## **COVID-19 Update**

A/Prof Suman Majumdar

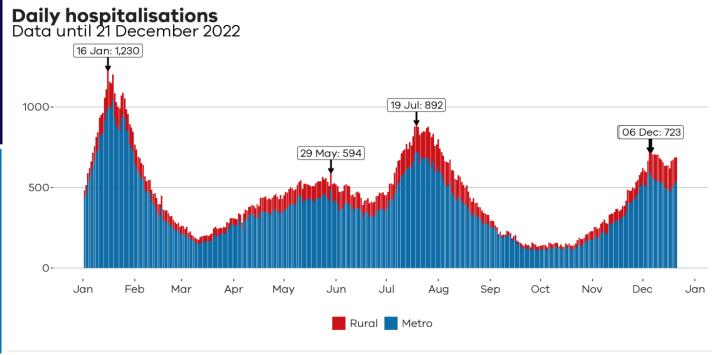
**Deputy Chief Health Officer** 

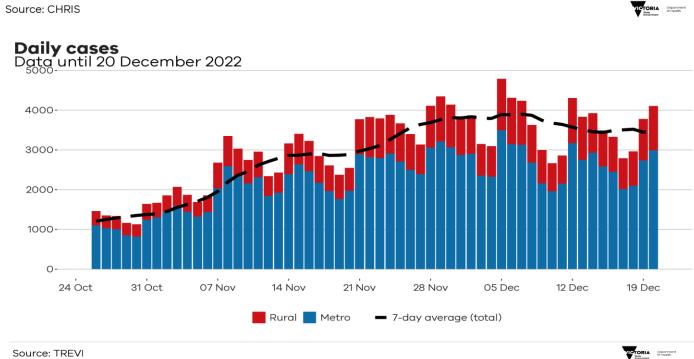
**21** December, **2022** 



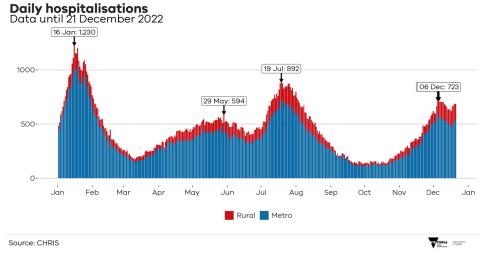
## Epidemiological summary

- ✓ The current wave has plateaued
- ✓ The wave was driven by a combination of waning pop immunity, reduction in community protective behaviours, & emerging immune evasive subvariants (XBF increased 5 to 32% in 6 weeks).
- ✓ Hospitalisations (691)have increased by 5% in the last 7 days
- ✓ ICU occupancy has (31) increased by 35%
- ✓ Furlough 1585 (3% increase)
- ✓ Weekly deaths (64, Nov 30) increased by 40=8%
- ✓ Reported case numbers have stablised with 0.6% decrease in the last 7 days.
- ✓ Significant underestimation due to falling case ascertainment (~15%).





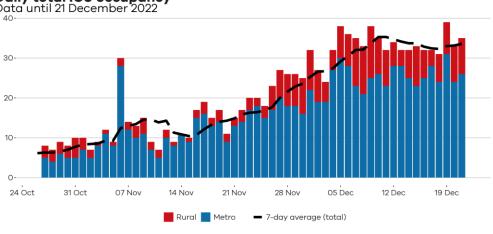
## Morbidity and Mortality



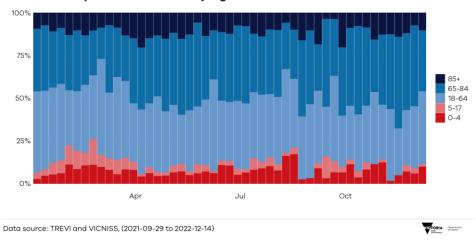
Note: data is taken from a live feed and the latest data point may vary slightly between reports

#### **Daily total ICU occupancy** Data until 21 December 2022

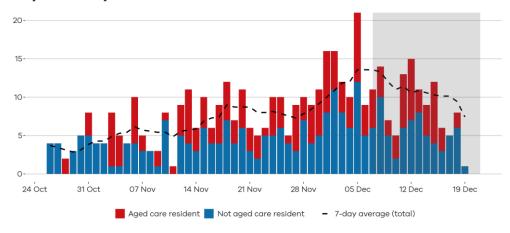
Source: CHRIS



#### Share of hospital admissions by age



#### Daily deaths by date of death



Source: TREVI



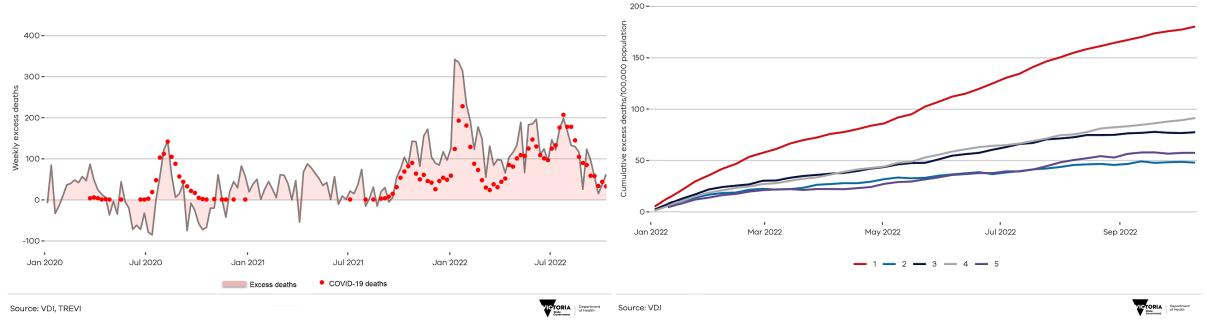
TICTORIA Drecovered affirmation

# Excess Deaths and Cumulative Excess Deaths in Victoria

Excess deaths in Victoria with COVID-19 deaths superimposed

## Cumulative excess deaths in Victoria by socio-economic status quintile

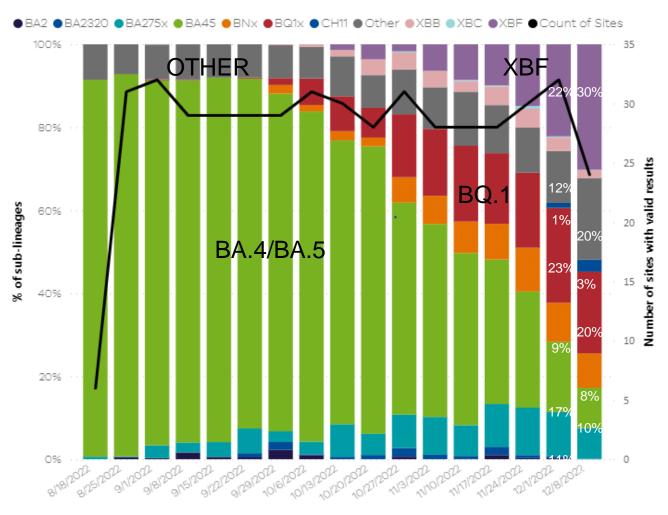
1 being the quintile with greatest relative social disadvantage



- From 1 January 2022 to 13 October 2022, estimated excess deaths in Victoria were 86 excess deaths per 100,000 population.
- The close alignment of excess deaths and COVID-19 death counts suggest excess deaths in Victoria were largely explained by COVID-19
  associated mortality
- Excess death rates were higher in areas of lower socioeconomic disadvantage.

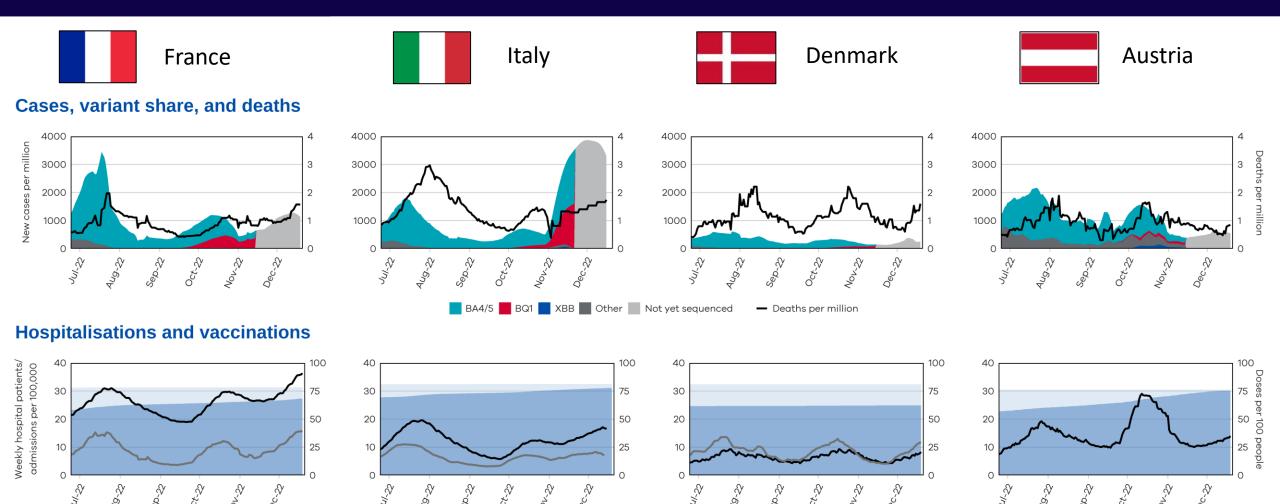
#### Virologic Surveillance

- The current wave in Victoria is driven by a mixture of new Omicron subvariants which became dominant in late October / early November
- XBF recombinant (BA.2.75.3 = CJ.1 and BA.5), BQ.1/BQ.1.1, BA 2.75 (and its sublineages BN.1. CH.1.1) are widely distributed
- XBF shows the most recent rapid growth. No signs of increased severity
- Many are resistance to Evusheld (XBB, XBB.1, BA.2.75.2, BA.4.6, BF.7, BQ.1, BQ.1.1)



Received date (week ending)

#### Countries of interest



Hospital admissions per 100,000

<sup>\*</sup>Booster doses refer to count of all doses beyond those prescribed by the original vaccination protocol.

#### Vaccination

#### Last updated: 21 Dec 22

VICTORIA Department of Health



						Doses delivered to Victorians	
Age group	Dose 1^	Dose 2^	Dose 3 <sup>^</sup>	Dose 4^	Waned immunity*	4 Week Trend	7 days to 17 Dec
0-4	0% (+0.01%)	0% (+0.00%)	0% (+NA)	NA (+NA)	NA		11
5-11	63% (+0.16%)	48% (+0.25%)	0% (+0.01%) Low eligi	bility 0% (+0.00%)	94%		493
12-15	100% (+0.03%)	98% (+0.09%)	2% (+0.05%)	0% (+0.00%)	97%		128
16-29	94% (+0.04%)	92% (+0.02%)	53% (+0.31%)	1% (+0.12%)	95%		1,359
30-49	98% (+0.03%)	97% (+0.01%)	68% (+0.17%)	12% (+1.00%)	91%		4,884
50-64	99% (+0.03%)	98% (+0.01%)	81% (+0.10%)	32% (+1.61%)	88%		4,464
65+	100% (+0.04%)	100% (+0.01%)	92% (+0.08%)	70% (+0.91%)	91%		3,299
		_		Total aged 12+	92%		

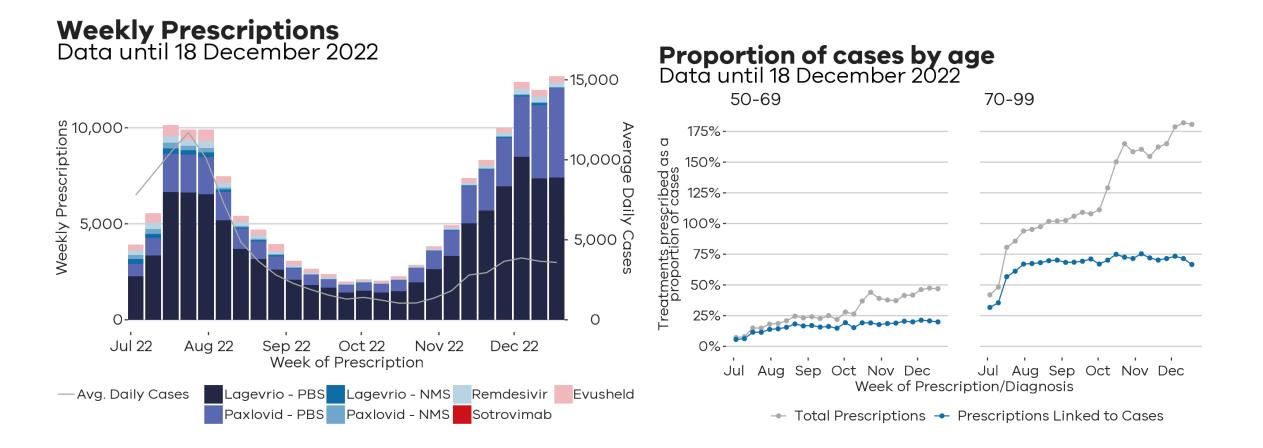
<sup>^</sup> Current vaccination coverage (change in coverage in last 30 days)

Source: AIR (ABS population)

**OFFICIAL** 

\*People with at least one vaccination but no vaccination or diagnosis in last 120 days
This will NOT capture any unreported COVID infections

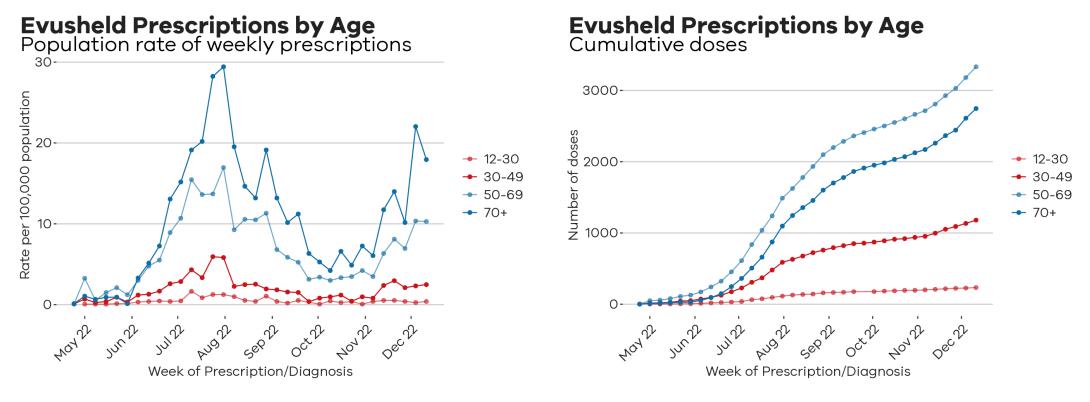
#### **Treatments**



## Evusheld usage

Evusheld is approved by the <u>TGA</u> for use as pre-exposure prophylaxis in those at risk for severe disease of COVID.

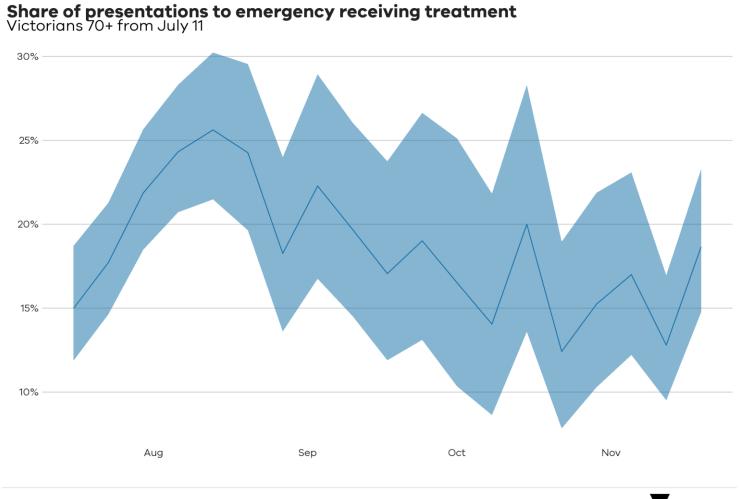
Evusheld is prioritised for severely immunocompromised individuals not expected to mount an adequate immune response to COVID-19 vaccination or due to underlying medical conditions or treatments that compromise the body's immune system.



### Victorians 70+ that receive treatment prior to ED presentation

The chart to the right shows the share of COVID positive Victorians aged 70+ that were receiving treatment before presenting to emergency.

- Approximately 20% were receiving treatment at the time of presentation
- 60% were undiagnosed at time of presentation
- 20% were diagnosed at least one day before but were not linked to a treatment.



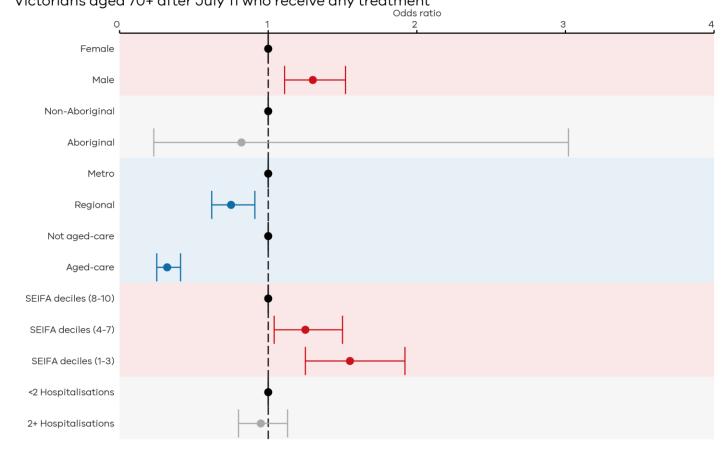


#### Likelihood of being diagnosed prior to presentation at ED

Males, people residing in metro areas, people not living in aged care and those living in an area of socioeconomic disadvantage were all factors associated with increased likelihood of presenting to ED with undiagnosed COVID for Victorians aged 70+.

60% of people who present to ED with COVID are undiagnosed at the time. This analysis compares the characteristics of this 60% of presentations compared to the characteristics of the 40% who were diagnosed at time of presentation.

#### Odds of not being diagnosed prior to an ED presentation Victorians aged 70+ after July 11 who receive any treatment



VEMD, PBS treatments, TREVI and ABS SEIFA data (2022-07-11 to 2022-11-25) n = 2698

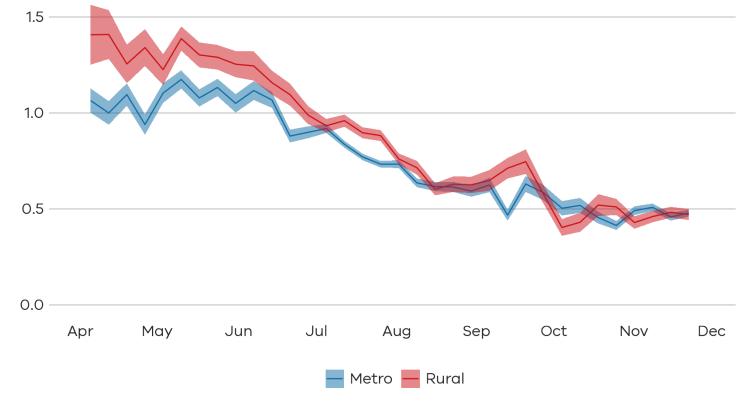


# Time to treatment over time for both metro and regional populations

The average time from diagnosis to treatment has decreased over time in both metropolitan and regional areas.

- The gap between regional and metropolitan areas has reduced over time.
- By August, the time to treat between Metropolitan and Regional areas was similar

Average days to treatment by metro/regional location Data from 02 Mar - 09 Dec, total treatments n = 62283



## Six steps to protect our community

#1 Masks Wear a quality mask to protect from COVID and flu

#2 Ventilation Have fresh air when gathering indoors (or go outside!)

#3 Isolation Stay home if unwell

#4 Testing Take a RAT if you have symptoms, PCR if high risk

#5 Medication Consult your doctor immediately if positive and high risk

If you're due for your third or fourth dose, get it NOW!

#6 Vaccination

#### **How to get Covid-19 medication**

1

#### **Get tested**

as soon as you notice symptoms to confirm you have COVID-19



Report your positive result

to the Department of Health at <a href="https://www.coronavirus.vic.gov.au/report">www.coronavirus.vic.gov.au/report</a> (only in English). Or by calling the Coronavirus Hotline on 1800 675 398. Need an interpreter? Press 0 when you call.

3

#### **Ask your doctor**

or the COVID Positive Pathways Program if you can get COVID-19 medication



If you are eligible, you will be prescribed medication. For the medicine to work best, you must **take it within five days of getting sick**. You should take the medication even if your symptoms are mild.

### **Covid-19 Medications Eligibility**

# Who can get COVID-19 medications?

Only people most likely to need hospital care can get COVID-19 medications. This includes people who:

- are aged 70+
- are aged 50+ with other health conditions
- have a weakened immune system, disability or congenital heart disease
- live in an aged care facility.

Most other people can manage COVID-19 safely at home without medication.

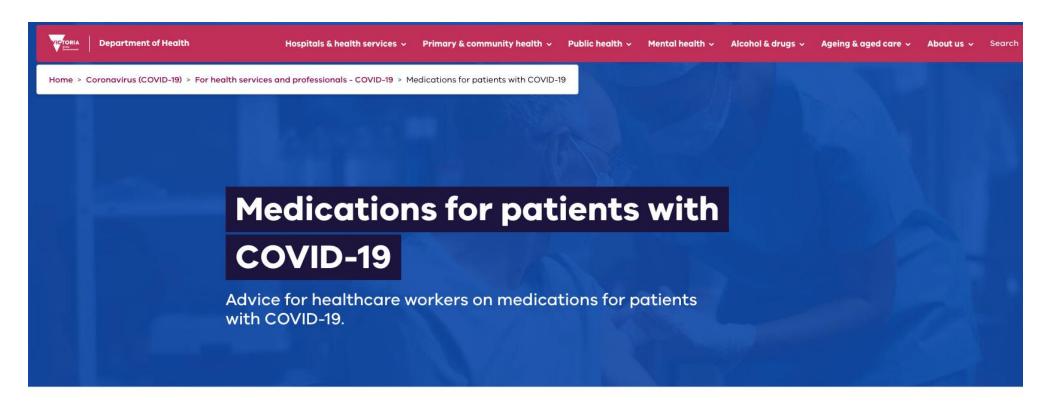
#### What medications can I get?

Doctors can prescribe Lagevrio™ and Paxlovid™ (antiviral tablets) to adults. They are on the Pharmaceutical Benefits Scheme (PBS), so they cost less money. They can also prescribe inhaled corticosteroids (puffers) to adults and children.

Some medications are only available through hospitals. Your doctor will refer you to a hospital if you need these. You may also get referrals and support through the COVID Positive Pathways Program.

#### Resources

https://www.health.vic.gov.au/covid-19/vaccines-and-medications-in-patients-with-covid-19



On this page

Early therapies

COVID-19

# Develop a COVID-19 treatment plan for your patients

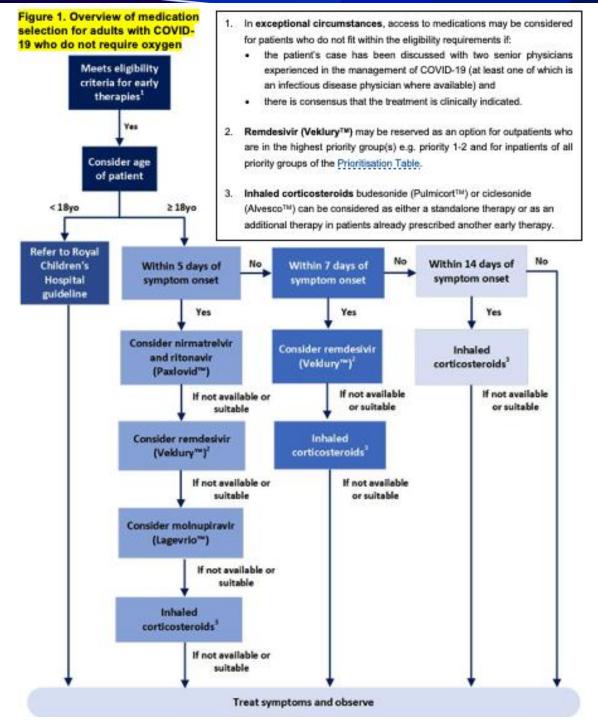
Actively engaging with at-risk patients to develop a COVID-19 treatment plan enables them to quickly access the best available treatment should they become infected.

Clinicians should consider contacting at-risk patients that may be eligible for early therapies for a proactive consultation to develop a COVID treatment plan, or do this during an elective/non-urgent consultation.

Examples of COVID treatment plan templates are available to download:

#### Vic Guidelines

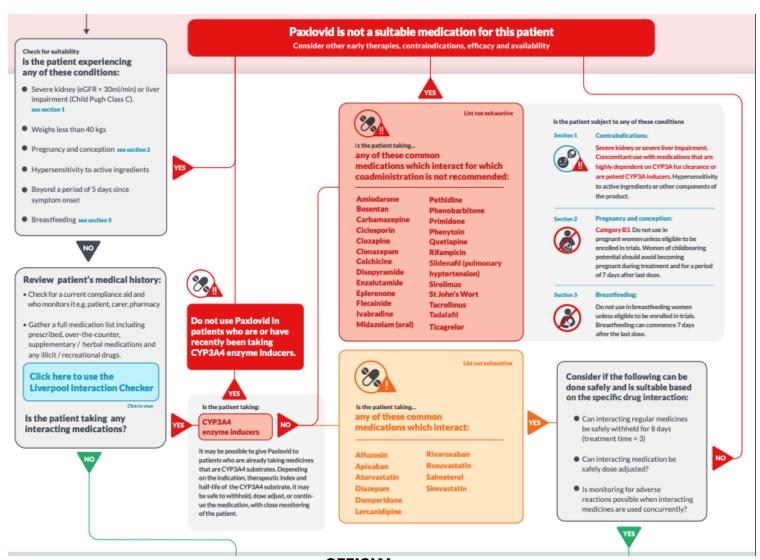
- Paxlovid (nirmatrelvir + ritonavir)
- 2. Remdesivir
- 3. Lagevrio (molnupiravir)





## Prescribing considerations for nirmatrelvir plus ritonavir (Paxlovid)

COVID-19



## **Treatment Effectiveness**



### Victorian COVID-19 treatment analysis

#### **Treatments in Victoria**

- Antiviral treatments (AVT) for COVID-19 have been available in Australia to all individuals over the age of 70 who tested positive to SARS-CoV-2 from July 11 2022.
- The two approved AVTs, molnupiravir and nirmatrelvir-ritonavir have been shown to reduce death and hospitalisation in unvaccinated individuals with COVID-19 in randomised clinical trials

#### Study aims and objectives

Among COVID-19 cases in Victoria who were diagnosed between 11th July and 23rd September 2022 aged over 70 years:

- 1. Describe the characteristics (clinical and demographic) of COVID-19 people who received COVID-19 AVT treatment compared to those who did not
- 2. Assess the effect of treatment on hospitalisation and death
- 3. Asses the effect of drug type (Paxlovid and Lagevrio) on hospitalisation and death
- 4. Asses the effect of time between diagnosis and treatment on hospitalisation and death



https://theconversation.com/paxlovid-is-australias-first-line-covid-antiviral-but-lagevrio-also-prevents-severe-disease-in-over-70s-195349

## **Summary Results**

(Preliminary data)

Victorians (70+) who receive a treatment, compared to individuals who did not receive a treatment are

26% less likely to be hospitalised

- 32% for Paxlovid, 26% for Lagevrio
- 37% if receiving treatment within 0-1 days of diagnosis

55% less likely to die

- 72% for Paxlovid and 54% for Lagevrio
- 63% if receiving treatment within 0-1 days of diagnosis