**SBUH Vancomycin Dosing Guidelines for Adult Patients**

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

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| **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)****Cr Cl (mL/min) =[ (140 – age in years) x Ideal Body Weight ]/(72 x Cr in mg/dL)****For female - Multiply above equation by 0.85****Ideal Body Weight (kg) for male = 50 + [0.91 x (Height in centimeters – 152.4)]****Ideal Body Weight (kg) for female = 45.5 + [0.91 x (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  | 750 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) |
| Updated 07.03.2020 |

**SBUH Vancomycin Dosing Guidelines for Adult Patients**

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

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| **Adult Vancomycin Initial Dosing for Patients Age ≥65 y.o.**  **(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)****Cr Cl (mL/min) =[ (140 – age in years) x Ideal Body Weight ]/(72 x Cr in mg/dL)****For female - Multiply above equation by 0.85****Ideal Body Weight (kg) for male = 50 + [0.91 x (Height in centimeters – 152.4)]****Ideal Body Weight (kg) for female = 45.5 + [0.91 x (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** Maintenance Dose for age **≥65 y.o.** OR weight less than **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) |
| Updated 07.03.2020 |

**SBUH Vancomycin Dosing Guidelines for Adult Patients - CRRT**

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| **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 3rd maintenance 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 | 500 mg q12h |
| 60 to 69 Kg | 500 mg q12h |
| 70 to 79 Kg | 750 mg q12h |
| 80 to 90 Kg | 750 mg q12h |
| Greater than 90 kg | 1000 mg q12h |
| Updated 07.03.2020 |

**SBUH Vancomycin Dosing Guidelines for Adult Patients**

**Intermittent Hemodialysis**

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| **Adult Vancomycin Initial Dosing - ESRD on Intermittent HD ( 3 time a week)****Contact Antimicrobial Stewardship via Spok Web to provide assistance in monitoring** |
| **First Dose** | **Maintenance Dose with each hemodialysis session** **MWF or TTS** |
| 20 – 25 mg/kg based on **actual body weight for the first dose** (max 2 grams)First dose can be given before HD session | **If administered after HD is completed** | **If administered during the last hour of hemodialysis** |
| 7.5 – 10 mg/kg given after HD is completed | 10 -15 mg/kg given during the last hour of hemodialysis |
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| **Monitoring** | Obtain Vancomycin level prior to the third hemodialysis session: adjust vancomycin dose to **maintain vancomycin pre-hemodialysis serum concentration between 15 to 20 mcg/mL** |
| Updated 07.01.2020 |