

NHS Lothian OPAT Teicoplanin Adult Dosing Procedure



Patient name:
Date of birth:
CHI:

Document your calculations in TRAK (\teicopat).
Clinical pharmacist check is recommended.

This guidance is for OPAT and ward staff initiating three times a week dosing of teicoplanin. It is only approved for ward-use in patients who have been accepted by the OPAT service. Other regimens/target trough levels are used on other services (oncology, paediatrics, Hospital@Home).

STEPS	COMMENT	Calculated Value																		
1: Calculate Creatinine Clearance	<ul style="list-style-type: none"> Measure patient's height, weight & serum creatinine Use the intranet calculator available here. Other online calculators could be used as long as they use the Cockcroft-Gault formula. As a last resort, calculate manually (See Appendix 2). 	ml/min																		
2: Decide on using Ideal or Actual Body Weight	<p>Review ideal body weight table here.</p> <ul style="list-style-type: none"> If patient's ACTUAL body weight is lower than the IDEAL body weight use their ACTUAL body weight. If patient's ACTUAL body weight is higher than the IDEAL body weight use the IDEAL body weight. 	kg Actual/IBW																		
3: Prescribe TECIOPLANIN LOADING doses	<p>Review Table 1 for the days the loading doses should be given. Prescribe daily for first 3 days:</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th rowspan="2"></th> <th rowspan="2">Creatinine Clearance (ml/min)</th> <th colspan="3">Ideal/Actual body weight</th> </tr> <tr> <th>40-59 kg</th> <th>60-79 kg</th> <th>>80 kg</th> </tr> </thead> <tbody> <tr> <td rowspan="2" style="text-align: center;">Teicoplanin loading doses</td> <td style="text-align: center;"><60</td> <td style="text-align: center;">1000mg</td> <td style="text-align: center;">1200mg</td> <td style="text-align: center;">1400mg</td> </tr> <tr> <td style="text-align: center;">≥60</td> <td style="text-align: center;">1200mg</td> <td style="text-align: center;">1400mg</td> <td style="text-align: center;">1600mg</td> </tr> </tbody> </table>		Creatinine Clearance (ml/min)	Ideal/Actual body weight			40-59 kg	60-79 kg	>80 kg	Teicoplanin loading doses	<60	1000mg	1200mg	1400mg	≥60	1200mg	1400mg	1600mg	mg	
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Teicoplanin loading doses	<60	1000mg	1200mg	1400mg																
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4: Prescribe TECIOPLANIN MAINTENANCE Doses	<p>Prescribe maintenance dose based on Creatinine Clearance from table below on Monday, Wednesday & Friday:</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Creatinine Clearance (ml/min)</th> <th style="text-align: center;"><25</th> <th style="text-align: center;">25-40</th> <th style="text-align: center;">41-54</th> <th style="text-align: center;">55-74</th> <th style="text-align: center;">75-89</th> <th style="text-align: center;">90-104</th> <th style="text-align: center;">105-120</th> <th style="text-align: center;">>120</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Teicoplanin dose</td> <td style="text-align: center;">400 mg</td> <td style="text-align: center;">600 mg</td> <td style="text-align: center;">800 mg</td> <td style="text-align: center;">1000 mg</td> <td style="text-align: center;">1200 mg</td> <td style="text-align: center;">1400 mg</td> <td style="text-align: center;">1600 mg</td> <td style="text-align: center;">1800 mg</td> </tr> </tbody> </table> <p>Review Table 1 for the day the first maintenance dose should start.</p>	Creatinine Clearance (ml/min)	<25	25-40	41-54	55-74	75-89	90-104	105-120	>120	Teicoplanin dose	400 mg	600 mg	800 mg	1000 mg	1200 mg	1400 mg	1600 mg	1800 mg	mg
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Teicoplanin dose	400 mg	600 mg	800 mg	1000 mg	1200 mg	1400 mg	1600 mg	1800 mg												
5: Monitoring	<ul style="list-style-type: none"> Take U+E and trough level with <u>first</u> maintenance dose. Then every Monday take U+E and Teicoplanin trough level Target trough level is 20-30 mg/ml. If renal function changes significantly during treatment, recalculate creatinine clearance and adjust maintenance doses accordingly. 																			

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6: Dose Adjustment	Adjusting trough levels: <ul style="list-style-type: none"> • If trough level is 15-20, increase maintenance dose by 200mg • If trough level is 31-35, decrease maintenance dose by 200mg Consult with pharmacist if: <ul style="list-style-type: none"> • Creatinine changes by +/- 10% • Trough level <15 or >35 for all patients • Patients on 800mg or less with a trough level <20 	
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Contraindication: Hypersensitivity to teicoplanin or its excipients, including anaphylaxis.

Caution: Non-anaphylactic allergy to Vancomycin. A prior history of "red man syndrome" with vancomycin is **NOT** a contraindication to the use of teicoplanin

Table 1: Which day to start loading and maintenance doses.

Maintenance start date of Monday is preferred where possible.

Loading doses to be given on	First trough level & maintenance doses start day
Wed/Thurs/Fri	Monday
Fri/Sat/Sun	Wednesday
Sun/Mon/Tues	Friday

Appendix 1: Recommended text for documenting calculations on Trak

TEICOPLANIN DOSING CALCULATIONS

Height (cm):
 Weight (kg):
 Creatinine (mmol/L):
 IDEAL or ACTUAL (specify) body weight used in calculations (kg):

Loading doses (give once daily for 3 days):
 Loading days:

Maintenance dosage:
 Day of first maintenance dose:

Appendix 2: Cockcroft-Gault Calculation

$$\text{CrCl (ml/min)} = [(140 - \text{Age}) \times \text{weight}^* \times 1.23(\text{male}) \text{ or } 1.04(\text{female})] / \text{Serum creatinine}^{**}$$

*Use actual or MAXIMUM body weight, whichever is the lower

** If Cr <60 μmol/L, use a value of 60.

Note: age in years, weight in kg, creatinine in micromoles/L.

References

Lamont et al. Journal of Antimicrobial Chemotherapy 2009; 64 : 181-187
[Summary of Product Characteristics, Targocid 400mg](#)