Tocilizumab for COVID-19

Tocilizumab is an intravenously administered monoclonal antibody which reduces inflammatory responses by blocking interleukin-6 (IL-6) receptors.

Tocilizumab should be co-administered with corticosteroids (either oral or intravenous) where possible.

Tocilizumab should be given with baricitinib (a Janus kinase inhibitor) where possible.

Clinical indications

Patients with severe or critical COVID-19. Treatment should be started as early as possible, and patients should be monitored and treated for other infections because of the immunosuppression caused by the medication.

Children: Applicability of the guidelines to children is uncertain due to a lack of direct evidence in the age group. Tocilizumab is used for other diseases in children over 2 years of age.

Pregnancy: Applicability of the guidelines to pregnant women is uncertain due to a lack of direct evidence in this group. There is no reason to think that pregnant women would respond differently to tocilizumab for COVID-19. Tocilizumab can cross the placenta, especially after the first trimester. The risk of transient immunosuppression in the fetus should be weighed against potential benefit in the mother.

Contraindications

- Under 2 years old.
- Known hypersensitivity to the medication.
- Hepatic impairment: tocilizumab should not be used in patients with ALT > 5 x upper limit of normal.

Recommendations for not giving tocilizumab

- Significant liver disease (ALT > 5 x the upper limit of normal).
- Neutropenia (< 0.5 x 10⁹/L), low platelets (< 50 x 10⁹/L).
- Evidence of active tuberculosis.
- Uncontrolled, confirmed or suspected severe systemic infection (other than COVID-19).

Available formulation and storage

Tocilizumab is supplied as concentrated solution for intravenous infusion in vials containing 80 mg or 200 mg or 400 mg at 20 mg/mL. Refrigerate vials at 2–8 °C until required for use.

Dosage and route

Route

The route of administration for COVID-19 is intravenous only. It must be diluted. Do not use the same IV line to administer other medications at the same time.

Dose and duration

Tocilizumab 8 mg/kg (maximum dose of 800 mg per infusion) intravenous infusion administered over 60 minutes as a single dose.