

Supplemental Material for

**Efficacy and Safety of Vancomycin Loading Doses in Critically Ill Patients with Methicillin-Resistant Staphylococcus aureus (MRSA) Infection**

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**eTable 1. White Blood Cell and Temperature Values Over Time**

**eFigure 1. Cumulative Incidence Function for Time to ICU Discharge from Vancomycin Initiation**

**eTable 2. Primary Outcome Assessed by Quartiles of Initial Dose (mg/kg)**

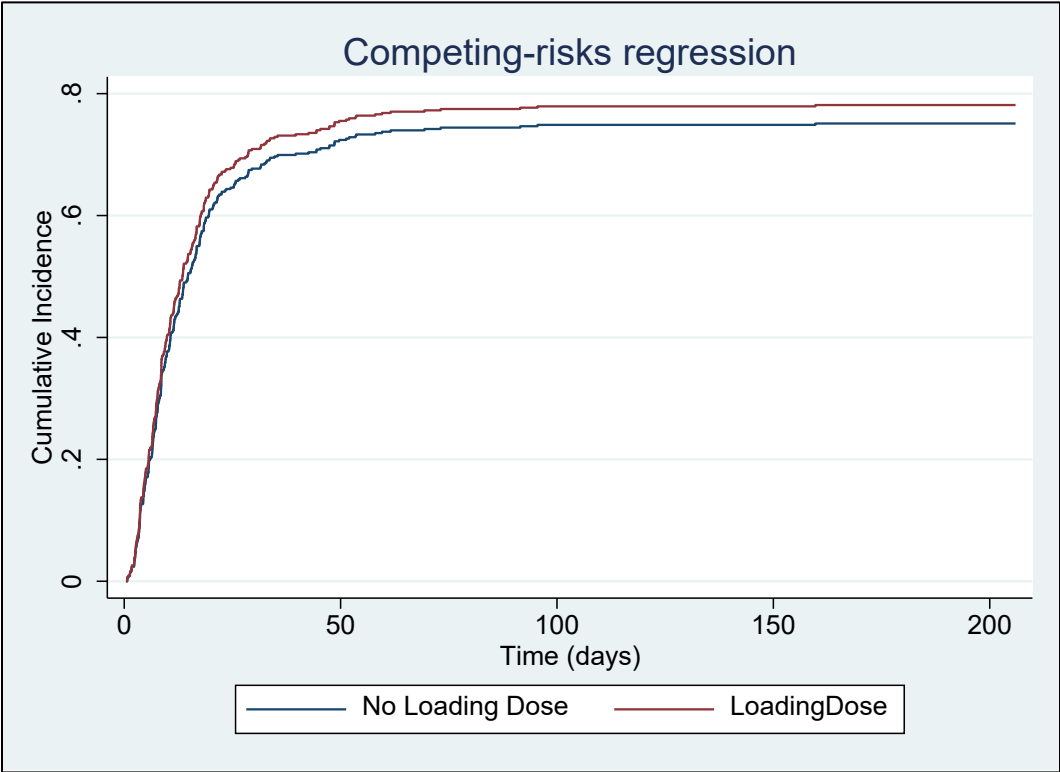
**eTable 3. Primary Outcome with Loading Dose Categorized as  $\geq 1,750$  mg**

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**eTable 1. White Blood Cell and Temperature Values Over Time**

<b>Value</b>	<b>Loading Dose (n=103)</b>	<b>No Loading Dose (n=346)</b>	<b>p-value</b>
<b>WBC (x10<sup>3</sup>/mm<sup>3</sup>)</b>			
Day 2	11.8 (8.9-17.3)	12.5 (8.9-18.7)	0.814
Day 3	10.8 (7.9-15.7)	11.9 (8.8-17.9)	0.254
Day 4	11.1 (7.9-15.8)	11.3 (7.7-16.5)	0.936
Day 5	10.7 (7.6-14)	11 (7.4-16.4)	0.446
<b>Temperature (°F)</b>			
Day 2	100.1 (99.0-101.1)	100.4 (99.1-101.4)	0.144
Day 3	100.0 (98.7-101.1)	99.8 (98.9-101.0)	0.680
Day 4	99.4 (98.6-100.4)	99.6 (98.8-100.7)	0.158
Day 5	99.3 (98.5-100.2)	99.5 (98.7-100.5)	0.155

**eFigure 1. Cumulative Incidence Function for Time to ICU Discharge from Vancomycin Initiation**



**eTable 2. Primary Outcome Assessed by Quartiles of Initial Dose (mg/kg)**

<b>Initial Dose Quartile (mg/kg actual body weight)<sup>a</sup></b>	<b>No Clinical Failure (n=120)</b>	<b>Clinical Failure (n=329)</b>
1 <sup>st</sup> quartile (7.9-15.1)	29 (25.7%)	84 (74.3%)
2 <sup>nd</sup> quartile (15.1-17.2)	34 (30.4%)	78 (69.6%)
3 <sup>rd</sup> quartile (17.2-19.3)	29 (25.9%)	83 (74.1%)
4 <sup>th</sup> quartile (19.3-27.6)	28 (25.0%)	84 (75.0%)

<sup>a</sup>p=0.794

**eTable 3. Primary Outcome with Loading Dose Categorized as  $\geq 1,750$  mg**

<b>Outcome</b>	<b>Loading Dose (n=100)</b>	<b>No Loading Dose (n=349)</b>	<b>p-value</b>
Clinical Failure (%)	76 (76.0%)	253 (72.5%)	0.485

**eTable 4. Multivariable Logistic Regression Model for Clinical Failure**

<b>Variable</b>	<b>Odds Ratio with 95% Confidence Interval</b>	<b>p-value</b>
First vancomycin dose (mg/kg)	0.98 (0.91-1.06)	0.617
Age (years)	1.01 (0.99-1.02)	0.418
Sex (male vs. female)	0.73 (0.44-1.21)	0.226
Infection Site (compared to blood alone)		
Respiratory	0.41 (0.21-0.81)	0.011
Concomitant blood and respiratory	0.47 (0.21-1.08)	0.074
End stage renal disease	0.17 (0.05-0.56)	0.003
Chronic kidney disease	1.06 (0.45-2.46)	0.899
ICU service (surgical vs. medical)	1.20 (0.70-2.07)	0.503
Day 1 white blood cell count ( $\times 10^3/\text{mm}^3$ )	1.08 (1.04-1.12)	<0.001
Day 1 blood urea nitrogen (mg/dl)	0.98 (0.97-0.99)	0.016
Day 1 serum creatinine (mg/dl)	1.35 (1.04-1.76)	0.023
Day 1 maximum temperature (°F)	0.97 (0.85-1.10)	0.597
Sequential Organ Failure Assessment score	1.23 (1.09-1.37)	<0.001
Requirement for vasopressor support (%)	0.61 (0.31-1.21)	0.156
Mechanical ventilation (%)	0.77 (0.36-1.65)	0.500