Supplemental Tables.

Table S1. Comparison of regression modeling for outcomes at 30 days after diagnosis of *Staphylococcus aureus* bacteremia, stratified by methicillin resistance, comparing those participants with MIC < 2 mcg/mL versus MIC = 2 mcg/mL.

Model	Methicillin-resistant *Staphylococcus aureus* (N=188)		Methicillin-susceptible *Staphylococcus aureus* (N=228)	
	Hazard Ratio (HR) (95% Confidence Interval)	P-value	Hazard Ratio (HR) (95% Confidence Interval)	P-value
Mortality, all-cause				
	(N=17)		(N=27)	
Cox regression, unadjusted	HR 0.69 (0.20, 2.39)	0.55	HR 1.78 (0.75, 4.21)	0.19
Cox regression, adjusted	*HR 0.71 (0.20, 2.62)	0.61	***HR 1.16 (0.48, 2.81)	0.75
Cox regression with propensity score and covariate adjustment	**HR 0.58 (0.16, 2.11)	0.41	**HR 1.14 (0.45, 2.88)	0.78
*adjustment covariates included: age, race, gender, hospital onset, Charlson comorbidity index, vancomycin use, advanced beta-lactam use (ceftaroline, cefepime or carbapenem class), immunosuppressive medication **adjustment covariates included: propensity score, advanced beta-lactam use (ceftaroline, cefepime or carbapenem class) ***adjustment covariates included: age, race, gender, hospital onset, Charlson comorbidity index, cefazolin use				
Readmission, all-cause				
	(N=19)		(N=28)	
Cox regression, unadjusted	HR 1.16 (0.42, 3.22)	0.78	HR 0.80 (0.28, 2.32)	0.69
Cox regression, adjusted	*HR 1.68 (0.56, 5.09)	0.36	[+]HR 0.77 (0.26, 2.24)	0.63

Cox regression with propensity score and covariate adjustment	**HR 1.36 (0.46, 4.02)	0.58	***HR 0.79 (0.27, 2.30)	0.66
*adjustment covariates included: age, race, gender, hospital onset, Charlson comorbidity index, immunosuppressive medication, vancomycin use **adjustment covariates included: propensity score, immunosuppressive medication ***adjustment covariates included: propensity score [+]adjustment covariates included: age, race, gender, hospital onset, Charlson comorbidity index				
Recurrence of bacteremia				
	(N=0)		(N=1)	
Cox regression, unadjusted	HR - (-, -)	-	HR - (-, -)	-
Cox regression, adjusted	HR - (-, -)	-	HR - (-, -)	-
Cox regression with propensity score and covariate adjustment	HR - (-, -)	-	HR - (-, -)	-
Too few outcome events for regression estimation.				
Composite				
	(N=36)		(N=55)	
Cox regression, unadjusted	HR 0.90 (0.41, 1.97)	0.79	HR 1.28 (0.66, 2.47)	0.47
Cox regression, adjusted	*HR 0.93 (0.41, 2.12)	0.86	[+]HR 1.13 (0.58, 2.23)	0.72
Cox regression with propensity score and covariate adjustment	**HR 0.94 (0.41, 2.15)	0.88	***HR 1.22 (0.62, 2.40)	0.56
*adjustment covariates included: age, race, gender, hospital onset, Charlson comorbidity index, immunosuppressive medication **adjustment covariates included: propensity score, recent longterm care facility stay				

***adjustment covariates included: propensity score, advanced beta-lactam use (ceftaroline, cefepime or carbapenem class)

[+]adjustment covariates included: age, race, gender, hospital onset, Charlson comorbidity index, recent longterm care facility stay

Table S2. Comparison of regression modeling for outcomes at 90 days after diagnosis of *Staphylococcus aureus* bacteremia, stratified by methicillin resistance, comparing those participants with MIC < 2 mcg/mL versus MIC = 2 mcg/mL.

Model	Methicillin-resistant *Staphylococcus aureus* (N=188)		Methicillin-susceptible *Staphylococcus aureus* (N=230)	
	Hazard Ratio (HR) (95% Confidence Interval)	P-value	Hazard Ratio (HR) (95% Confidence Interval)	P-value
Mortality, all-cause				
	(N=28)		(N=35)	
Cox regression, unadjusted	HR 0.69 (0.26, 1.82)	0.46	HR 2.06 (0.99, 4.30)	0.05
Cox regression, adjusted	*HR 0.47 (0.16, 1.34)	0.16	[+]HR 1.38 (0.64, 3.00)	0.42
Cox regression with propensity score and covariate adjustment	**HR 0.46 (0.16, 1.31)	0.14	***HR 1.56 (0.72, 3.36)	0.26
*adjustment covariates included: age, race, gender, hospital onset, Charlson comorbidity index, advanced beta-lactam use (ceftaroline, cefepime or carbapenem class), cefazolin use, immunosuppressive medication, *S. aureus* infection in the prior 12 months **adjustment covariates included: propensity score, advanced beta-lactam use (ceftaroline, cefepime or carbapenem class), immunosuppressive medication, *S. aureus* infection in the prior 12 months ***adjustment covariates included: propensity score, advanced beta-lactam use (ceftaroline, cefepime or carbapenem class), aminopenicillin use [+]adjustment covariates included: age, race, gender, hospital onset, Charlson comorbidity index, advanced beta-lactam use (ceftaroline, cefepime or carbapenem class)				
Readmission, all-cause				

	(N=57)		(N=68)	
Cox regression, unadjusted	HR 0.58 (0.29, 1.19)	0.14	HR 0.62 (0.30, 1.29)	0.20
Cox regression, adjusted	*HR 0.58 (0.27, 1.23)	0.16	[+]HR 0.69 (0.33, 1.45)	0.33
Cox regression with propensity score and covariate adjustment	**HR 0.56 (0.27, 1.18)	0.13	***HR 0.61 (0.29, 1.28)	0.66
*adjustment covariates included: age, race, gender, hospital onset, Charlson comorbidity index, hospital length-of-stay prior to onset of bacteremia, treatment with penicillin or oral agents, cefazolin use, vancomycin use, daptomycin use, *S. aureus* infection in the prior 12 months, recent longterm care facility stay **adjustment covariates included: propensity score, hospital length-of-stay prior to onset of bacteremia, immunosuppressive medication, *S. aureus* infection in the prior 12 months, treatment with penicillin or oral agents ***adjustment covariates included: propensity score [+]adjustment covariates included: age, race, gender, hospital onset, Charlson comorbidity index, cefazolin use, recent longterm care facility stay				
Recurrence of bacteremia				
	(N=6)		(N=4)	
Cox regression, unadjusted	HR - (-, -)	-	HR - (-, -)	-
Cox regression, adjusted	HR - (-, -)	-	HR - (-, -)	-
Cox regression with propensity score and covariate adjustment	HR - (-, -)	-	HR - (-, -)	-
Too few outcome events for regression estimation.				
Composite				
	(N=82)		(N=98)	
Cox regression, unadjusted	HR 0.56 (0.31, 1.02)	0.06	HR 1.28 (0.66, 2.47)	0.47
Cox regression, adjusted	*HR 0.55 (0.30, 1.01)	0.06	[+]HR 1.13 (0.58, 2.23)	0.72

Cox regression with propensity score and covariate adjustment	**HR 0.57 (0.31, 1.05)	0.07	***HR 0.91 (0.53, 1.57)	0.74

*adjustment covariates included: age, race, gender, hospital onset, Charlson comorbidity index, immunosuppressive medication, vancomycin use

**adjustment covariates included: propensity score, immunosuppressive medication, *S. aureus* infection in the prior 12 months

*** adjustment covariates included: propensity score

[+]adjustment covariates included: age, race, gender, hospital onset, Charlson comorbidity index, recent longterm care facility stay

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