

Vancomycin Online AUC Calculator User Guide

- To access the website, follow the link (www.vancopk.com)
- **Select the Advanced Vancomycin Calculator**

Advanced Vancomycin Calculator
Basic Vancomycin Calculator
Aminoglycosid

Vancomycin Calculator

Patient Data

Age: years

SCr: mg/dL

Height: inch

Body weight: kg

Gender: Male Female

Settings

Infusion rate: mg/hr

Goal trough range: mcg/mL

S. aureus MIC:

Amputations:

IDMS SCr: On Off Slope: Y-Intercept:

- **Make sure to choose (Steady-state trough) option**

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IDMS SCr: On Off Slope: Y-Intercept:

Initial Dosing
Peak
Steady-State Level
Two Levels After First Dose
Steady-State Peak and Trough
Intermittent Hemodialysis
Supplemental Calculator

Patient Data

Use estimated Ke and Vd:

Dose: mg

Dosing Interval: hrs

Measured Level: mcg/mL

Time at start of dose: :

Time of level (same day as dose): :

Time from start of dose to level: hrs

PK Parameters

V: L

AUC_{ss} 0-24/MIC:

Extrapolated trough: mcg/mL

K: hr⁻¹

Half-life: hrs

Estimated/Alternative Dose

Dose: mg

Interval: hrs

Peak_{ss}: mcg/mL

Trough_{ss}: mcg/mL

AUC_{ss} 0-24/MIC:

AUC_{ss} min/MIC:

- After filling the patient data and calculating AUC (as shown in picture above), use simple proportional method to make dose adjustments (i.e. if calculated AUC was 900 with 3g/day, a dose of 1.5g/d approximately correlates to an AUC of 450).
- Do not use the calculator for:
 - o Initial dosing recommendation
 - o Alternative dose recommendation following AUC calculations


Advanced Vancomycin Calculator

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Patient Data		Settings	
Age	25 years	Infusion rate	750 mg/hr
SCr	0.79 mg/dL	Goal trough range	15-20 mcg/mL
Height	67 inch	S. aureus MIC	Empiric or 1 mg/L
Body weight	70 kg	Amputations	None
Gender	<input type="radio"/> Male <input type="radio"/> Female	IDMS SCr	<input type="radio"/> On <input checked="" type="radio"/> Off
		Slope:	1.065
		Y-Intercept	0.067
		Save Settings	Reset Settings

Initial Dosing Peak  Steady-State Level Two Levels After First Dose Steady-State Peak and Trough Intermittent Hemodialysis Supplemental Calculator

Patient Data		PK Parameters		Estimated/Alternative Dose	
Use estimated Ke and Vd		V	43 L	Dose	mg
Dose	1500 mg	AUC _{ss} 0-24/MIC	911	Interval	8 hrs
Dosing Interval	8 hrs	Extrapolated trough	26.0 mcg/mL	Peak _{ss}	mcg/mL
Measured Level	26 mcg/mL	K	0.1152 hr ⁻¹	Trough	16.7 mcg/mL
Time at start of dose	02:00	Half-life	6.0 hrs	AUC _{ss} 0-24/MIC	607
Time of level (same day as dose)	10:00			AUC _{ss} min/MIC	
Time from start of dose to level	8.0 hrs				

- Limitations of the calculator:
 - o It does not accept SCr values less than 0.5 mg/dL
 - o It does not accept trough values less than 5 mcg/mL
 - o It provides estimated/alternative doses that are not reasonable
- For questions/concerns, do not hesitate to contact the Antimicrobial Stewardship pager at 55955