# Tocilizumab (Interleukin-6 Receptor Antagonist)

**Indications**: COVID pneumonia / pneumonitis meeting following criteria:

- On oxygen therapy
- Already received oral or iv dexamethasone 6mg
- Admission to HDU or ICU for organ support (HFNO / CPAP /BIPAP / invasive vent)

**Exclusion criteria**

- Known hypersensitivity to tocilizumab
- Co-existing **severe** infection that might be worsened by tocilizumab
    - Any active, severe infection other than COVID-19 causing physiological derangement
    - Caution is advised when considering the use of tocilizumab in patients with a history of recurring or chronic infections or with underlying conditions which may predispose patients to infections.
- Liver dysfunction: ALT or AST more than 5 times the upper limit of normal (caution is recommended if hepatic enzymes are more than 1.5 times the upper limit of normal)
- A platelet count of less than 50 x 109/L
- A neutrophil count of less than 2 x 109/L
- A pre-existing condition or treatment resulting in ongoing immunosuppression

Tocilizumab should only be used during pregnancy when clinically necessary at the discretion of the treating clinician.

## Administration:

Tocilizumab must be administered as an intravenous infusion at a dose of 8mg per kg, up to a maximum dose of 800mg. The following dose bandings are suggested:

| Weight | Dose |
|---|---|
| <41kg | 8mg/kg, rounded to nearest 20mg |
| ≥ 41kg and ≤ 45kg | 360mg |
| ≥ 46kg and ≤ 55kg | 400mg |
| ≥ 56kg and ≤ 65kg | 480mg |
| ≥ 66kg and ≤ 80kg | 600mg |
| ≥ 81kg and ≤ 90kg | 680mg |
| ≥91kg | 800mg |

Tocilizumab must be diluted in a 100mL bag of 0.9% sodium chloride, after removing an equivalent volume of saline (total volume 100mL) and given over 1 hour.

- Infuse at 10 mL/hour for 15 minutes followed by 130 mL/hour for 45 mins to complete dosing over 1 hour)
- Ensure that the infusion bag is emptied, flushing any remaining solution through the intravenous tubing set with 20 mL of normal saline (or the volume needed to flush the entire tubing if different than 20 mL) following standard procedures.

Access to Tocilizumab is also available via the RECOVERY trial. Patients are eligible if they have been randomised into the RECOVERY trial within the last 21 days; have $SpO_2$ <92% on air or requiring oxygen; have a CRP ≥75mg/L; and no contraindication to receiving tocilizumab