

SBUH Vancomycin Dosing Guidelines for Adult Patients

Vancomycin Initial Dosing for Adult Patients Age Less than 65 y.o. or Weight ≥60 kg

Adult Vancomycin Initial Dosing for Patients Age Less than 65 y.o. or Weight ≥60 kg (No prior dosing or measured vancomycin concentrations)	
Therapeutic Window: 24-h AUC between 400 and 600 mg*h/L	
Stable Creatinine Clearance calculated by Cockcroft-Gault formula (mL/min) $\text{Cr Cl (mL/min)} = [(140 - \text{age in years}) \times \text{Ideal Body Weight}] / (72 \times \text{Cr in mg/dL})$ For female - Multiply above equation by 0.85 Ideal Body Weight (kg) for male = $50 + [0.91 \times (\text{Height in centimeters} - 152.4)]$ Ideal Body Weight (kg) for female = $45.5 + [0.91 \times (\text{Height in centimeters} - 152.4)]$	
First dose	
Weight	Dose
60 to 69 Kg	1250 mg
70 to 79 Kg	1500 mg
80 to 90 Kg	1750 mg
Greater than 90 kg	2000 mg
Maintenance Dose	
Creatinine Clearance	Dose
Greater than 120 mL/min	1250 mg q8h
90 to 120 mL/min	1500 mg q12h
70 to 89 mL/min	1250 mg q12h
50 to 69 mL/min	1000 mg q12h
40 to 49 mL/min	750 mg q12h
30 to 39 mL/min	1000 mg q24h
21 to 29 mL/min	500 mg q24h
Less than or equal to 20 mL/min (not on renal replacement therapy)	Maintenance dose subsequent to the first dose is based on PK analysis. Obtain 2 vancomycin random levels at 4 and 24 hours after the first dose according to total weight. (Contact Antimicrobial Stewardship via Spok for monitoring)

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Editors:

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SBUH Vancomycin Dosing Guidelines for Adult Patients

Vancomycin Initial Dosing for Adult Patients Age ≥65 y.o. or Weight less than 60 kg

Adult Vancomycin Initial Dosing for Patients Age ≥65 y.o. or Weight Less than 60 kg (No prior dosing or measured vancomycin concentrations)	
Therapeutic Window: 24-h AUC between 400 and 600 mg*h/L	
Stable Creatinine Clearance calculated by Cockcroft-Gault formula (mL/min) $\text{Cr Cl (mL/min)} = [(140 - \text{age in years}) \times \text{Ideal Body Weight}] / (72 \times \text{Cr in mg/dL})$ For female - Multiply above equation by 0.85 Ideal Body Weight (kg) for male = $50 + [0.91 \times (\text{Height in centimeters} - 152.4)]$ Ideal Body Weight (kg) for female = $45.5 + [0.91 \times (\text{Height in centimeters} - 152.4)]$	
First dose	
Weight	Dose
Less than 60 kg	1000 mg
60 to 69 Kg	1250 mg
70 to 79 Kg	1500 mg
80 to 90 Kg	1750 mg
Greater than 90 kg	2000 mg
Maintenance Dose	
Initial Dose for age ≥65 y.o. OR weight <60 kg is capped at 1000mg q12h	
Creatinine Clearance	Dose
Greater than 50 mL/min	1000 mg q12h
40 to 49 mL/min	750 mg q12h
30 to 39 mL/min	1000 mg q24h
21 to 29 mL/min	500 mg q24h
Less than or equal to 20 mL/min (not on renal replacement therapy)	Maintenance dose subsequent to the first dose is based on PK analysis. Obtain 2 vancomycin random levels at 4 and 24 hours after the first dose according to total weight. (Contact Antimicrobial Stewardship via Spok for monitoring)
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SBUH Vancomycin Dosing Guidelines for Adult Patients - CRRT

Adult Vancomycin Initial Dosing - Continuous Renal Replacement Therapy (CVVHD/F) (No prior dosing or measured vancomycin concentrations)	
Therapeutic Window: 24-h AUC between 400 and 600 mg*h/L	
Monitoring: Obtaining vancomycin trough concentration prior to the 3 rd dose and contact Antimicrobial Stewardship via Spok Web to provide assistance in monitoring	
First dose	
Weight	Dose
Less than 60 Kg	1000 mg
60 to 69 Kg	1250 mg
70 to 79 Kg	1500 mg
80 to 90 Kg	1750 mg
Greater than 90 kg	2000 mg
Maintenance Dose	
Weight	Dose
Less than 60 Kg	750 mg q24h
60 to 79 Kg	1000 mg q24h
80 to 90	1250 mg q24h
Greater than 90 kg	1500 mg q24h
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**SBUH Vancomycin Dosing Guidelines for Adult Patients
Intermittent Hemodialysis**

Adult Vancomycin Initial Dosing - ESRD on Intermittent HD			
Therapeutic Window: Maintain 20 – 25 mcg/mL in between hemodialysis sessions in patient with minimal residual vancomycin clearance when not receiving hemodialysis			
First Dose	Subsequent Dosing: Give Vancomycin after each hemodialysis. Monitoring: Obtain Vancomycin level prior to hemodialysis session		
20 mg/kg based on actual body weight for the first dose (Round dose to the nearest 250 mg increment; Max 2g per dose) First dose can be given before HD.	Pre-dialysis Level (mcg/ml)	Less than 80 kg	Greater than or equal to 80 Kg
	Less than 10	1000 mg	1250 mg
	10 to 20	750 mg	1000 mg
	21 to 25	500 mg	750 mg
	Greater than 25	<ul style="list-style-type: none">• Hold vancomycin• Obtain a vancomycin random level in 24 hours• Contact ASP* via Spok Web for monitoring	<ul style="list-style-type: none">• Hold vancomycin• Obtain a vancomycin random level in 24 hours• Contact ASP* via Spok Web for monitoring
<ul style="list-style-type: none">• If patient receives the first dose of vancomycin before a HD session and the next planned HD is greater than 36 hours, give a supplemental dose after HD: 250mg after HD for <80 kg 500mg after HD for ≥80 kg	<ul style="list-style-type: none">• For 3 times a week HD- when the same vancomycin dose is used for 2 consecutive times, the same vancomycin dose can be given after each hemodialysis (MWF or TueThursSat)• After establishing a stable maintenance post-HD dose, monitor pre-HD level every 2 weeks. The target of the pre-HD level for re-dosing of vancomycin is less than 25 mcg/mL.		
Updated 06.27.2019			

*ASP - Antimicrobial Stewardship