

Title: Impact of Ceftolozane-tazobactam vs. Best Alternative Therapy on Clinical Outcomes in Patients with Multidrug-Resistant and Extensively Drug-Resistant *Pseudomonas aeruginosa* Lower Respiratory Tract Infections

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Table S1. Bivariate Comparison of Baseline Demographics and Clinical Criteria Between Patients with and without Clinical Failure

Characteristics	No Clinical Failure (n = 135)	Clinical Failure (n = 71)	P value
Demographics			
- Age in years, median (IQR)	60 (22.0)	64 (18.0)	.029
- Age over 60 years	65 (48.1)	43 (60.6)	.090
- Male sex	97 (71.9)	47 (66.2)	.400
- BMI, median (IQR)	24 (9.3)	24 (8.9)	.573
- XDR <i>P. aeruginosa</i>	58 (43.0)	28 (39.4)	.626
Race			
- African American	72 (53.3)	45 (63.4)	.167
- Caucasian	51 (37.8)	21 (29.6)	.241
- Hispanic	3 (2.2)	0 (0.0)	.553
- Asian	0 (0.0)	1 (1.4)	.345
- Other/unknown	9 (6.7)	4 (5.6)	1.000
Severity of illness factors			
- Index culture collected in ICU	93 (69.4)	45 (63.4)	.382
- SOFA score, median (IQR)	5 (3.0)	7 (4.0)	.002
- APACHE II score, median (IQR)	23 (10.0)	27 (10.0)	<.001
- CCI, median (IQR)	2.0 (3.0)	2.0 (2.0)	.001
- AKI on admission	40 (31.5)	25 (38.5)	.334
Co-morbid conditions			
- COPD	40 (29.6)	30 (42.3)	.069
- Moderate to severe CKD	30 (22.2)	24 (33.8)	.072
- Chronic dialysis	11 (8.1)	9 (12.7)	.297
- AKI	30 (22.2)	20 (28.2)	.344
- MI	5 (3.7)	5 (7.0)	.318
- PVD	14 (10.4)	8 (11.3)	.843
- HF	27 (20.0)	17 (23.9)	.512
- HIV	1 (0.7)	2 (2.8)	.273
- CVD	31 (23.0)	23 (32.4)	.144
- Dementia	15 (11.2)	7 (9.9)	.782
- Asthma	13 (9.6)	2 (2.8)	.093
- Connective tissue disease	13 (9.6)	6 (8.5)	.781
- Moderate or severe liver disease	2 (1.5)	1 (1.4)	1.000
- Diabetes	21 (15.6)	13 (18.3)	.613
- Diabetes (with end-organ damage)	31 (23.0)	19 (26.8)	.546
- Hemiplegia	16 (11.9)	6 (8.5)	.453
- Tumor without metastasis	4 (3.0)	3 (4.2)	.635
- Tumor with metastasis	8 (5.9)	8 (11.3)	.173
- Leukemia	0 (0.0)	1 (1.4)	.345
- IV drug use	7 (5.2)	2 (2.8)	.722
Immunosuppression factors			
- Neutropenia	2 (1.5)	15 (21.1)	<.001
- Solid organ transplant	0 (0.0)	1 (1.4)	.345
- Chemotherapy within 90 days*	4 (3.0)	6 (8.5)	.096
- High dose corticosteroids	3 (2.2)	2 (2.8)	1.000
MDR risk factors			
- Antimicrobials within 90 days*	91 (67.4)	45 (63.4)	.562
- Hospitalization within 90 days*	83 (61.5)	46 (64.8)	.653
- Admitted from nursing home/LTCF	52 (38.5)	30 (42.3)	.603
- Chronic dialysis within last 30 days*	10 (7.4)	8 (11.3)	.351
- Home wound care	4 (3.0)	2 (2.8)	1.000
- Surgery within 30 days*	13 (9.6)	6 (8.5)	1.000
Treatment (≥48h)			
- Ceftolozane/tazobactam	90 (66.7)	28 (39.4)	<.001
- Amikacin	10 (7.4)	6 (8.5)	.790
- Colistin (IV)	5 (3.7)	5 (7.0)	.318
- Gentamicin	0 (0.0)	1 (1.4)	.345

- Polymyxin B	8 (5.9)	5 (7.0)	.769
- Tobramycin	34 (25.2)	8 (11.3)	.018
- Combination therapy	34 (25.2)	14 (19.7)	.378
Infection characteristics			
- VABP	63 (46.7)	33 (46.5)	1.000
- Polymicrobial	53 (39.3)	33 (46.5)	.318
Resistance characteristics			
- Resistant $\geq$ 1 carbapenem	102 (78.5)	58 (81.7)	.587
- Resistant $\geq$ 1 aminoglycoside	16 (12.1)	7 (10.0)	.652
- Resistant $\geq$ 1 polymyxin	8 (18.6)	6 (24.0)	.596
Interventions			
- ID consult	121 (89.6)	63 (88.7)	.843
- Surgery consult	12 (9.0)	8 (11.4)	.573

Data are presented as “number (%)” unless stated otherwise. Abbreviations: ICU, intensive care unit; COPD, chronic obstructive

pulmonary disorder; CKD, chronic kidney disease; moderate to severe CKD, KDOQI CKD Stage III-V or GFR < 60 ml/min or

on chronic dialysis; MI, myocardial infarction; PVD, peripheral vascular disease; HF, heart failure; CVD, cerebrovascular

disease; PUD, peptic ulcer disease; HIV, human immunodeficiency virus; AIDS, acquired immunodeficiency syndrome (CD4 <

200); IV, intravenous; MDR, multidrug resistant; LTCF, long term care facility; CCI, Charlson comorbidity index.

*From time of index culture

**Neutropenia (ANC or WBC < 500)