

Appendix I – Study Forms

Non-obese Vancomycin Nomogram Monitoring Form

Place Patient Label:

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| Age: | |
| Height: | |
| Sex: | |
| Patient Study Number: *Find on randomization sheet | |

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| | Column 1 | Column 2 |
|----------|--------------------------------------------------------------------------------|----------|
| 1 | Enter Indication → | |
| 2 | Enter target trough range (10-15 OR 15-20) → | |
| 3 | Enter ABW (kg) from randomization sheet ***Use for dosing calculations*** → | |
| 4 | Enter IBW (kg) from randomization sheet → | |

| Target Trough 10-15 mg/L | | | | | | | | | | | | | | | | | | | |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------|------|---|--------|----|-------|----|-------|----|-------|----|-------|----|-------|----|------|-----|
| 5 | Loading dose (check one): Already given = record dose in Box A below OR Calculate loading dose and record in Box A below $LD = 22mg/kg \times (ABW)$ | | | | | | | | | | | | | | | | | | |
| 6 | Maintenance dose: Calculate and enter in Box B $MD = 13mg/kg \times (ABW)$ | | | | | | | | | | | | | | | | | | |
| 7 | Enter initial serum creatinine (mg/dL) in Box C | | | | | | | | | | | | | | | | | | |
| 8 | Calculate creatinine clearance (mL/min) and enter in Box D $CrCl = \frac{(140 - age)(IBW) \times (0.85 \text{ in females})}{72 \times Scr}$ * use ABW if the patient weighs less than calculated IBW | | | | | | | | | | | | | | | | | | |
| 9 | Select appropriate dosing interval based on calculated creatinine clearance and enter in Box E <table border="1" style="width: 100%;"> <thead> <tr> <th>CrCl (mL/min)</th> <th>Dosing Interval (hrs)</th> </tr> </thead> <tbody> <tr><td>>100</td><td>8</td></tr> <tr><td>71-100</td><td>12</td></tr> <tr><td>46-70</td><td>18</td></tr> <tr><td>31-45</td><td>24</td></tr> <tr><td>21-30</td><td>36</td></tr> <tr><td>15-20</td><td>48</td></tr> <tr><td>11-14</td><td>72</td></tr> <tr><td>! 10</td><td>prn</td></tr> </tbody> </table> | CrCl (mL/min) | Dosing Interval (hrs) | >100 | 8 | 71-100 | 12 | 46-70 | 18 | 31-45 | 24 | 21-30 | 36 | 15-20 | 48 | 11-14 | 72 | ! 10 | prn |
| CrCl (mL/min) | Dosing Interval (hrs) | | | | | | | | | | | | | | | | | | |
| >100 | 8 | | | | | | | | | | | | | | | | | | |
| 71-100 | 12 | | | | | | | | | | | | | | | | | | |
| 46-70 | 18 | | | | | | | | | | | | | | | | | | |
| 31-45 | 24 | | | | | | | | | | | | | | | | | | |
| 21-30 | 36 | | | | | | | | | | | | | | | | | | |
| 15-20 | 48 | | | | | | | | | | | | | | | | | | |
| 11-14 | 72 | | | | | | | | | | | | | | | | | | |
| ! 10 | prn | | | | | | | | | | | | | | | | | | |

| Target Trough 15-20 mg/L | | | | | | | | | | | | | | | | | |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------|-----|---|-------|----|-------|----|-------|----|-------|----|-------|----|------|-----|
| 5 | Loading dose (check one): Already given = record dose in Box A below OR Calculate loading dose and record in Box A below $LD = 24mg/kg \times (ABW)$ | | | | | | | | | | | | | | | | |
| 6 | Maintenance dose: Calculate and enter in Box B $MD = 13mg/kg \times (ABW)$ | | | | | | | | | | | | | | | | |
| 7 | Enter initial serum creatinine (mg/dL) in Box C | | | | | | | | | | | | | | | | |
| 8 | Calculate creatinine clearance (mL/min) and enter in Box D $CrCl = \frac{(140 - age)(IBW) \times (0.85 \text{ in females})}{72 \times Scr}$ * use ABW if the patient weighs less than calculated IBW | | | | | | | | | | | | | | | | |
| 9 | Select appropriate dosing interval based on calculated creatinine clearance and enter in Box E <table border="1" style="width: 100%;"> <thead> <tr> <th>CrCl (mL/min)</th> <th>Dosing Interval (hrs)</th> </tr> </thead> <tbody> <tr><td>>80</td><td>8</td></tr> <tr><td>56-80</td><td>12</td></tr> <tr><td>36-55</td><td>18</td></tr> <tr><td>26-35</td><td>24</td></tr> <tr><td>15-25</td><td>36</td></tr> <tr><td>11-14</td><td>48</td></tr> <tr><td>! 10</td><td>prn</td></tr> </tbody> </table> | CrCl (mL/min) | Dosing Interval (hrs) | >80 | 8 | 56-80 | 12 | 36-55 | 18 | 26-35 | 24 | 15-25 | 36 | 11-14 | 48 | ! 10 | prn |
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| >80 | 8 | | | | | | | | | | | | | | | | |
| 56-80 | 12 | | | | | | | | | | | | | | | | |
| 36-55 | 18 | | | | | | | | | | | | | | | | |
| 26-35 | 24 | | | | | | | | | | | | | | | | |
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| ! 10 | prn | | | | | | | | | | | | | | | | |

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|----------|-----------------------------|--|
| A | Loading Dose | |
| B | Maintenance Dose | |
| C | Initial Scr | |
| D | Creatinine Clearance | |
| E | Dosing Interval | |

Obese Vancomycin Nomogram Monitoring Form

Place Patient Label:

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| Age: | |
| Height: | |
| Sex: | |
| Patient Study Number: *Find on randomization sheet | |

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| | Column 1 | Column 2 |
|---|------------------------------------------------------------------------|----------|
| 1 | Enter Indication → | |
| 2 | Enter target trough range (10-15 OR 15-20) → | |
| 3 | Enter DW (kg) from randomization sheet ***Use for calculations*** → | |

| Target Trough 10-15 mg/L | | | | | | | | | | | | | | | | | | | |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------|------|---|--------|----|-------|----|-------|----|-------|----|-------|----|-------|----|------|-----|
| 4 | Loading dose (check one): Already given = record dose in Box A below OR Calculate loading dose and record in Box A below $LD = 22\text{mg/kg} \times (DW)$ | | | | | | | | | | | | | | | | | | |
| 5 | Maintenance dose: Calculate and enter in Box B $MD = 13\text{mg/kg} \times (DW)$ | | | | | | | | | | | | | | | | | | |
| 6 | Enter initial serum creatinine (mg/dL) in Box C | | | | | | | | | | | | | | | | | | |
| 7 | Calculate creatinine clearance (mL/min) and enter in Box D $CrCl = \frac{(140 - \text{age})(DW)*}{72 \times \text{Scr}}$ (0.85 in females) | | | | | | | | | | | | | | | | | | |
| 8 | Select appropriate dosing interval based on calculated creatinine clearance and enter in Box E <table border="1" style="width: 100%;"> <thead> <tr> <th>CrCl (mL/min)</th> <th>Dosing Interval (hrs)</th> </tr> </thead> <tbody> <tr><td>>100</td><td>8</td></tr> <tr><td>71-100</td><td>12</td></tr> <tr><td>46-70</td><td>18</td></tr> <tr><td>31-45</td><td>24</td></tr> <tr><td>21-30</td><td>36</td></tr> <tr><td>15-20</td><td>48</td></tr> <tr><td>11-14</td><td>72</td></tr> <tr><td>! 10</td><td>prn</td></tr> </tbody> </table> | CrCl (mL/min) | Dosing Interval (hrs) | >100 | 8 | 71-100 | 12 | 46-70 | 18 | 31-45 | 24 | 21-30 | 36 | 15-20 | 48 | 11-14 | 72 | ! 10 | prn |
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| ! 10 | prn | | | | | | | | | | | | | | | | | | |

| Target Trough 15-20 mg/L | | | | | | | | | | | | | | | | | |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------|-----|---|-------|----|-------|----|-------|----|-------|----|-------|----|------|-----|
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|---|----------------------|--|
| A | Loading Dose | |
| B | Maintenance Dose | |
| C | Initial Scr | |
| D | Creatinine Clearance | |
| E | Dosing Interval | |

Traditional Dosing Vancomycin Monitoring Form

Place Patient Label:

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|-------------------------------------------------------|--|
| Age: | |
| Height: | |
| Sex: | |
| Patient Study Number: *Find on randomization sheet | |

Please check one: Kinetic Dosing Global Rph Other
 (Fill out form below) (Print and attach Global Rph Form)

| | Column 1 | Column 2 |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 1 | Enter ABW (kg) from randomization sheet → | |
| 2 | Enter IBW (kg) from randomization sheet → | |
| 3 | Enter DW (kg) if calculated on randomization sheet → | |
| 3 | Enter Indication → | |
| 4 | Enter target trough range (10-15 OR 15-20) → | |
| 5 | Enter initial Scr (mg/dL) in column 2 → | |
| 6 | Calculate creatinine clearance (mL/min) and enter in column 2 → $\text{CrCl} = \frac{(140 - \text{age})(\text{IBW}) * (0.85 \text{ in females})}{72 \times \text{Scr}}$ * use ABW if the patient weighs less than calculated IBW and DW if obese | |
| 7 | Calculate and enter k_e $k_e = 0.00083(\text{CrCl}) + 0.0044$ → | |
| 8 | Calculate and enter half life → $T_{1/2} = 0.693/k_e$ | |
| 9 | Calculate and enter Vd → $V_d = 0.7\text{L/kg} \times (\text{ABW})$ or (DW) if obese | |
| 10 | Loading dose (check one): Already given = record dose → OR Calculate loading dose and record → $\text{LD} = V_d \times \text{desired peak}$ | |
| 11 | Calculate Dosing Interval and record → $t = \frac{\ln\left(\frac{C_{pk}}{C_{tr}}\right)}{k}$ | |
| 12 | Calculate Maintenance dose (MD) and record → $\text{MD} = C_{\text{peak}} \times V_d \times (1 - e^{-kt})$ | |
| 13 | Calculate estimated peak and record $C_{pk} \text{ actual} = C_{pk} \text{ desired} \times \frac{\text{actual dose}}{\text{theoretical dose}}$ → | |
| 14 | Calculate estimated trough and record → $C_{\text{trough}} = C_{pk} \text{ actual} \times e^{-kt}$ | |