Tocilizumab

NICE guidance

Tocilizumab is recommended, within its marketing authorisation, as an option for treating COVID-19 in adults who:

- are having systemic corticosteroids and
- need supplemental oxygen or mechanical ventilation.

The decision to initiate treatment with tocilizumab should be made by the receiving Consultant and with the support from multi-disciplinary colleagues in cases of uncertainty. Tocilizumab may be considered immediately (alongside corticosteroids) if the clinical presentation justifies or following a lack of response to initial treatment with corticosteroids. A copy of this authorisation form must be completed and signed by the Consultant and sent to Pharmacy with the prescription

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Contraindications

- Known hypersensitivity to tocilizumab
- Active, severe infections with the exception of COVID-19
- Liver enzymes [alanine aminotransferase (ALT) or aspartate aminotransferase (AST)] ten times or greater the upper limit of normal
- Absolute neutrophil count of less than 1 x 10^9 /L
- Platelet count of less than 50 x 10^3 /µL

Cautions

Caution should be exercised when considering treatment with IL-6 inhibitors in the following circumstances:

- A pre-existing condition or treatment resulting in ongoing immunosuppression
- History of recurrent or chronic infection or a predisposition to infection

Treatment with IL-6 inhibitors can lower the ability of the immune system to fight infections. This could increase the risk of getting a new infection or make any infection the patient contracts worse. It also causes prolonged depression of CRP levels, making CRP a less reliable marker of active infection.

Caution is necessary when prescribing tocilizumab to patients with neutropenia or thrombocytopaenia – see SmPC for further information

Screening

- Send a screen for HIV, Hepatitis B and C. Tocilizumab should be given within the required time-frame, do NOT delay therapy whilst awaiting results
- Obtain a negative pregnancy test for women of child-bearing age

Dosing

The recommended dose of tocilizumab is 8mg/kg to be administered as an intravenous infusion. The total dose should not exceed 800mg.

Dose Banding:

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

*Rounded to nearest whole kg

A single dose is to be administered.**
Preparations: 80mg in 4mL, 200mg in 10mL, 400mg in 20mL concentrate for solution for infusion

Administration of an IL-6 inhibitor, including date administered, must be highlighted at all handovers of clinical care and included on discharge letters.

**A second dose of tocilizumab may be considered after 24 hours if no improvement or worsening condition, in conjunction with review by a clinician experienced in COVID-19 management.

Administration and monitoring

Refer to the MEDUSA IV guide: Medicines Information - Medusa IV Drug Information (sharepoint.com) (intranet connection required)

Combination treatment

IL-6 inhibitors may be administered in combination with baricitinib (as well as corticosteroids, unless contraindicated), according to clinical judgement, in patients with severe or critical COVID-19.

Co-administration: COVID-19 treatments

There is no interaction expected between IL-6 inhibitors with other commissioned COVID-19 treatments. For further information please visit the University of Liverpool COVID-19 Drug Interactions website (https://www.covid19-druginteractions.org/checker).

Tocilizumab should not be regarded as an alternative to corticosteroids.

Pregnancy/BF/women of childbearing age

Please see: Using Tocilizumab or Sarilumab for hospitalised patients with COVID-19 who are pregnant

Women of childbearing potential must use effective contraception during and up to 3 months after treatment.

It is unknown whether tocilizumab is excreted in human breast milk. The excretion of tocilizumab in milk has not been studied in animals. A decision on whether to continue / discontinue breast-feeding or to discontinue IL-6 inhibitor therapy should be made taking into account the benefit of breast-feeding to the child and the benefit of therapy to the woman.

Further advice is also available via the SmPC for use in pregnancy and breastfeeding.

Patient Counselling

All patients must be counselled at the earliest opportunity. The information relating to post-treatment considerations must also be communicated to the GP at discharge, including the date of tocilizumab administration:

- Patients should be counselled on the risk versus benefits of treatment
- Patient must be advised that live vaccines should be avoided for 12 months after tocilizumab therapy.
- Women of child-bearing age must be counselled regarding the requirement for effective contraceptives up to 3 months post-treatment.
- Patients should be advised to avoid contact with anyone showing symptoms of chickenpox or shingles for 6 months post-treatment and seek medical advice should inadvertent exposure occur.
- Markers of infection (i.e CRP) will be depressed for some time after treatment, making it a less reliable marker of active infection

Patient Information Leaflets can be accessed via the sharepoint and are available in English and Welsh

Safety reporting

Any suspected adverse drug reactions (ADRs) for patients receiving tocilizumab should be reported directly to the MHRA via the new dedicated COVID-19 Yellow Card reporting site at: https://coronavirus-yellowcard.mhra.gov.uk/

Tocilizumab supply

Tocilizumab will be supplied via Pharmacy. The prescription chart and completed authorisation form should be sent to Pharmacy or given to a member of the Pharmacy Team.

Supply will be available during Pharmacy working hours, including mornings on weekends. Out of hours supply is not available and the chart should be sent to Pharmacy promptly the next morning (including weekends) for supply.

References / review date

NICE GUIDANCE: https://www.nice.org.uk/guidance/ta878/chapter/1-Recommendations

BNF: BNF (British National Formulary) | NICE

Tocilizumab SPC: RoActemra 20mg/ml Concentrate for Solution for Infusion - Summary of Product Characteristics (SmPC) - (emc) (medicines.org.uk)

Last Reviewed: May 2023