

## Teicoplanin - Therapeutic Drug Monitoring (TDM) Guidance

On the microbiology request card for serum levels, please supply details of the antibiotic level required, the time and date of the sample and the time since the last dose was administered. For further details and information on the sample required please visit the [Laboratories departmental page for Individual tests and select the appropriate drug from the A-Z list.](#)

Results can be obtained electronically via TrakCare and SCI-store or from Medical Microbiology (Ext 52451). Help in interpretation of the results and dose adjustments for individual patients can be obtained from your ward Clinical Pharmacist, Specialist Antibiotic Pharmacists (Ext 51048), Medicines Information Service (Ext 52316), or out of hours the On-call Pharmacist via switchboard or from the duty medical microbiologist.

In patients with impaired renal function or antibiotic levels outwith the therapeutic range, please contact your clinical pharmacist or medical microbiologist for advice on dosage and the need for further assays.

Drug	Optimum sampling time(s)	Target Range/Points to note
<b>Teicoplanin</b>  <b>Daily Dosing Regimen</b>	Pre-dose (trough) level only required.  Take teicoplanin trough plasma level directly before 6th dose is given.	<p><i>Skin and soft tissue infections:</i> pre-dose (trough) 15-30mg/L, but less than 60mg/L.</p> <p><i>Bone &amp; joint infections:</i> pre-dose (trough) 20-40mg/L, but less than 60mg/L.</p> <p><i>Infective endocarditis:</i> pre-dose (trough) 30-40mg/L, but less than 60mg/L.</p> <p>If indicated monitor weekly unless dosage or renal function changes.</p> <p>Renal function, hepatic function and full blood count should be monitored weekly.</p> <p><i>(NB: Levels not assayed in ARI – liaise with Medical Microbiology).</i></p>

Drug	Optimum sampling time(s)	Target Range/Points to note
<p><b>Teicoplanin Three Times Weekly</b></p> <p><a href="#">(see OPAT protocol)</a></p> <p><i>Only for OPAT (Outpatient Parenteral Antimicrobial Therapy) use – contact <a href="#">OPAT team</a> or pharmacy for advice.</i></p>	<p>Pre-dose (trough) before the 6<sup>th</sup> dose.</p> <p>Ideally take 72 hour trough on a Monday morning.</p>	<p>Pre-dose (trough)</p> <p>20-30mg/L.</p> <p>Further monitoring weekly unless dosage or renal function changes.</p> <p>See OPAT <a href="#">protocol</a> for advice on interpretation of levels and dosing adjustments.</p> <p>Renal function, hepatic function and full blood count should be monitored weekly.</p> <p><i>(NB: Levels not assayed in ARI – liaise with Medical Microbiology).</i></p>

## References

1. Individual drug monograph - <https://bnf.nice.org.uk/drug/teicoplanin.html#>
2. Summary of Product Characteristics (Targocid 200mg powder for solution for injection/infusion or oral solution, Sanofi- accessed 3/6/20) – [www.medicines.org.uk](http://www.medicines.org.uk)
3. Development of teicoplanin dosage guidelines for patients treated within an outpatient parenteral antibiotic therapy (OPAT) programme Elspeth Lamont, R. Andrew Seaton, Merran Macpherson, Lindsay Semple, Emma Bell and Alison H. Thomson. Journal of Antimicrobial Chemotherapy (2009) 64, 181–187 - <https://academic.oup.com/jac/article/64/1/181/756327>
4. North Bristol NHS Trust Antimicrobial Reference Laboratory – Guideline Ranges 2020 - <https://www.nbt.nhs.uk/sites/default/files/Antibiotic%20Guideline%20Ranges%202020.pdf>
5. North Bristol NHS Trust Antimicrobial Reference Laboratory – Analytes <https://www.nbt.nhs.uk/severn-pathology/requesting/test-information/teicoplanin>
6. NHS Grampian OPAT monographs: Teicoplanin daily and Teicoplanin three times weekly <http://nhsgintranet.grampian.scot.nhs.uk/depts/OPAT/Pages/DrugInformation.aspx>