



MONOGRAPH

Nirmatrelvir with ritonavir (Paxlovid®) Monograph - Paediatric

Scope (Staff):	Medical, Pharmacy, Nursing
Scope (Area):	All Clinical Areas

Child Safe Organisation Statement of Commitment

CAHS commits to being a child safe organisation by applying the National Principles for Child Safe Organisations. This is a commitment to a strong culture supported by robust policies and procedures to reduce the likelihood of harm to children and young people.

This document should be read in conjunction with this [DISCLAIMER](#)

QUICKLINKS

Dosage/Dosage Adjustments	Administration	Compatibility	Monitoring
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DRUG CLASS

Antiviral with activity against severe acute respiratory syndrome coronavirus (SARS-CoV-2) also known as COVID-19.⁽¹⁾

INDICATIONS AND RESTRICTIONS

- Nirmatrelvir with ritonavir (Paxlovid®) may be considered in exceptional circumstances for the treatment of COVID-19 in children and adolescents ≥12 years and ≥40 kg who:
 - are within 5 days of symptom onset
 - do not require oxygen
 - are at high risk of deterioration
 - are not up to date with vaccination OR are immunosuppressed (regardless of immunisation status)⁽²⁾

Further information regarding high risk patients can be found in the [Australian guidelines for the clinical care of people with COVID-19](#).⁽²⁾

Oral: Restricted (red) antiviral

ChAMP approval is required prior to prescription.

CONTRAINDICATIONS

- Hypersensitivity to nirmatrelvir, ritonavir or any component of the formulation.⁽³⁾
- Nirmatrelvir with ritonavir (Paxlovid®) is contraindicated in patients with severe renal impairment, severe hepatic impairment and in combination with other medications that are dependent on CYP3A4 for clearance where elevated concentrations are associated with harm.⁽³⁻⁵⁾ Further information regarding potential interactions for nirmatrelvir with ritonavir (Paxlovid®) can be found on the [Liverpool COVID-19 interaction checker](#).

PRECAUTIONS

- For patients with renal impairment who require dose reduction, the additional tablets of nirmatrelvir should be removed prior to providing to the patient.^(1, 4)
- Sexually active adolescent females should use effective contraception whilst taking nirmatrelvir with ritonavir (Paxlovid®).⁽³⁾

FORMULATIONS

Listed below are products available at PCH, other formulations may be available, check with pharmacy if required:

- Nirmatrelvir 150 mg tablets with ritonavir 100 mg tablets – co-packaged

Imprest location: Not on imprest, contact Pharmacy for individual patient stock

DOSAGE & DOSAGE ADJUSTMENTS**Children <12 years of age and/or <40 kg:**

- Not recommended for this age group. Contact Infectious Diseases to discuss alternative options.

Children and adolescents ≥12 years and ≥40 kg:

- 300 mg nirmatrelvir (two 150 mg tablets) with 100 mg ritonavir (one 100 mg tablet) twice daily for a total of five days.⁽¹⁾

Renal impairment:

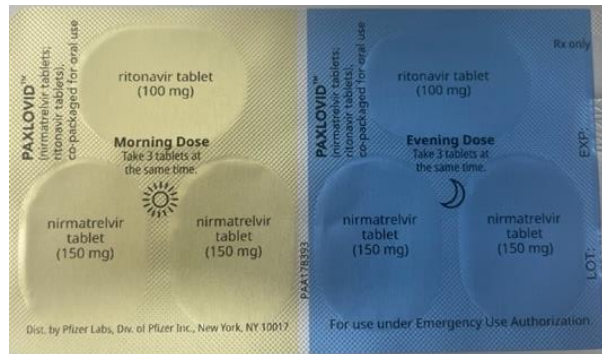
- [eGFR calculator](#)
- No dosage adjustment is required in patients with an eGFR of 60 mL/minute or greater.⁽⁴⁾
- eGFR 30 to 59 mL/minute: 150 mg nirmatrelvir (one 150mg tablet) with 100 mg ritonavir (one 100 mg tablet) twice daily for a total of five days.^(1, 4)
- eGFR < 30 mL/minute: Contact Infectious Diseases to discuss alternative options.⁽¹⁾

Hepatic impairment:

- No dose adjustment is required for patients with a Child-Pugh score of A and B. There is no data on use in patients with severe hepatic impairment (Child-Pugh score C) and nirmatrelvir with ritonavir (Paxlovid®) should not be used in these patients.^(1, 4)

Prescribing recommendations for inpatient use:

- Nirmatrelvir with ritonavir (Paxlovid®) is only available as separate, co-packaged tablets.



- The patient must be charted for both agents separately on the medication chart as per the guide below:
 - Nirmatrelvir and ritonavir must be taken at the same time to ensure adequate nirmatrelvir levels are achieved.^(1, 3, 5)

YEAR 20__		DATE & MONTH		15/11							
PRESCRIBER MUST ENTER ADMINISTRATION TIMES											
Date	Medication (Print Generic Name)					<input type="checkbox"/> Tick if Slow Release					
15/11	Nirmatrelvir										
Route	DOSE	Frequency & now enter times		0800							
PO	300mg	BD for 5 days							X	X	
Pharmacy/Additional Information											
2 x 150mg tablets											
Indication											
COVID-19											
Prescriber Signature		Print Name		Contact/Pager							
D. Doctor		Dr Doctor				Day	1	2	3	4	5
Date	Medication (Print Generic Name)					<input type="checkbox"/> Tick if Slow Release					
15/11	Ritonavir 100mg tablet										
Route	DOSE	Frequency & now enter times		0800							
PO	100mg	BD for 5 days							X	X	
Pharmacy/Additional Information											
Indication											
COVID-19											
Prescriber Signature		Print Name		Contact/Pager							
D. Doctor		Dr Doctor				Day	1	2	3	4	5

ADMINISTRATION

- Nirmatrelvir and ritonavir must be taken at the same time to ensure adequate nirmatrelvir levels are achieved.^(1, 3, 5)
- Nirmatrelvir and ritonavir tablets are co-packaged with 5 daily blister cards. Each daily blister card contains a morning dose (two 150 mg nirmatrelvir tablets and one 100 mg ritonavir tablet) and evening dose (two 150 mg nirmatrelvir tablets and one 100 mg ritonavir tablet).⁽⁴⁾
- Nirmatrelvir and ritonavir (Paxlovid®) may be taken with or without food and should not be

cut, crushed or chewed.^(1, 3, 4)

- If a dose of nirmatrelvir with ritonavir is missed by ≤8 hours, the dose should be taken as soon as possible. If the dose is missed by >8 hours, the subsequent dose should be taken at the next scheduled time. There is no need to give an additional dose to replace the missed dose.^(4, 5)

COMPATIBILITY (LIST IS NOT EXHAUSTIVE)

Not applicable

MONITORING

Consider monitoring liver function tests and serum creatinine during treatment.⁽¹⁾

ADVERSE EFFECTS

Common: diarrhoea, vomiting, alteration in taste, headache^(1, 3, 5)

Infrequent: Hypertension, myalgia^(1, 3)

Rare: Toxic epidermal necrolysis, Stevens-Johnson syndrome, hypersensitivity reactions, angioedema^(1, 5)

STORAGE

Store below 25°C⁽³⁾

INTERACTIONS

This medication may interact with other medications; consult PCH approved references (e.g. [Clinical Pharmacology](#)), a clinical pharmacist or PCH Medicines Information Service on extension 63546 for more information.

Please note: The information contained in this guideline is to assist with the preparation and administration of **nirmatrelvir with ritonavir (Paxlovid®)**. Any variations to the doses recommended should be clarified with the prescriber prior to administration

Related CAHS internal policies, procedures and guidelines

[Antimicrobial Stewardship Policy](#)

[ChAMP Empiric Guidelines and Monographs](#)

[KEMH Neonatal Medication Protocols](#)

References

1. Clinical Pharmacology [Internet]. Elsevier BV. 2022 [cited 23/06/2022]. Available from: <https://www-clinicalkey-com.pklibresources.health.wa.gov.au/pharmacology/>
2. Paediatric and Adolescent Care Panel. National COVID-19 Clinical Evidence Taskforce Melbourne2022 [Available from: <https://covid19evidence.net.au/>].
3. MIMS Australia. MIMS online [full product information]. St Leonards, N.S.W: CMP Medica

Australia.; 2022. p. 1v. (various pagings).

4. McEvoy G, editor. AHFS Drug Information. Maryland: American Society of Health-System Pharmacists; 2022.

5. IBM Micromedex [Internet]. Truven Health Analytics. 2022 [cited 09/06/2022]. Available from: <http://www-micromedexsolutions-com.pklibresources.health.wa.gov.au/micromedex2/librarian>.




Useful resources (including related forms)

[National COVID-19 Clinical Evidence Taskforce – living guidelines](#)

[Patient Consent form](#)

[Patient medicines information leaflet](#)

This document can be made available in alternative formats on request for a person with a disability.

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Respect

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