



**Community
HealthPathways**
Hunter New England

Care of COVID positive Adults in the community- Prescribing Oral Antivirals



Community
HealthPathways
Hunter New England



Health
Hunter New England
Local Health District

Key points

- Apply National Evidence Task force Guidelines to clinical scenarios
- Demonstrate using the Liverpool interaction checker
- Discuss prescribing options



Care of COVID-19 Positive Adult Patients in the Community

Username: hnehealth password: p1thw1ys

Initial consultation

Initial assessment ▼  



Medication – Sotrovimab, oral antivirals, and inhaled corticosteroids ▼

COVID Care in the Community (CCiC) – Escalation criteria and referral ▼

Pulse oximeters – Criteria and supply ▼

Safety netting ▼

Household and close contacts ▼

Initial consultation

Initial assessment ▼ 🇳🇵 🇮🇪

Medication – Sotrovimab, oral antivirals, and inhaled corticosteroids ^



Oral antivirals and monoclonal antibodies ^

These medications may be suitable for patients at [higher risk of severe disease](#) [\[1\]](#). The [National COVID-19 Clinical Evidence Taskforce](#) [\[2\]](#) is aware of in vitro data suggesting a potential reduction in efficacy of sotrovimab against the BA.2 subvariant. Use of sotrovimab should only be considered where other treatments are not suitable or available. Consider contacting [COVID Care in the Community](#) [\[3\]](#) to discuss before referral for sotrovimab for all indications except where patients are pregnant or trying to conceive.



1. Consider using the [decision tool for drug treatments for at risk adults with COVID-19](#) [\[4\]](#).
2. [Assess eligibility](#) [\[5\]](#).
3. Choose the appropriate agent.
 - [Nirmatrelvir plus ritonavir \(Paxlovid\)](#) [\[6\]](#)
 - [Molnupiravir \(Lagevrio\)](#) [\[7\]](#) 🇳🇵 🇮🇪
 - [Sotrovimab \(Xevudy\)](#) [\[8\]](#)
4. Ensure [informed verbal consent](#) [\[9\]](#).
5. Arrange prescription or supply:
 - [Nirmatrelvir plus ritonavir \(Paxlovid\)](#) [\[6\]](#)
 - [Molnupiravir \(Lagevrio\)](#) [\[7\]](#). Consider arranging [preparation of an oral solution](#) [\[10\]](#) for patients who cannot swallow capsules or who have a nasogastric/orogastric (NG/OG) tube
 - [Sotrovimab \(Xevudy\)](#) – contact [COVID Care in the Community \(CCiC\)](#) [\[3\]](#)
6. If the general practitioner determines that the patient is high risk but they don't meet the above criteria, contact [COVID Care in the Community \(CCiC\)](#) [\[3\]](#) for advice.

2. Assess eligibility .

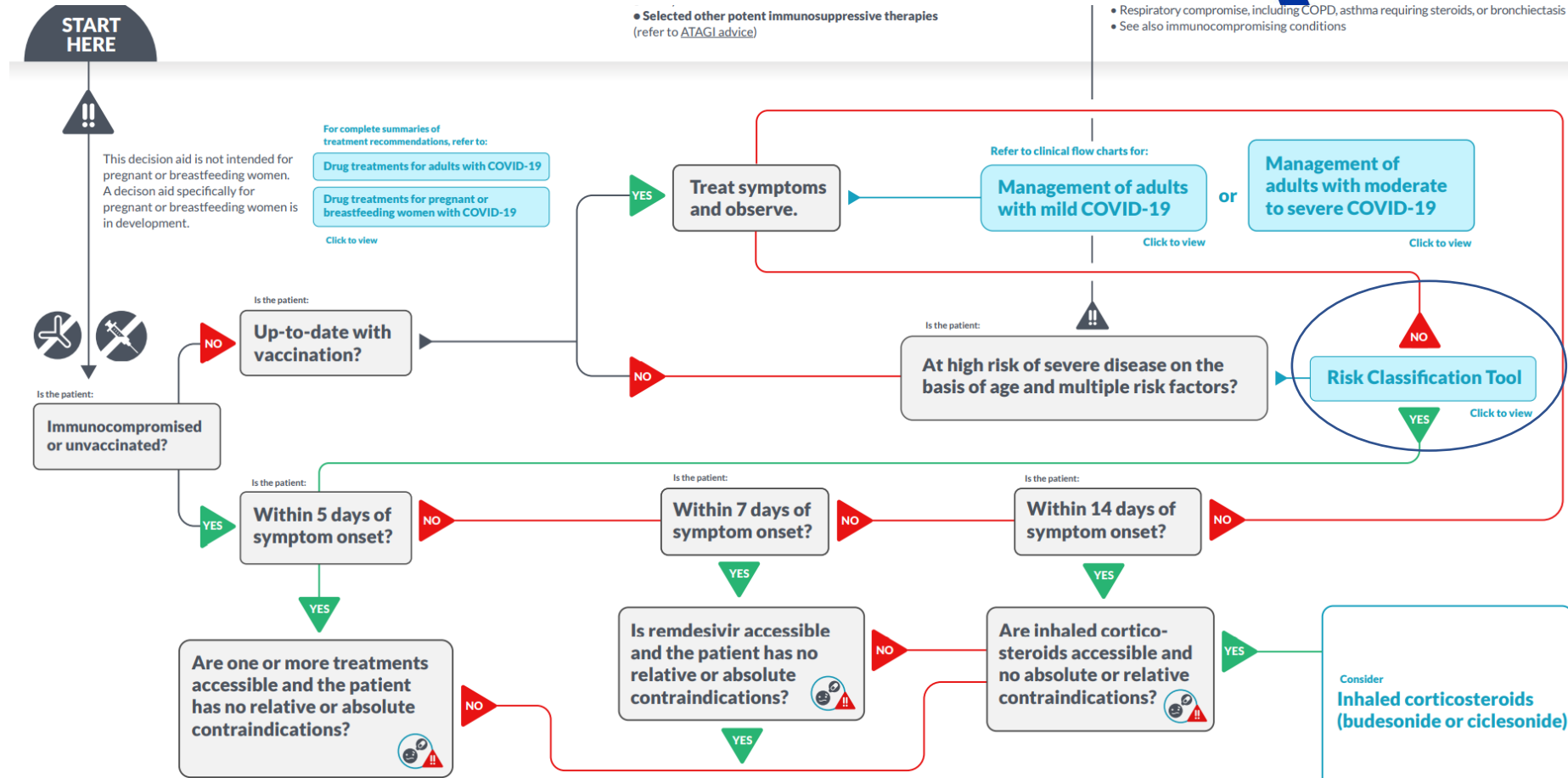
Assess eligibility

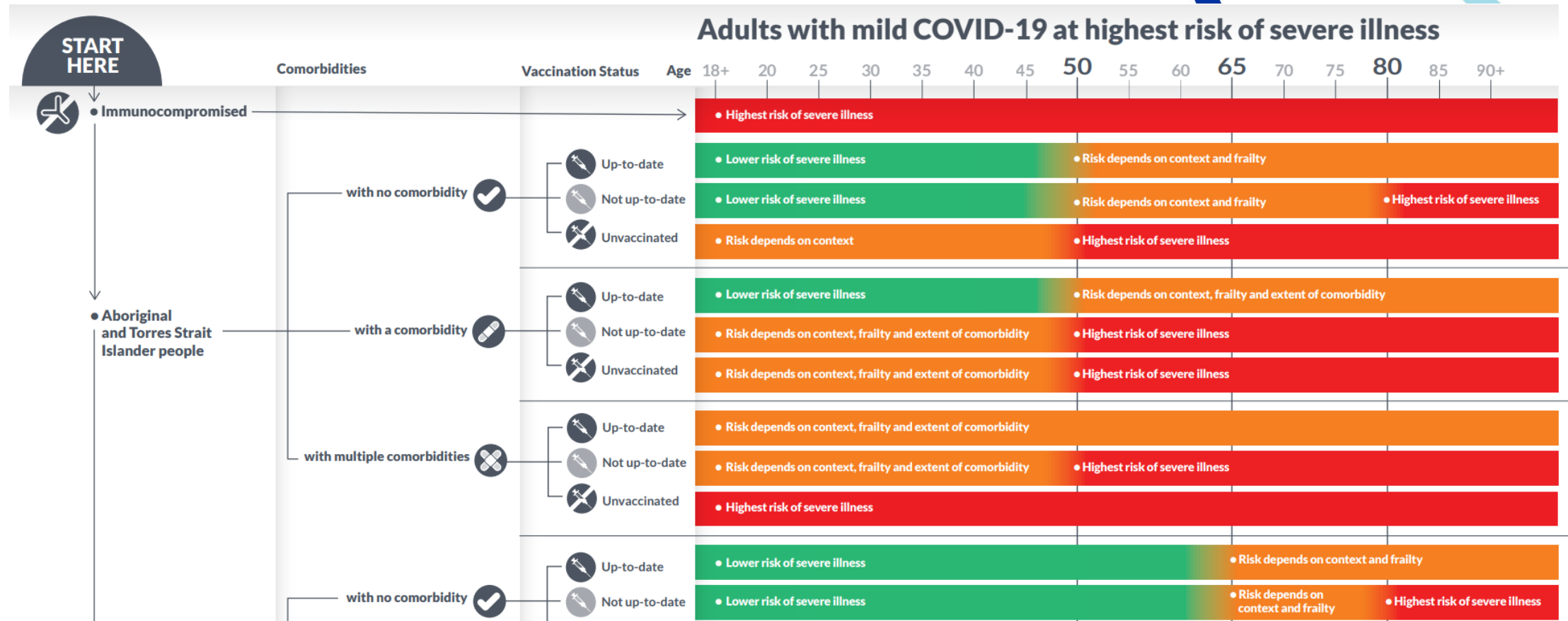
- Is the patient able to provide [evidence of their positive COVID-19 status](#) .
- Is the patient within 5 days of symptom onset?
- Is the patient [immunocompromised](#) ? if yes, there is no need for any other qualifying conditions.


Quick exclusions:

- Patient aged < 12 years – All of the antiviral or monoclonal antibody therapies are contraindicated.
- Patient aged 12 to 17 years or pregnant in second or third trimester – Only consider sotrovimab (Xevudy). The antiviral therapies are contraindicated in pregnancy and if aged < 18 years.
- Patient [up to date with COVID-19 vaccination](#)  and not immunosuppressed. Molnupiravir and Paxlovid are available on the PBS regardless of vaccination status. However, local specialists advise considering [the National COVID-19 Clinical Evidence Taskforce recommendations](#)  before prescribing.


Tools







COVID-19 Drug Interactions






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[About](#)[Interaction Checkers](#)[Prescribing Resources](#)[Contact Us](#)

Interactions with selected WHO Essential Medicines and Paxlovid (nirmatrelvir/ritonavir) now available in the Prescribing Resources section - [click here for the PDF](#).

If a drug is not listed below it cannot automatically be assumed it is safe to coadminister.

COVID Drugs	Co-medications	Drug Interactions
<input type="text" value="Search drugs..."/>	<input type="text" value="Search co-medications..."/>	<input type="checkbox"/> Check COVID/COVID drug interactions
<input checked="" type="radio"/> A-Z <input type="radio"/> Class <input type="radio"/> Trade	<input checked="" type="radio"/> A-Z <input type="radio"/> Class	Drug Interactions will be displayed here
Selected Drugs will be displayed here.	Selected Co-medications will be displayed here	
<input type="checkbox"/> Anakinra 	<input type="checkbox"/> Abacavir 	

- 
- 74 yo
 - Day 3
 - X3 vaccinations
 - Asthma, T2DM, BMI 30
 - Medications: Salbutamol, Metformin, Aspirin, Atorvastatin, Symbicort (budesonide; formoterol), Tiotropium, Prednisolone (for asthma flares- used x2 in the last 12 months)

**START
HERE**

• Selected other potent immunosuppressive therapies
(refer to [ATAGI advice](#))

• Respiratory compromise, including COPD, asthma requiring steroids, or bronchiectasis
• See also immunocompromising conditions

For complete summaries of
treatment recommendations, refer to:

[Drug treatments for adults with COVID-19](#)

[Drug treatments for pregnant or
breastfeeding women with COVID-19](#)

[Click to view](#)

This decision aid is not intended for
pregnant or breastfeeding women.
A decision aid specifically for
pregnant or breastfeeding women is
in development.



Is the patient:

**Immunocompromised
or unvaccinated?**

NO

Is the patient:

**Up-to-date with
vaccination?**

YES

Is the patient:

**Within 5 days of
symptom onset?**

YES

**Are one or more treatments
accessible and the patient
has no relative or absolute
contraindications?**

NO

Is the patient:

**Within 7 days of
symptom onset?**

YES

**Is remdesivir accessible
and the patient has no
relative or absolute
contraindications?**

YES

Is the patient:

**At high risk of severe disease on the
basis of age and multiple risk factors?**

YES

**Treat symptoms
and observe.**

NO

Refer to clinical flow charts for:

**Management of adults
with mild COVID-19**

[Click to view](#)

or

**Management of
adults with moderate
to severe COVID-19**

[Click to view](#)

Is the patient:

**Within 14 days of
symptom onset?**

YES

**Are inhaled cortico-
steroids accessible and
no absolute or relative
contraindications?**

YES

Consider
**Inhaled corticosteroids
(budesonide or ciclesonide)**

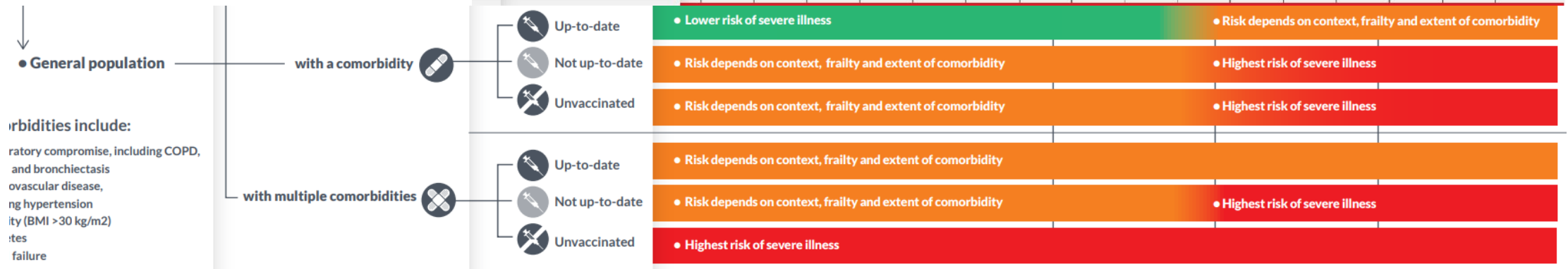
Risk Classification Tool

[Click to view](#)

NO

YES

What if only x2 vaccinations?



Prescribing

- Paxlovid or Molnupiravir?
- Severe liver impairment (Child-Pugh Class C)?
- Severe renal impairment GFR <30?
- Interaction with existing medication?
- Find a source
 - PBS script- streamlined authority.
 - Hospital pharmacy



PAXLOVID (Pfizer) Nirmatrelvir/Ritonavir

LAGEVRIO (MSD) Molnupiravir

VEKLURY (Gilead) Remdesivir

- Paxlovid 2 x 150mg Nirmatrelvir and 1 x ritonavir bd for 5 days (10 doses 30 tabs)
- Lagevrio 4 x 200mg capsules PO bd for 5 days (10 doses – 40 caps)
- Veklury 200mg on day 1 and 100mg on days 2 and 3 **intravenous infusion.**
- Adult covid patients within 5 days of symptom onset and at high risk of progression to severe covid.
- Licensing study:
 - unvaccinated,
 - non-hospitalised,
 - within 5 days, (7 for remdesivir)
 - at least 1 risk factor
- Molnupiravir (58% Delta) Nirmatrelvir/Ritonavir (98% Delta)
- No omicron in any study

PAXLOVID (Pfizer) Nirmatrelvir/Ritonavir
LAGEVRIO (MSD) Molnupiravir
VEKLURY (Gilead) Remdesivir

- Hospitalisation or death: MSD – NEJM 16 Dec 21, Pfizer – NEJM 14 Apr 22. Gilead – 27 Jan 22.
 - PAXLOVID 5.62% reduction (95%CI: 4.03 to 7.21)
 - LAGEVRIO 2.8% reduction (95%CI: 0 to 5.7)
 - VEKLURY 5.1% reduction (HR 0.13 95%CI: 0.03 to 0.59)
- Death alone
 - PAXLOVID 1.3% reduction (0 vs 12)
 - LAGEVRIO 1.4% reduction (1 vs 9)
 - VEKLURY No deaths in either drug or placebo group.

● Do Not Coadminister ■ Potential Interaction ▲ Potential Weak Interaction ◆ No Interaction Expected

[Results Key](#)

	Nirmatrelvir/ritonavir (5 days) [Please read the interaction details as management of these interactions may be complex.]
Aspirin (Anti-platelet)	◆
Atorvastatin	■
Budesonide (inhaled)	▲
Formoterol	◆
Metformin	◆
Prednisolone	◆
Salbutamol (Albuterol)	◆
Tiotropium bromide	◆

Potential Interaction

Nirmatrelvir/ritonavir (5 days) [Please read the interaction details as management of these interactions may be complex.]

Atorvastatin

Quality of Evidence: Very Low ⓘ

Summary:

Coadministration has not been studied. Atorvastatin is metabolized by CYP3A4 and concentrations are expected to increase due to inhibition of CYP3A4 by nirmatrelvir/ritonavir. Coadministration is not recommended unless specifically required for patient management. Given the short duration of nirmatrelvir/ritonavir treatment, atorvastatin should be stopped. The pragmatic approach to stop temporarily atorvastatin (or any other statin) is acceptable considering that it will not negatively affect the therapeutic effect but can minimize the risk for adverse events related to a drug interaction. If it is decided to pause atorvastatin during nirmatrelvir/ritonavir treatment, atorvastatin should be restarted 3 days after the last dose of nirmatrelvir/ritonavir as CYP3A4 inhibition by ritonavir takes several days to resolve. If coadministration is necessary, reduce atorvastatin to 10 mg daily and resume the usual dose 3 days after completing nirmatrelvir/ritonavir.

Potential Weak Interaction

Nirmatrelvir/ritonavir (5 days) [Please read the interaction details as management of these interactions may be complex.]

Budesonide (inhaled)

Quality of Evidence: Very Low ⓘ

Summary:

Coadministration has not been studied. Nirmatrelvir/ritonavir is metabolized by CYP3A and strongly inhibits CYP3A4. Budesonide is metabolized by CYP3A4 and concentrations are expected to increase due to CYP3A4 inhibition by nirmatrelvir/ritonavir. This is unlikely to be clinically relevant due to the short duration of nirmatrelvir/ritonavir treatment. The risk of Cushing syndrome is also considered to be low for inhaled budesonide used in COVID-19 treatment (2 weeks). However, prescribers should be aware of and to look out for signs of systemic corticosteroid side effects. A retrospective review of published case reports of individuals developing a Cushing's syndrome while treated concurrently with a boosted HIV protease inhibitor and inhaled corticosteroids indicated that this adverse effect tended to occur after several months (and more rarely 2 weeks) of concurrent administration of these drugs.

Description:

Systemic corticosteroid effects including Cushing's syndrome and adrenal suppression (plasma cortisol levels were noted to be decreased 86%) have


5. Arrange prescription or supply:

- [Nirmatrelvir plus ritonavir \(Paxlovid\)](#) ^

Nirmatrelvir plus ritonavir (Paxlovid)

Nirmatrelvir plus ritonavir (Paxlovid) can be prescribed on the [PBS](#) using a Streamlined Authority prescription or through the [NSW health model of care](#). Details of the medical condition necessitating the use of the drug must be recorded in the patient's medical records.

- Dose:
 - Nirmatrelvir 300 mg + Ritonavir 100 mg every 12 hours for 5 days (10 doses) – for patients with eGFR > 60 mL/min
 - Nirmatrelvir 150 mg + Ritonavir 100 mg every 12 hours for 5 days (10 doses) – for patients with eGFR 30-60 mL/min
- Either:
 - Forward the PBS script to the pharmacy of choice and check that the pharmacy has supply, or
 - Complete the [NSW Health prescription and declaration for general practitioners](#), and fax or email the closest [HNELHD dispensing service](#). Consider including a copy of the patient's medication list. Do not give page 1 or 2 to the patient, but complete page 3 and give to the patient. Tell the patient that the dispensing pharmacy will notify the patient when the medication is available to [organise collection](#).
- If prescribing in an RACF or Aboriginal Medical Service where the medication has been supplied to the facility from the National medicines stockpile, complete the medication chart or document as appropriate in the patient record. Complete the [prescriber declaration form](#) and keep a record for possible future audit activity.

- 
- 49 yo Aboriginal
 - Day 3
 - Unvaccinated, living in small country town
 - PMHx- T2DM, HTN, IHD- NSTEMI May 2020, stent May 2020, OSA on CPAP, BMI 40
- Med; rosuvastatin, metformin, telmisartan+ hydrochlorthiazide, semaglutide, ducover- clopidogrel + aspirin, empagliflozin
- kidney and liver function- most recent May, eGF >90, LFT's NAD

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Is the patient:

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Is the patient:

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symptom onset?**

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**Are one or more treatments
accessible and the patient
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contraindications?**



NO

**Treat symptoms
and observe.**

YES

NO

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Is the patient:

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YES

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**Inhaled corticosteroids
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