a patient's concomitant medications, including: over-the-counter medications, herbal supplements, and recreational drug before prescribing or dispensing Paxlovid.

Dose adjustment

The prescriber should consider if risk of drug-drug interactions can be managed safely with additional monitoring and/or by temporarily withholding or adjusting the dose of the patient's interacting medications.

As Paxlovid is more effective than Lagevrio, the use of Lagevrio should be limited to situations where in the opinion of the prescriber, Paxlovid cannot be used due to contraindications. Further details are available at Paxlovid PBS fact sheet.

Renal impairment

Paxlovid (nirmatrelvir/ritonavir) is contraindicated in patients with severe renal impairment.

The dosages for Paxlovid (nirmatrelvir/ritonavir) in renal impairment are as follows:

eGFR (estimated glomerular filtration rate)	**Paxlovid ® (nirmatrelvir/ritonavir) dose**
Greater than 60 mL/min (normal renal function or mild renal impairment)	300 mg nirmatrelvir with 100 mg ritonavir, taken twice daily for five days
≥30 to <60 mL/min (moderate renal impairment)	150 mg nirmatrelvir with 100 mg ritonavir, taken twice daily for five days
<30 mL/min (severe renal impairment)	Paxlovid ® (nirmatrelvir/ritonavir) is not recommended

Note: The daily blister card contains two separate parts (a 'Morning Dose' part and an 'Evening Dose' part). Each part contains two tablets of nirmatrelvir and one tablet of ritonavir, corresponding to daily administration at the standard dose.

Residents with **moderate renal impairment** and their clinical care team should be alerted to the fact that only one tablet of nirmatrelvir with the tablet of ritonavir should be taken every 12 hours.

Hepatic impairment

Paxlovid (nirmatrelvir/ritonavir) is contraindicated in patients with severe hepatic impairment.

Mild and Moderate - No dosage adjustment of Paxlovid (nirmatrelvir/ritonavir) is needed for residents with either mild (Child-Pugh Class A) or moderate (Child-Pugh Class B) hepatic impairment.

Severe - No pharmacokinetic or safety data are available regarding the use of nirmatrelvir or ritonavir in subjects with severe hepatic impairment (Child-Pugh Class C), therefore, Paxlovid (nirmatrelvir/ritonavir) is contraindicated in residents with severe hepatic impairment.

Drug interactions

Paxlovid (nirmatrelvir/ritonavir) has clinically important interactions with many drugs.

Clinicians may wish to refer to the Product Information for more detailed information – TGA nirmatrelvir/ritonavir (Paxlovid) product information

Paxlovid (nirmatrelvir/ritonavir) is contraindicated in patients using drugs that are highly dependent on CYP3A for clearance, and for which elevated concentrations are associated with serious and / or life-threatening reactions.

Paxlovid (nirmatrelvir/ritonavir) is an inhibitor of CYP3A and may increase plasma concentrations of medicinal products that are primarily metabolised by CYP3A.

Medicinal products that are extensively metabolised by CYP3A and have high first pass metabolism appear to be the most susceptible to large increases in exposure when co-

administered with Paxlovid (nirmatrelvir/ritonavir).

Medicinal product class	Medicinal products within class
Interactions that result in an increase or decrease in concentrations of concomitant medicine	
Alpha 1-adrenoreceptor antagonist	alfuzosin
Antianginal	ranolazine
Antiarrhythmics	amiodarone, flecainide
Anticancer	neratinib, venetoclax
Anti-gout	colchicine
Antipsychotics	lurasidone, clozapine
Ergot derivatives	ergometrine
Lipid-modifying agents HMG-CoA reductase inhibitors	simvastatin
Nonsteroidal anti-inflammatory drugs (NSAIDs)	piroxicam
Opioid analgesic	pethidine
PDE5 inhibitor	avanafil, sildenafil, vardenafil, tadalafil
Sedative/hypnotics	diazepam
Interactions that result in decrease in nirmatrelvir/ritonavir concentrations	
Anticancer	apalutamide
Anticonvulsant	carbamazepine, phenobarbital, phenytoin
Antimycobacterials	rifampicin
Herbal products	St. John's Wort (hypericum perforatum)

There are many further drugs that should be used with caution in patients on Paxlovid (nirmatrelvir/ritonavir) – please refer to the TGA's Product Information (Section 4.4 Special warnings and precautions for use; and Section 4.5 Interactions with other medicines and other forms of interactions).

The Product Information's Table 3 lists many drugs where caution is required, and includes recommendations to mitigate risk for many specific drugs. In some cases, the recommendation is to avoid co-administration.

The list includes:

- **Fentanyl**, and **Methadone**, medicine to treat pain
- **Digoxin**, medicine to treat certain heart conditions
- **Lidocaine (lignocaine) (systemic),** medicine to correct or change heart rhythm
- **Afatinib, Abemaciclib, Ceritinib, Dasatinib, Nilotinib, Encorafenib, Ibrutinib, Vinblastine**, and **Vincristine**, medicine to treat certain types of cancer
- **Haloperidol, Risperidone**, and **Quetiapine**, medicine to treat certain mental and emotional conditions
- **Rivaroxaban**, and **Warfarin**, medicine to treat or prevent blood clots
- **Lamotrigine**, medicine to prevent or treat convulsions, fits
- **Amitriptyline, Fluoxetine, Imipramine, Nortriptyline, Paroxetine**, and **Sertraline**, medicine to treat depression
- **Loratadine**, medicine to treat allergies
- **Atovaquone, Clarithromycin, Erythromycin, Rifabutin, Ketoconazole, Isavuconazonium Sulfate, Voriconazole**, and **Itraconazole**, medicine to treat infections
- **Atazanavir, Darunavir, Efavirenz, Fosamprenavir, Maraviroc, Nevirapine, Saquinavir, Tipranavir, Raltegravir, Zidovudine, Bictegravir/Emtricitabine/Tenofovir**, medicine to treat HIV
- **Glecaprevir/Pibrentasvir, Sofosbuvir/Velpatasvir/Voxilaprevir**, medicine to treat hepatitis C
- **Salmeterol**, medicine to treat severe lung conditions, including asthma and chronic obstructive pulmonary disease (COPD)
- **Amlodipine, Diltiazem, Felodipine**, and **Nifedipine**, medicine to treat angina or lower blood pressure
- **Bosentan**, and **Riociguat**, medicine to treat high blood pressure in the lungs
- **Ethinylestradiol**, medicine to treat hormone deficiency or for contraception
- **Ciclosporin**, **Everolimus**, **Tacrolimus**, and **Sirolimus**, medicine to suppress the immune system
- **Atorvastatin**, and **Rosuvastatin**, medicine to lower cholesterol
- **Alprazolam, Midazolam (parenteral),** and **Zolpidem**, medicine to help you sleep
- **Bupropion**, a medicine to assist in giving up smoking
- **Betamethasone, Budesonide, Dexamethasone, Prednisone, Methylprednisolone**, and **Triamcinolone**, medicine to treat various inflammatory conditions.

Previous hypersensitivity and contraindications

Paxlovid (nirmatrelvir/ritonavir) is contraindicated in patients with a history of clinically significant hypersensitivity to its active ingredients (nirmatrelvir and ritonavir) or excipients.

Prescribers and dispensers should carefully review a patient's concomitant medications including over-the-counter medications, herbal supplements, and recreational drug before prescribing or dispensing Paxlovid.

There is a full list of excipients in the TGA Product Information's Section 6.1.

Swallowing

The tablets should be swallowed whole and not chewed, broken, or crushed. If the aged care resident cannot swallow tablets whole, consider other treatment options.

See the PBS (Paxlovid) product information fact sheet.

Preparation for potential use of this medicine

To facilitate speedy access to treatment, residential aged care homes are encouraged to pre-assess eligible residents, as per the advice above.

Pre-assessment activities should include:

- discussing consent options for potential treatment with the resident and relevant decision-makers
- identifying eligible residents in the residential aged care home's clinical management systems
- discussing potential medicine administration with the resident's GP, nurse practitioner or clinical care staff.

Accessing this treatment

Paxlovid (nirmatrelvir/ritonavir) is a prescription only (S4) medicine which requires a prescription from an authorised prescriber is available through community pharmacies.

If a resident is eligible for this treatment and is experiencing mild-moderate COVID-19 symptoms, please contact their treating clinician or health professional to arrange a clinical assessment as soon as possible.

As with other antiviral treatments, such as the treatment for shingles or influenza, this medicine should be started as soon as possible. People aged 70 years or older, who test positive for COVID-19 can commence treatment with or without symptoms, regardless of risk factors.

Starting treatment beyond 5 days from onset of symptoms is not recommended.

Use your usual process to prepare for a clinical consultation. Where the resident's usual treating clinician is not available, follow your residential aged care home's process to source medical support.

Medicine administration

Once a resident is prescribed the relevant medicine, it should be used in a manner consistent with medicine regulation in your jurisdiction.

The recommended dosage is 300 mg nirmatrelvir (two 150 mg tablets) with 100 mg ritonavir (one 100 mg tablet) taken together orally every 12 hours for five days. A lower dose is given to patients with moderate renal impairment (see above).

Paxlovid (nirmatrelvir/ritonavir) is supplied in a carton of 30 tablets in five PA/Al/PVC/Al blister cards marked as “Morning Dose” and “Evening Dose” for tablets to be taken each morning and each evening. It should be stored below 25 C. The tablets can be taken with or without food.

Please review the PBS nirmatrelvir/ritonavir (Paxlovid) product information and discuss with the resident’s treating clinician to ensure that this medication is administered safely.

Adverse events

Please ensure that all possible adverse reactions are reported using usual existing mechanisms.

Anyone can report an adverse event.

In order to report an event online you will need the following information:

- reporter details
- resident details
- medicine details
- reaction details.

See the TGA Adverse Event Management System privacy statement.