

Shared care guidelines

Drug

CICLOSPORIN

Specialty

NEPHROLOGY

Indication

IMMUNOSUPPRESSION / PROPHYLAXIS OR ORGAN TRANSPLANT REJECTION

Overview

A calcineurin antagonist licensed for use in transplantation. Also effective in a range of immune mediated diseases including some forms of glomerulonephritis.

Hospital specialist's responsibilities

Initial investigations: As appropriate to clinical application. Include BP, urinalysis U&E, eGFR, LFTs, glucose.
Initial regimen: Determined by indication: 2 to 15 mg/kg divided dose 12 hrly
Clinical monitoring: For adverse effects and usual disease management
 Frequency: Twice weekly to every 6 months
Safety monitoring: BP, U&E, creatinine, eGFR, LFTs, glucose, trough drug levels
 Frequency: Weekly to every 4 months
Prescribing arrangements: Specialist to initiate and establish stable dose (minimum 3mths)
Documentation: Clinic letters and results to GP via ICE.

GP's responsibilities

Maintenance prescription: Aim for lowest dose achieving adequate immune suppression and avoiding nephrotoxicity. Guidance from specialist.
Clinical monitoring: For adverse effects and usual disease management
 Frequency: Every 3 months
Safety monitoring: BP, urinalysis, U&Es, creatinine, eGFR, LFTs, glucose, FBC
 Frequency: Every 3 months
Duration of treatment: Long-term as recommended by specialist
Documentation: Practice records. Correspondence with specialist as required.

Adverse events

Adverse Event	Action
>30% ↑ creatinine from baseline on 2 occasions (1 week apart)	Discuss with specialist
↑ K ⁺ above normal	Discuss with specialist
Rise in bilirubin or liver enzymes (AST/ALT/ALP > 2x upper limit of normal)	Discuss with specialist
WCC ↓ <4.0 x10 ⁹ /L or Platelets ↓ <150 x10 ⁹ /L	Discuss with specialist
↓ trend in WCC / platelet count	Repeat FBC & discuss with specialist
Hypertension (≥ 140/90 on 2 consecutive readings 2 weeks apart)	Treat (N.B. note drug interactions); if BP remains uncontrolled discuss with specialist.
Exaggerated physiological tremor	Discuss with specialist
Gingival hyperplasia	Discuss with specialist
Hyperglycaemia	Use oral hypoglycaemic agents or insulin as appropriate
Abnormal bruising	Check FBC & discuss with specialist

Other information

There are numerous drug interactions involving ciclosporin – check SPC / BNF when introducing new drugs. Avoid grapefruit juice (raises plasma ciclosporin concs). Live vaccines should be avoided. Annual flu vaccination recommended.
 All immunosuppressants carry a risk of malignancy especially dermatological malignancies. Advise UV protection, surveillance and early referral.
 Brands of ciclosporin are not interchangeable. **Maintain brand by prescribing by name.**

Contact details

The renal department can be contacted for advice using their website: kidney@stees.nhs.uk