

**Additional file 1.** CKD-EPI eGFR predictive models for vancomycin trough with and without both BSA normalization for 1.73 m<sup>2</sup> and weight

Model variable <sup>a</sup>	Model fit (R <sup>2</sup> )
<b>Model 5: eGFR with CKD EPI<sub>creatinine</sub></b>	
Intercept	
Vancomycin total dose (g)	
Every 8 hour interval	
Every 12 hour interval	
Every 24 hour interval	
<b>and</b>	
eGFR in mL/min/1.73m <sup>2</sup>	0.330
eGFR in mL/min/1.73m <sup>2</sup> and weight	0.384
eGFR in mL/min <sup>b</sup>	0.394
eGFR in mL/min and weight <sup>b</sup>	0.396
<b>Model 6: eGFR with CKD EPI<sub>cystatin C</sub></b>	
Intercept	
Vancomycin total dose (g)	
Every 8 hour interval	
Every 12 hour interval	
Every 24 hour interval	
<b>and</b>	
eGFR in mL/min/1.73m <sup>2</sup>	0.525
eGFR in mL/min/1.73m <sup>2</sup> and weight	0.544
eGFR in mL/min <sup>b</sup>	0.538
eGFR in mL/min and weight <sup>b</sup>	0.538
<b>Model 7: eGFR with CKD EPI<sub>creatinine-cystatin C</sub></b>	
Intercept	
Vancomycin total dose (g)	
Every 8 hour interval	
Every 12 hour interval	
Every 24 hour interval	
<b>and</b>	
eGFR in mL/min/1.73m <sup>2</sup>	0.536
eGFR in mL/min/1.73m <sup>2</sup> and weight	0.574
eGFR in mL/min <sup>b</sup>	0.580
eGFR in mL/min and weight <sup>b</sup>	0.580

<sup>a</sup>. Vancomycin total dose represents the cumulative grams of vancomycin given prior to trough level being drawn. Per the study definition this represents three doses of vancomycin therapy.

<sup>b</sup>: To convert from mL/min/1.73<sup>2</sup> multiply by [(0.007184\*Height (cm)<sup>0.725</sup>\*Weight (kg)<sup>0.425</sup>)/1.73] [37]

