

SUPPLEMENTAL DATA

TABLES

Supplemental Table 1. Baseline Demographics, Clinical Features, and Outcomes of Entire

Cohort

Characteristic/Outcome	N = 190
Demographics	
Age (years), mean (SD)	63.4 (16.4)
Female gender, n (%)	103 (54.2)
Race	
African American, n (%)	147 (77.4)
Caucasian, n (%)	25 (13.2)
Hispanic/Latino, n (%)	3 (1.6)
Other, n (%)	15 (7.9)
Comorbidities & Past Medical History	
Prior hospitalization (1 year), n (%)	140 (73.7)
Prior surgery (30 days), n (%)	67 (35.3)
VRE infection (1 year), n (%)	7 (3.7)
IVDU, n (%)	13 (6.8)
Prosthetic device/hardware, n (%)	9 (4.7)
Chronic kidney disease, n (%)	101 (53.2)
Chronic hemodialysis, n (%)	65 (34.2)
Liver disease, n (%)	33 (17.4)
Diabetes mellitus, n (%)	86 (45.3)
Cerebrovascular accident, n (%)	42 (22.1)
Hemi/paraplegia, n (%)	11 (5.8)
HIV/AIDS, n (%)	9 (4.7)
Immunosuppression (30 days), n (%)	22 (11.6)
Bone marrow transplant, n (%)	1 (0.5)
Solid organ transplant, n (%)	1 (0.5)
Chemotherapy/radiation therapy (30 days), n (%)	18 (9.5)
Urinary catheter ^a , n (%)	28 (14.7)
Acute kidney injury ^a , n (%)	60 (31.6)
Mechanical ventilation ^a , n (%)	34 (17.9)

Characteristic/Outcome	N = 190
Decubitus ulcer, n (%)	24 (12.6)
Malignancy, n (%)	32 (16.8)
Receiving TPN ^a , n (%)	12 (6.3)
Prior antibiotics (90 days), n (%)	86 (45.3)
Charlson comorbidity index ^a , median (IQR)	7 (5,8)
EBSI Characteristics	
Primary source	
Intra-abdominal, n (%)	30 (15.8)
Infective endocarditis, n (%)	7 (3.7)
IV catheter, n (%)	94 (49.5)
SSTI, n (%)	18 (9.5)
Urinary tract, n (%)	20 (10.5)
Unknown, n (%)	20 (10.5)
Enterococcal species	
<i>E. faecium</i> , n (%)	89 (46.8)
Polymicrobial BSI, n (%)	84 (44.2)
Intensive care unit ^a , n (%)	69 (36.3)
Pitt-bacteremia score ^b , median (IQR)	3 (3,5)
Susceptibility phenotypes	
Ampicillin resistant, n (%)	87 (45.8)
Vancomycin resistant, n (%)	119 (62.6)
Daptomycin non-susceptible, n (%) *N = 124	9 (7.3)
Linezolid intermediate, n (%) *N = 110	1 (0.9)
Treatment Data	
Empiric	
Vancomycin, n (%)	145 (76.3)
Linezolid, n (%)	40 (21.1)
Daptomycin, n (%)	36 (18.9)
Ampicillin, n (%)	21 (11.1)
Piperacillin/tazobactam, n (%)	9 (4.7)
Other, n (%)	8 (4.2)
Definitive	
Vancomycin, n (%)	32 (16.8)
Linezolid, n (%)	61 (32.1)

Characteristic/Outcome	N = 190
Daptomycin, n (%)	58 (30.5)
Ampicillin, n (%)	49 (25.8)
Piperacillin/tazobactam, n (%)	12 (6.3)
Other, n (%)	6 (3.2)
Combination therapy, n (%)	20 (10.5)
Vancomycin trough (mg/dL), mean (SD)	19.0 (6.1)
Daptomycin dose (mg/kg), median (IQR)	8.9 (7,10)
Time to appropriate therapy (hours), mean (SD)	38.6 (30.3)
Time to appropriate therapy (hours), median (IQR)	31.6 (20.3, 51.2)
Time to appropriate therapy \geq 48.1 h, n (%)	53 (27.9)
Other treatment information	
Source control intervention pursued, n (%)	105 (55.3)
ID on consult within 24 h after index, n (%)	154 (81.1)
 Outcomes	
Hospital-los post-EBSI (days), median (IQR)	12 (8,18.25)
Duration EB (days), median (IQR)	3 (2,4)
In-hospital mortality, n (%)	37 (19.5)
30-day mortality, n (%)	44 (23.2)

Abbreviations: VRE, vancomycin-resistant enterococci; IVDU, intravenous drug user; HIV, human immunodeficiency virus; AIDS, acquired immune deficiency syndrome; TPN, total parenteral nutrition; LOS, length of stay; EBSI, enterococcal bloodstream infection; BSI, bloodstream infection; ID, infectious diseases

^a At time of index culture

^b Worst score in 48 hours preceding index culture

Supplemental Table 2. Description of co-pathogens in polymicrobial bloodstream infections

Co-Pathogen	N = 190
Gram-positive	28 (14.7)
<i>Staphylococcus aureus</i> , n (%)	11 (5.8)
Coagulase-negative <i>Staphylococcus</i> , n (%)	10 (5.3)
<i>Enterococcus spp.</i> , n (%)	8 (4.2)
Gram-negative	33 (17.4)
<i>Klebsiella spp.</i> , n (%)	9 (4.7)
<i>Acinetobacter baumannii</i> , n (%)	8 (4.2)
Other <i>Enterobacteriaceae</i> , n (%)	7 (3.7)
<i>Pseudomonas aeruginosa</i> , n (%)	5 (2.6)
<i>Escherichia coli</i> , n (%)	5 (2.6)
<i>Stenotrophomonas maltophilia</i> , n (%)	2 (1.1)
<i>Bacteroides fragilis</i> , n (%)	2 (1.1)
Fungal	3 (1.6)
<i>Candida albicans</i> , n (%)	2 (1.1)
<i>Candida glabrata</i> , n (%)	2 (1.1)

Supplemental Table 3. Comparison of Receiver Operating Characteristic Curve Results for CART-derived and *a priori* specified Thresholds in Time to Appropriate Therapy for predicting 30-day Mortality

Time threshold	Sensitivity (%)	Specificity (%)	Area under ROC curve	95% CI	P value
≥ 24 hours	84.1	39.0	0.616	0.527 – 0.705	0.020
≥ 36 hours	63.6	64.4	0.640	0.546 – 0.734	0.005
≥ 48.1 hours	54.5	80.1	0.673	0.577 – 0.770	<0.001
≥ 60 hours	36.4	87.0	0.617	0.516 – 0.718	0.019
≥ 72 hours	29.5	90.4	0.600	0.498 – 0.702	0.045

Abbreviations: ROC, receiver-operating characteristic; CI, confidence interval

Supplemental Table 4. Bivariate Comparison of 30-day Mortality between Patients Receiving Early or Delayed Appropriate Antibiotic Therapy in Select Subgroups

Subgroup	30-day mortality, n/N (%)		P value
	Early	Delayed	
Severity of Illness			
Non-intensive care unit	10 (11.2)	12 (37.5)	0.001
Intensive care unit	10 (20.8)	12 (57.1)	0.003
Pitt bacteremia score < 4 ^a	2 (4.5)	18 (24.0)	0.005
Pitt bacteremia score ≥ 4 ^a	5 (25.0)	19 (37.3)	0.409
Species			
<i>Enterococcus faecalis</i>	8 (10.5)	12 (48.0)	<0.001
<i>Enterococcus faecium</i>	12 (19.7)	12 (42.9)	0.022
Phenotype			
Vancomycin-susceptible	7 (11.3)	7 (77.8)	<0.001
Vancomycin-resistant	13 (17.3)	17 (38.6)	0.010

Abbreviations: VRE, vancomycin-resistant enterococci; IVDU, intravenous drug user; HIV, human immunodeficiency virus; AIDS, acquired immune deficiency syndrome; TPN, total parenteral nutrition; LOS, length of stay; EBSI, enterococcal bloodstream infection; BSI, bloodstream infection; ID, infectious diseases

^a Worst score in 48 hours preceding index culture