

# TEICOPLANIN ONCE DAILY

## Dosing and Monitoring in Adults

### Indications:

- [Oncology](#) and [Haematology](#) neutropenic sepsis as per local guidance
- Endocarditis or other deep seated infections on recommendation of ID/OHPAT teams only

### NOTE: this guidance does not apply to:

- bone and joint infection patients where a separate three times a week protocol is used – available [here](#)
- skin & soft tissue infections or pneumonia where teicoplanin is not recommended locally for these indications and a lower dosing regimen is used

### STEP 1: LOADING dose and MAINTENANCE dose based on weight and renal function

- Teicoplanin dose is based on actual body weight
- Calculate CrCl (do not use eGFR) – if > 80ml/min see table below
- Use Actual Body Weight (ABW) to calculate CrCl

ACTUAL WEIGHT	LOADING dose	MAINTENANCE dose (started 12 hours after last loading dose)
<45kg	400mg every 12 hours for 4 doses	400mg ONCE daily
45-60kg	600mg every 12 hours for 4 doses	600mg ONCE daily
61-79kg	800mg every 12 hours for 4 doses	800mg ONCE daily
80-95kg	1000mg every 12 hours for 4 doses	1000mg ONCE daily
96-120kg	1200mg every 12 hours for 4 doses	1200mg ONCE daily
121-140kg	1400mg every 12 hours for 4 doses	1400mg ONCE daily
>140kg	Discuss with pharmacist	

- Renal impairment
  - From day 5 if:
    - CrCl 30-80ml/min – give half of usual maintenance dose (or give maintenance dose every 2<sup>nd</sup> day)
    - CrCl <30ml/min – give one third of maintenance dose (or give maintenance dose every 3<sup>rd</sup> day)
    - Dialysis patients – discuss with pharmacist

### STEP 2: ADMINISTRATION/ADVERSE REACTIONS

- Administer by IV bolus over 3-5 minutes or infuse over 30 minutes
- Administration related reactions can be limited by giving via infusion
- Common adverse effects include: rash and pain at injection site
- Uncommon adverse effects include: nausea, vomiting, GI disturbances, dizziness, headache, ototoxicity, blood dyscrasias including thrombocytopenia, neutropenia, deranged LFTs and raise creatinine

### STEP 3: MONITORING

- **FBC/U&Es/LFTs**
  - Baseline then twice weekly for first week (more frequently if acutely unwell)
  - Weekly thereafter
- **Teicoplanin levels**
  - NOT required for treatment courses  $\leq 7$  days
  - Required for deep seated or complex infections including endocarditis or a patient who is not responding to treatment
  - Pre dose level taken pre 6<sup>th</sup> dose (avoid weekend sampling if possible)
  - Sample is sent to Bristol lab and may take 3-5 working days to be reported
    - After level is taken, give subsequent doses while awaiting reported result
  - After each dose change - repeat pre dose level after further 5 -7 days treatment
  - Patients with therapeutic levels and stable renal function – monitor levels weekly

### STEP 4: INTERPRETATION of TEICOPLANIN levels and dose adjustment

- Recommended range for predose levels
  - Endocarditis = 30-50mg/L
  - All other indications = 20-50mg/L
- If out with range adjust dose as per table below:

Pre Dose Level	Action
<20mg/L	Increase maintenance dose by up to 50% (round to nearest 100mg) and/or discuss with pharmacist
20-50mg/L	Endocarditis: increase dose by 25% (round to nearest 100mg) and or discuss with pharmacist if level <30mg/L Other infections: continue on current dose
>50mg/L	Discuss with pharmacist – dose reduction (or increase dosage interval) especially if thrombocytopenia, decreasing renal function or other adverse effects

- If significant deterioration or improvement in renal function discuss further dosing and monitoring with pharmacist

Developed by: Antimicrobial/OHPAT Teams

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