

**SUPPLEMENTARY TABLE I. Antibiotic susceptibilities of isolates in this study**

	Non-susceptible					
	All patients (n=984)	ICU patients (n=205)	Non-ICU patients (n=779)	Received appropriate antibiotics (n=686)	Received inappropriate antibiotics (n=298)	ESBL-producing isolates (n=113)
Amikacin	10%	0%	12%	0%	15%	5%
Ampicillin	100%	100%	100%	100%	100%	100%
Amoxicillin/clavulanate	19%	19%	19%	8%	52%	100%
Cefazolin	23%	19%	24%	5%	51%	100%
Cefotaxime	87%	79%	90%	86%	88%	100%
Ceftazidime	97%	87%	100%	83%	100%	100%
Ceftriaxone	77%	50%	84%	50%	84%	100%
Cefuroxime	23%	24%	22%	7%	60%	100%
Cotrimoxazole	26%	31%	24%	16%	51%	76%
Ertapenem	29%	25%	30%	19%	32%	6%
Gentamicin	8%	6%	8%	4%	16%	35%
Levofloxacin	14%	11%	14%	6%	30%	38%
Meropenem	6%	50%	5%	0%	8%	4%
Piperacillin/tazobactam	55%	62%	52%	36%	66%	100%
Imipenem/cilastatin	5%	12%	4%	4%	6%	3%
Ticarcillin/clavulanate	95%	96%	95%	95%	95%	100%

Abbreviations: ESBL = extended-spectrum beta-lactamase; ICU = intensive care unit

**SUPPLEMENTARY TABLE 2. Clinical characteristics and empirical antibiotics in ICU subgroup\***

Parameters	Total (n=205)	Appropriate empirical antibiotics (n=148)	Inappropriate or no empirical antibiotics (n=57)	P value
Age, y	68.0 (58.0-78.0)	67.5 (58.0-77.8)	69.0 (58.5-79.5)	0.491
Age >65 y	117 (57.1%)	85 (57.4%)	32 (56.1%)	0.867
Male sex	132 (64.4%)	97 (65.5%)	35 (61.4%)	0.579
Admitting department				0.388
Medicine	116 (56.6%)	79 (54.4%)	37 (64.9%)	
Surgery	68 (32.2%)	52 (35.1%)	16 (28.1%)	
Oncology	3 (1.5%)	3 (2.0%)	0	
Others	18 (8.8%)	14 (9.5%)	4 (7.0%)	
Co-morbidities				
Diabetes mellitus	67 (32.7%)	45 (30.4%)	22 (38.6%)	0.263
Cirrhosis	8 (3.9%)	3 (2.0%)	5 (8.8%)	0.039
CHF	21 (10.2%)	16 (10.8%)	5 (8.8%)	0.666
CKD/ESRF	20 (9.8%)	8 (5.4%)	12 (21.2%)	0.001
Haematological malignancy	10 (4.9%)	7 (4.7%)	3 (5.3%)	0.874
Solid tumour	50 (24.4%)	41 (27.7%)	9 (15.8%)	0.075
Steroid (30D)	23 (11.2%)	18 (12.2%)	5 (8.8%)	0.491
Chemotherapy (30D)	6 (2.9%)	5 (3.4%)	1 (1.8%)	1.000
Source of sepsis				
Hepatobiliary	88 (42.9%)	69 (46.6%)	19 (33.3%)	0.085
Gastrointestinal	19 (9.3%)	11 (7.4%)	8 (14.0%)	0.144
Respiratory	48 (23.4%)	28 (18.9%)	20 (35.1%)	0.014
Urosepsis	30 (14.6%)	23 (15.5%)	7 (12.3%)	0.554
Musculoskeletal	5 (2.4%)	4 (2.7%)	1 (1.8%)	1.000
Neurological	1 (0.5%)	1 (0.7%)	0	1.000
Others or unknown	14 (6.8%)	12 (8.1%)	2 (3.5%)	0.242
CVC usage	116 (56.6%)	82 (55.4%)	34 (59.6%)	0.583
Prior antibiotic use (30D)	168 (82.0%)	118 (79.7%)	50 (87.7%)	0.183
Septic shock	169 (82.4%)	121 (81.8%)	48 (84.2%)	0.679
Total SOFA score	10.0 (7.00-13.00)	9.0 (6.0-13.0)	12.0 (8.0-14.0)	0.016
Supportive treatment				
RRT	68 (33.2%)	48 (32.4%)	20 (35.1%)	0.718
Mechanical ventilation	123 (60.0%)	76 (51.4%)	47 (82.5%)	<0.001
Vasopressor	161 (78.5%)	113 (76.4%)	48 (84.2%)	0.219
Resistance				
ESBL	25 (12.2%)	11 (7.4%)	14 (24.6%)	0.001
Carbapenem	3 (1.5%)	1 (0.7%)	2 (3.5%)	0.188
Outcome				
90-Day mortality	71 (34.6%)	37 (25.0%)	34 (59.6%)	<0.001
ICU mortality	38 (18.5%)	18 (12.2%)	20 (35.1%)	<0.001
ICU LOS, d	2.66 (1.36-6.78)	2.58 (1.47-6.74)	2.75 (1.03-7.13)	0.379
ICU ventilator days	1.0 (0.00-5.00)	1.0 (0.00-5.00)	2.0 (1.0-4.0)	0.026
Hospital mortality	66 (32.2%)	34 (23.0%)	32 (56.1%)	<0.001
Hospital LOS, d	18.86 (10.09-42.93)	19.62 (11.49-42.97)	17.62 (4.12-45.06)	0.209

Abbreviations: CHF = congestive heart failure; CKD/ESRF = chronic kidney disease/end-stage renal failure; CVC = central venous catheter; ESBL = extended-spectrum beta-lactamase; ICU = intensive care unit; LOS = length of stay; RRT = renal replacement therapy (ie, intermittent or continuous replacement); SOFA = Sequential Organ Failure Assessment; Vasopressor = dopamine, adrenaline, noradrenaline

\* Data are presented as No. (%) or median (interquartile range)