

Medication information tables

Tocilizumab	
Indication	CRS
Dose	8mg/kg in patients $\geq$ 30kg (maximum 800mg per dose)
Frequency	Dose can be repeated after a minimum interval of 8 hours, based on symptoms.
Duration	Maximum of 4 doses in total (but it is advised that after 2 doses of tocilizumab any additional doses should be given concurrently with corticosteroids and avoid further tocilizumab monotherapy)
Dilution	- Tocilizumab dose should be diluted to a final volume of 100mL with sodium chloride 0.9% - To mix, gently invert the infusion bag to avoid foaming
Administration	- Intravenous infusion over 1 hour - Central (preferred) or large peripheral vein
Renal and/or hepatic adjustment	- No dose adjustment needed for renal or hepatic impairment - Use with caution if deranged LFTs
Additional information	- Can be prepared and administered by qualified nursing staff who have been assessed competent in administration of IV drugs. Note: SACT training is not needed. - Prior to CAR-T cell infusion, at least one dose of tocilizumab must be available in the treatment area fridge and there should be access to an additional dose of tocilizumab within 8 hours of each previous dose. - If the patient is transferred to another ward e.g. ICU, ensure tocilizumab is moved to the new treatment area fridge. - In England, a Blueteq form should be submitted retrospectively for all tocilizumab administered. - Tocilizumab is a humanised anti-interleukin-6 (IL-6) receptor monoclonal antibody. - Record the brand name, batch number and expiry date from each vial used. - Store in the original container (light protection) in a refrigerator between 2°C and 8°C.

Dexamethasone	
Indication	CRS and ICANS
Dose	10mg
Frequency	Up to four times a day. Refer to CRS and ICANS management tables.
Duration	Continue until symptoms resolve to Grade 1, or after 3-4 days if no response, and then taper the dose to stop. Taper will depend on total corticosteroid dose received, but a short taper over a few days is usually appropriate.
Administration	• Slow IV injection over 3-5 minutes. • Oral can be considered at Grade 1 and when weaning (noting lower bioavailability and onset of action).
Renal and/or hepatic adjustment	• No dose adjustment needed for renal or hepatic impairment.
Additional information	• Corticosteroids should be used for the shortest time possible. • Steroids should be tapered prior to anakinra being tapered.

Anakinra	
Indication	Refractory CRS and ICANS not responsive to dexamethasone 10mg QDS (off-label).
Dose	• 2mg-8mg/kg/day. Dose should be titrated and increase the dose at intervals of 2mg/kg/day up to a maximum of 8mg/kg/day* • Round dose to the nearest 100mg.
Frequency	The total daily dose should be given in 2-4 divided doses [#]
Duration	Until clinical improvement and then tapered
Dilution	For intravenous infusion, dilute in 50mL with 0.9% NaCl. Mix gently by inverting 10 times.
Administration	• Subcutaneous injection or • IV infusion (unlicensed) over 30 – 60 minutes
Renal and/or hepatic impairment	• Hepatic impairment: no dose adjustment needed • Renal impairment: there are different dosing considerations in patients with severe renal impairment (creatinine clearance <30mL/min) or on haemofiltration or haemodialysis and specialist pharmacy advice should be sought to ensure appropriate dose calibration.
Additional information	• *Dosing schedules vary and are subject to change based on emerging data. • # Anakinra has a short half-life and more frequent dosing provides sustained receptor blockade. There is limited compatibility information which is relevant when given IV. • In severe CRS/ICANS anakinra is generally initiated intravenously. • The intravenous route is unlicensed. Administration should move to the subcutaneous route as soon as possible once patient is stable. • Regular response assessment by CAR-T team. • Store in a refrigerator (between 2°C and 8°C) in the original packaging (protect from light). • Human interleukin-1 receptor antagonist

Methylprednisolone (as sodium succinate)

Indication	Refractory CRS and ICANS
Dose	500mg - 1g
Frequency	Once a day, with a response assessment after each dose.
Duration	Usually for 3 doses and tapered.
Dilution	Reconstitute vial with water for injection. Further dilute required dose to a final volume of 100mL with sodium chloride 0.9% or glucose 5%.
Administration	Intravenous infusion over 30 minutes.
Renal and/or hepatic adjustment	No dose adjustment needed for renal or hepatic impairment.
Additional information	• Only to be given in life-threatening situations on approval of a CAR-T consultant. • High dose corticosteroids should be used for the shortest time possible and the dose tapered once symptoms resolved to Grade 1 or after 3 days if no response.