

Teicoplanin Intravenous Injection THREE TIMES A WEEK

Approved within Kent and Medway as an option for use in situations where the usual Teicoplanin regimen is unsuitable e.g. OPAT or SDEC

Acknowledgement:

We gratefully acknowledge the Dartford & Gravesham NHS Trust for the production of the original version of this protocol.

Indications

- Skin and soft tissue infections
- Line infections
- Bone and joint infections

Only to be started after discussion with Consultant Microbiologist unless prescribed in line with a microbiology approved protocol e.g. SDEC pathway.

Exclusions - Patients with unstable clinical infection or uncontrolled microbial source and patients with severe kidney failure (CrCL < 20ml/min)

Loading Dose

To facilitate ONCE daily loading, the patient should receive THREE consecutive days of TEICOPLANIN IV (dosed 15 – 20mg/kg ONCE daily irrespective of CrCl). A fourth consecutive daily dose may be administered in severe infections or to facilitate THREE weekly dosing dates.

Note: if a patient is established on ONCE daily TEICOPLANIN as an in-patient (>3 days received) **NO** loading dose required

Maintenance Dose

Following appropriate loading, the patient should be started on a maintenance dose (dosed as per CrCl and body weight – see table below). Doses should be administered Mon/Wed/Fri or Tue/Thu/Sat at the patient's convenience.

Teicoplanin dosing is based on kidney function (CrCl as determined by Cockcroft–Gault equation) and total body weight.							
Extremes of body weight should be discussed with antimicrobial pharmacist							
Indication		Dosing as per weight					
High-dose Treatment Dose three times a week <u>(10-25mg/kg)</u>	CrCl (ml/min)	<45kg	45-60kg	61-80kg	81-100kg	101-120kg	>120kg
	>90	1000mg	1200mg	1400mg	1800mg	2000mg	Not suitable for this regime. For ONCE DAILY regimen or alternative d/w microbiologist.
	60-90	800mg	1000mg	1200mg	1400mg	1800mg	
	40-60	600mg	800mg	1000mg	1000mg	1400mg	
	20-40	400mg	600mg	800mg	800mg	1000mg	
Discuss with pharmacy if assistance required							

Monitoring

Weekly blood monitoring: FBC, U&Es, LFTs, CRP - changes in baseline CrCl may warrant dose adjustment / repeat TEICOPLANIN assays measurements.

Approved By: IMOC
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Renew Date: July 2025

Teicoplanin levels: Determination of serum teicoplanin concentrations may aid in optimisation of therapy, especially when treating a deep seated or complex infection or in a patient who is not responding to treatment. All patients on High-dose Treatment Dose for deep-seated infection TEICOPLANIN therapy for > 7 days require serum teicoplanin levels.

A trough (pre-dose) level is required after 5-7 days therapy and then weekly thereafter until TWO consecutive levels within in range.

Patients with stable TEICOPLANIN levels should be monitored monthly thereafter. Where possible please take pre-dose level after the longest interval (i.e. Monday / Tuesday following two day gap).

Please document the below on the EDN/transfer of care documentation:

- Target range for the Teicoplanin levels
- Need for weekly FBCs, U&E's, LFTs, CRP and Teicoplanin levels

Please note Teicoplanin samples are sent to a laboratory in Bristol for analysis and can take up to 3 to 5 days to be reported. Continue with the same regimen unless suspected deterioration such as decreased urine output, puffiness, new tinnitus/hearing disturbances, balance problems. Seek advice for dose recommendations if this occurs.

Interpretation of results and dose adjustment

Returned level result:	Action:
<20mg/L	Discuss with antimicrobial pharmacist/microbiologist
20 – 50mg/L	Continue on current dose
50-60mg/L	Discuss result with antimicrobial pharmacist / microbiology. A dose reduction is advisable particularly if N/V, thrombocytopenia, worsening CrCl present.
>60mg/L	Discuss result with the antimicrobial pharmacist/microbiologist for advice on dose reduction

Document History

2	May 2023	Added statement that levels are assayed in Bristol and time frame for return of results following discussion at May IMOS.
1	April 2023	First draft, adapted from existing Dartford & Gravesham NHS Trust guidance