

Gastrointestinal Complications

➤ Acute colonic pseudo-obstruction

- Possibly prolonged critical illness related
- Conservative management if stable
- Electrolyte optimisation and Decompression

➤ Mesenteric ischaemia

- **Most serious GI complication**
- **3.8-4% incidence in cohort studies of critically ill patients**
- **?role of microvascular coagulopathy**
- **Require surgical intervention**

Acute Management Principles

➤ GI symptoms related to viral infection:

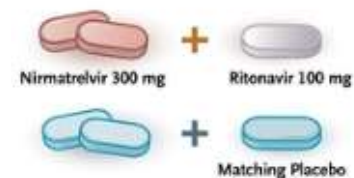
- Antiemetics
- Oral or IV hydration
- Loperamide
 - “Expert Opinion”
 - In absence of fever bloody stools, *C. difficile* risk factors
 - Low dose

Acute Management Principles

➤ COVID-19 Specific:

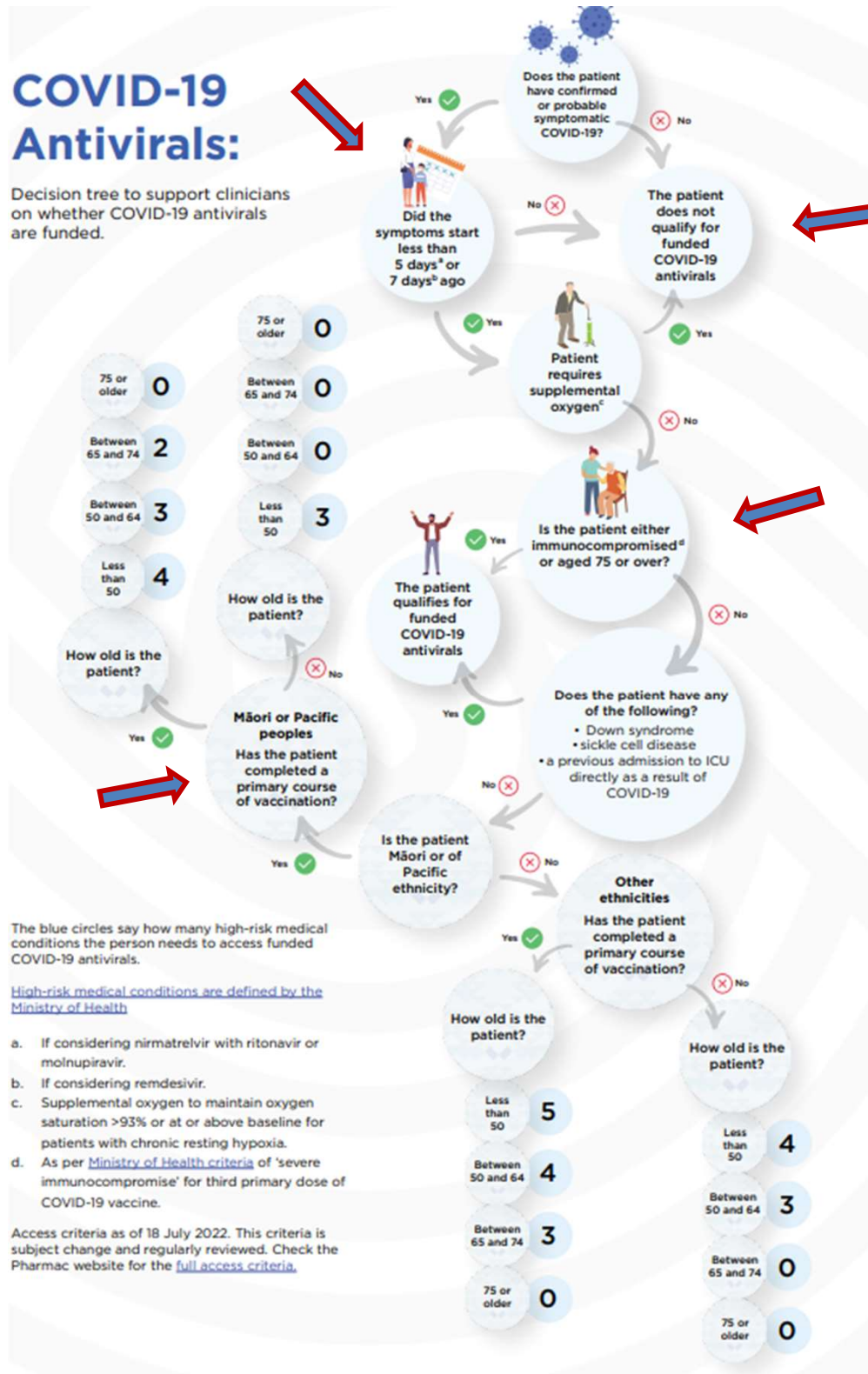
➤ Antivirals²⁴

- Paxlovid (Nirmatrelvir with Ritonavir)
 - 5/7 course (three tablets twice daily)
 - » International, Multicentred RCT of 2246 participants
 - » Randomised to Paxlovid vs Placebo for five days
 - » Reduces risk of hospitalisation or death (0.8% vs 6.3%, $p < 0.001$; $NNT = 18$)
 - Contraindications: eGFR < 30 mL/min, severe hepatic impairment, pregnancy
 - Beware drug-drug interactions
 - » Implications for other medications (e.g OCP, antiepileptics)



COVID-19 Antivirals:

Decision tree to support clinicians on whether COVID-19 antivirals are funded.



The blue circles say how many high-risk medical conditions the person needs to access funded COVID-19 antivirals.

[High-risk medical conditions are defined by the Ministry of Health](#)

- If considering nirmatrelvir with ritonavir or molnupiravir.
- If considering remdesivir.
- Supplemental oxygen to maintain oxygen saturation >93% or at or above baseline for patients with chronic resting hypoxia.
- As per [Ministry of Health criteria](#) of 'severe immunocompromise' for third primary dose of COVID-19 vaccine.

Access criteria as of 18 July 2022. This criteria is subject change and regularly reviewed. Check the [Pharmac website](#) for the [full access criteria](#).

Acute Management Principles

Inflammatory Bowel Disease

➤ COVID-19 positive (stable disease)²⁵

- Consider withholding medications which impair T-cell mediated viral clearance
- Thiopurines, anti-TNF agents, anti-IL23 agents, vedolizumab
- 2-3 weeks unlikely to precipitate a major flare

➤ IBD flare²⁵

- Treat underlying disease irrespective of COVID-19 status
- Includes initiation of steroids or anti-TNF agents
- Exclusive Enteral Nutrition (EEN) could be an alternative in Crohn's disease flares

➤ Smoking Cessation, Influenza Vaccinations

Acute Management Principles

Inflammatory Bowel Disease

➤ Resumption of Medications:²⁵

- No evidence to guide timing
- Resume after resolution of symptoms (Expert Consensus)
- Typically 14 days
- Low risk of IBD flare if in remission

Vaccination and IBD

➤ **Universally recommended**²⁶⁻²⁹

- Lower risk and severity of infection²⁶
 - HR 0.31, 95%CI 0.17-0.56 (n=15,000; USA)
- Seroconversion >96% after three doses³⁰
 - Meta-analysis (31 studies)
- Safe

➤ **Three primary doses:**

- Biologics/Thiopurines/Methotrexate within last three months
- Prednisone ≥ 20 mg/day within one month

➤ **No evidence to alter dose or timing of doses around vaccination**²⁵⁻²⁹

Implications for Endoscopy

➤ Acute Setting:

- Gastrointestinal bleeding most common³¹⁻³³
- COVID-19 inpatients usually anticoagulated
- Risk stratification
 - Gastroscopy: aerosol generating procedure
- Most patients managed conservatively with delayed Endoscopy
- Urgent/Emergent procedures not delayed

Implications for Endoscopy

Timing of Endoscopy post-COVID-19

Asymptomatic COVID-19 infection

Asymptomatic COVID-19 infection diagnosed on the day ^a of or within 2 weeks prior to scheduled procedure	Defer endoscopic procedure for ≥ 2 weeks after diagnosis
Asymptomatic COVID-19 infection diagnosed > 2 weeks prior to scheduled procedure	Proceed with endoscopic procedure as scheduled

Mild COVID-19 illness

- Mild symptoms and signs^b
- No new dyspnoea
- No evidence of LRTI on clinical exam or imaging if available

Mild symptomatic COVID-19 illness diagnosed on the day ^a of or within 2 weeks prior to scheduled procedure	Rebook endoscopy procedure ≥ 2 weeks after diagnosis
Mild symptomatic COVID-19 illness diagnosed > 2 weeks prior to scheduled procedure	Proceed with endoscopic procedure as scheduled

Moderate COVID-19 illness

- Evidence of LRTI on clinical exam such as
 - a. SaO₂ 92-94% on room air
 - b. Desaturation or dyspnoea with mild exertion
- Evidence of LRTI on imaging

Moderate symptomatic Covid-19 illness diagnosed on the day ^a of or within 4 weeks prior to scheduled procedure	Rebook endoscopy procedure ≥ 4 weeks after diagnosis
Moderate symptomatic Covid-19 illness diagnosed > 4 weeks prior to scheduled procedure	Proceed with endoscopic procedure as scheduled

Severe or Critical COVID-19 illness

- Deteriorating respiratory function^c
- Respiratory failure^d
- Other organ failure

Severe or Critical COVID-19 illness within 6 months of scheduled procedure	Defer endoscopic procedure until cleared at medical review
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Gastrointestinal post-acute COVID-19 Syndrome (G-PACS)

- aka “Long Covid” of the GI Tract...

