Therapeutics Technical Advisory Group | Te Rōpū Haumanu Kowheori-19

Update for health professionals: Therapeutics for the treatment of COVID-19

Date: 28 February 2022

The Therapeutics Technical Advisory Group (Therapeutics TAG) was established by the Ministry of Health in August 2021 to provide expert advice on existing and emerging medicines for use in the management of COVID-19.

The Ministry of Health, Pharmac, Medsafe, the Therapeutics TAG and others are working collaboratively to ensure ongoing supply of existing medicines for the treatment of COVID-19, to support access to appropriate additional medicines, and in horizon scanning and proactively evaluating existing and emerging medicines, most recently in the context of Omicron.

Global supplies of medicines for COVID-19 are very constrained in terms of quantity of supply and access to specific medicines.

Current therapeutics in use in NZ for treatment of COVID-19

dexamethasone	enoxaparin
tocilizumab	baricitinib
remdesivir	budesonide
casirivimab/imdevimab – Delta infection only	

Medicine supply anticipated

- Nirmatrelvir/ritonavir (Paxlovid) - A decision on approval by Medsafe is expected soon. Supply is yet to be confirmed, estimated April-June 2022.
- Molnupiravir (Lagevrio) – Medsafe has recently received an application for approval and it is under priority assessment. Supply is yet to be confirmed, estimated April-June 2022.

Pharmac is working with a number of suppliers to secure additional COVID-19 treatments for New Zealand including sotrovimab and tixagevimab with cilgavimab.

Pharmac will be providing regular updates regarding treatments for COVID-19 and supply on the Pharmac website.

Not recommended for the treatment of COVID-19

- Ivermectin – Medsafe and the Ministry of Health strongly recommend that ivermectin is not used to prevent or treat COVID-19. Medsafe link here
- Hydroxychloroquine – not recommended. See WHO summary Q&A.

Remdesivir

- Remdesivir has been available for hospital use in NZ since early in the pandemic. Recent evidence from the PINETREE study suggests it may be an appropriate antiviral treatment earlier in the disease course. Link for study here
- Access to additional remdesivir supply is being explored. Remdesivir is administered over consecutive days by intravenous infusion, which presents challenges for community administration and equitable use.

Oral antivirals

- Nirmatrelvir plus ritonavir and molnupiravir are given orally, making them well suited to use in community settings.
- Treatment with nirmatrelvir/ritonavir or molnupiravir is recommended to be initiated within 5 days of first symptoms on the basis of trial evidence.

Nirmatrelvir/ritonavir (Paxlovid)	**Molnupiravir** (Lagevrio)
Orally administered protease inhibitor. Nirmatrelvir blocks the activity of an enzyme needed for SARS-CoV-2 replication; ritonavir slows the breakdown of nirmatrelvir. Ritonavir is known to cause interactions with multiple commonly prescribed drugs. Due to the short-term use, if potential interactions are well managed the overall risk is likely to be low.	Orally administered ribonucleoside analogue that inhibits the replication of SARS-CoV-2. Not suitable for use in current or potential pregnancy due to concerns about risk of mutagenesis.

In hospital care

- Therapeutics recommended for the treatment of adults hospitalised with COVID-19, including pregnant women, are detailed in the guideline: **Clinical management of COVID-19 in hospitalised adults**

  The guideline is updated regularly with the latest update published on the Ministry's **COVID-19: Advice for all health professionals** webpage.

- Paediatric care: Starship maintain a guideline on the management of **COVID-19 disease in children** (see link), as well as a guideline on the management of Paediatric Inflammatory Multisystem Syndrome - Temporally associated with SARS-CoV-2 / Multisystem Inflammatory Syndrome of Children (PIMS-TS / MIS-C), accessed here.

Casirivimab/imdevimab – Delta infection only

- Casirivimab/imdevimab (Ronapreve) is a monoclonal antibody therapy (SC/IV) active against Delta infection but **not** Omicron. Recent evidence has shown that most monoclonal antibody therapies available to date internationally, including casirivimab/imdevimab, are not effective treatments for Omicron infection. Casirivimab/imdevimab was approved in December 2021 by Medsafe for the treatment of COVID-19 in people age 12 years or older. Pharmac established eligibility criteria for casirivimab/imdevimab treatment, which applied to Delta infection. See link
- During February 2022, Omicron has increasingly become the dominant variant responsible for COVID-19 infection in the community and hospitals in NZ. As a result, the window for using casirivimab/imdevimab as a treatment has largely closed at present, especially in the community. Use is expected to only be applicable in rare circumstances (eg. both profoundly immunosuppressed and non-immune, with a Delta infection), and largely on the advice of an Infectious Diseases specialist. Identification of Delta infection by whole genome sequencing (WGS) is not normally available in clinical timeframes, but an individual case could be discussed with a microbiologist.