TABLES

Supplemental Table 1. Univariate description of demographic, clinical characteristics, and outcomes of included patients

Covariate	Observed Data (n = 270)
Demographics	
Age (years)	58 (46 – 66.5)
Male	175 (64.8)
Race	
African American	142 (52.6)
Caucasian	114 (42.2)
Asian	4 (1.5)
Hispanic	2 (0.7)
Other/unknown	8 (3.0)
Study Site	
Detroit Medical Center	134 (49.6)
UF Health – Shands Hospital	35 (13.0)
Henry Ford Hospital	30 (11.1)
University of Tennessee Medical Center	17 (6.3)
Lee Memorial Hospital	16 (5.9)
University of Maryland Medical Center	13 (4.8)
VA San Diego Healthcare System	11 (4.1)
Huntsville Hospital	9 (3.3)
HonorHealth John C. Lincoln Medical Center	3 (1.1)
Our Lady of the Lake Regional Medical Center	2 (0.7)
Comorbidities & Past Medical History	
Myocardial infarction	28 (10.4)
Heart failure	65 (24.1)
Peripheral vascular disease	45 (16.7)
Cerebrovascular disease	35 (13.0)
Dementia	11 (4.1)
Chronic pulmonary disease	57 (21.1)
Chronic obstructive pulmonary disease	41 (15.2)
Asthma	22 (8.1)
Connective tissue disease	29 (10.7)
Peptic ulcer disease	0
Liver disease	57 (21.1)
Mild[b]	47 (17.4)

Covariate	Observed Data (n = 270)
Moderate/severe[c]	10 (3.7)
Diabetes	104 (38.5)
Without end-ordan damage	27 (10.0)
With end-organ damage	77 (28.5)
Hemiplegia	9 (3.3)
Moderate/severe renal disease[d]	108 (40.0)
Chronic hemodialysis	54 (20.0)
Solid tumor without metastasis	8 (3.0)
Leukemia	4 (1.5)
Lymphoma	1 (0.4)
Metastatic solid tumor	4 (1.5)
Human immunodeficiency virus	9 (3.3)
Acquired immune deficiency syndrome	2 (0.7)
Charlson comorbidity index	2.5 (1.0 – 5.0)
Intravenous drug use	65 (24.1)
Prior hospitalization (90 days)	101 (37.4)
Prior MRSA infection (1 year)	71 (26.3)
Prior IV vancomycin (90 days)	47 (17.4)
Prior daptomycin (90 days)	27 (10.0)
Prior ceftaroline (90 days)	3 (1.1)
Clinical Data	
Admitted from	
Home	203 (75.2)
Transferred from another hospital	34 (12.6)
Nursing facility	32 (11.9)
Weight (kg)	81.4 (68.5 – 97.0)
Body mass index (kg/m^2)	26.7 (23.5 – 32.5)
Obesity[e]	89 (33.0)
Creatinine clearance [f,g] (mL/min)	61.7 (36.5 – 96.1)
> 50 mL/min	136 (50.4)
30.01 - 50 mL/min	44 (16.3)
15 - 30 mL/min	30 (11.1)
< 15 mL/min or ESRD	60 (22.2)
Acute kidney injury[g]	90 (33.3)
APACHE II score[g]	14.0 (9.0 – 19.0)

Covariate	Observed Data (n = 270)
Neutropenia[g]	4 (1.5)
Infection Data	
Endovascular	94 (34.8)
Infective endocarditis	82 (30.4)
Other endovascular	13 (4.8)
Intra-abdominal	6 (2.2)
Lower respiratory tract	0
Bone/joint	84 (31.1)
Invasive prosthetic device	24 (8.9)
Skin/soft tissue	55 (20.4)
Deep tissue abscess	22 (8.1)
Intravenous catheter	52 (19.3)
Urinary	6 (2.2)
Unknown	13 (4.8)
Treatment Data	
Infectious diseases consult	255 (94.4)
Source control pursued	133 (49.3)
Study drug line of therapy	
1st line	78 (28.9)
2nd line	188 (69.6)
3rd line	4 (1.5)
Preceding MRSA BSI Therapy	
Vancomycin	181 (67.0)
Daptomycin	6 (2.2)
Ceftaroline	1 (0.4
Linezolid	9 (3.3)
Time to study drug (hours)	43.0 (20.8 – 71.0)
Ceftaroline dose, n = 83	
600 mg	57 (68.7)
400 mg	12 (14.5)
300 mg	11 (13.3)
200 mg	3 (3.6)
Ceftaroline dose interval, n = 83	
Every 8 hours	35 (42.2)
Every 12 hours	47 (56.6)
Every 24 hours	1 (1.2)
Daptomycin dose mg	600 (500 – 770)
Daptomycin dose mg/kg – actual body weight	7.7 (6.1 – 9.3)

Covariate	Observed Data (n = 270)
Daptomycin dose mg/kg – adjusted body weight	8.5 (6.9 – 10.1)
Daptomycin dose interval	
Every 24 hours	120 (64.2)
Every 48 hours/post-hemodialysis	67 (35.8)
Inpatient study drug duration (days)	9.5 (6.0 – 16.0)
Outcomes	
Composite treatment failure	100 (37.0)
30-day mortality	32 (11.9)
BSI duration ≥ 7 days	50 (18.5)
60-day MRSA BSI recurrence	38 (14.1)
60-day readmission	97 (35.9)
MRSA BSI-related	23 (8.5)
BSI duration (days)	5.0 (4.0 – 8.0)
Post-study drug initiation BSI duration (days)	3.0 (2.0 – 5.25)
LOS	15.0 (10.8 – 24.0)
LOS post-BSI onset (days)	14.0 (9.0 – 21.3)
LOS post-study drug initiation (days)	12.0 (7.0 – 20.0)
Adverse drug reaction[h]	41 (15.2)
Acute kidney injury	3 (1.1)
Neutropenia[i]	0
Thrombocytopenia	6 (2.2)
Rash	11 (4.1)
Creatine phosphokinase elevation[j]	10 (3.7)
Clostridioides difficile infection[k]	7 (2.6)

Abbreviations: IV, intravenous; MRSA, methicillin-resistant *Staphylococcus aureus*; APACHE, acute physiology and chronic health evaluation; BSI, bloodstream infection; LOS, length of stay,

[a] Data presented as number (percentage) or median (interquartile range)

[b] Mild liver disease defined as chronic hepatitis without cirrhosis

[c] Severe liver disease defined as portal hypertension or cirrhosis

[d] Moderate/severe renal disease defined as chronic kidney disease stage 3 or greater or receiving chronic dialysis

[e] Calculated using cockroft-gault formula using actual body weight for body mass index < 30 and adjusted body weight for body mass index > 30

[f] Calculated using cockroft-gault formula using actual body weight for body mass index < 30 and adjusted body weight for body mass index > 30

[g] At time of index MRSA blood culture

[h] Includes CPK elevation, neutropenia, rash Clostridioides difficile infection, acute kidney injury, thrombocytopenia (data presented on in table) and additional adverse reactions occurring while on study drug or attributed to study drug by treating clinicians such as, fever, hypotension & bradycardia, and eosinophilic pneumonia.

[i] decrease in absolute neutrophil count (ANC) to < 1,500 cells/mm3 or ≥ 50% decline from initiation of study medication if baseline ANC < 1,500 cells/mm3

[j] increase to > 600 U/L or > 1,000 U/L if baseline CPK > 200 U/L

[k] Clostridioides difficile infection defined as signs/symptoms along with positive laboratory test at least 48 hours after initiation of study drug

Supplemental Table 2. Actual and inverse probability of treatment weighted risk differences between daptomycin and ceftaroline for the composite treatment failure in *post hoc* subgroup analysis by line of therapy

Group	Daptomycin	Ceftaroline	Risk difference (95% CI)	*P* value[a]	Weighted Risk difference (95% CI)	*P* value[b]
Study therapy 1st line, n = 78	25/62 (40.3)	7/16 (43.8)	-3.4 (-23.8 – 30.6)	0.804	-6.4 (-22.0 – 34.7)	0.658
Study therapy 2nd line, n = 188	47/124 (37.9)	20/64 (31.3)	6.7 (-20.1 – 7.6)	0.367	8.0 (-5.7 – 21.7)	0.263
Study therapy 3rd line, n = 4	1/1 (100)	0/3 (0)	-	-	-	-

CI, confidence interval

[a] *P* value for χ2 or Fisher's exact test of actual risk differences

[b] *P* value for χ2 test of weighted risk differences