

# **Ceftazidime/avibactam-based versus polymyxin B-based therapeutic regimens for the treatment of carbapenem-resistant Klebsiella pneumoniae infection in critically ill patients: a retrospective cohort study**

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**Table S1.** Antimicrobial susceptibility characteristics of *Klebsiella pneumoniae* isolates.

Antimicrobial agent	MIC range	S <sup>a</sup> (%)	I <sup>b</sup> (%)	R <sup>c</sup> (%)
CAZ/AVI	<20 mm->21 mm	96.3	N/A <sup>d</sup>	3.7
Colistin	0.125–0.5 µg/ml	100	N/A	0
Meropenem	≥16 µg/ml	0	0	100
Imipenem	≥16 µg/ml	1.2	1.8	97.0
Tigecycline	≤0.5 µg/ml	94.5	N/A	5.5
Amikacin	≤16–≥64 µg/ml	17.1	6.1	76.8

<sup>a</sup>S = Susceptible.<sup>b</sup>I = Intermediate.<sup>c</sup>R = Resistant.<sup>d</sup>N/A = Not applicable.**Table S2.** Antimicrobial treatment options for patients receiving CAZ/AVI-based or PMB-based therapeutic regimens

Antimicrobial treatment option	n = 82	CAZ/AVI group		PMB group		
		30-day microbiological eradication	30-day mortality	n = 82	30-day microbiological eradication	30-day mortality
Monotherapy	33	22 (66.7)	17 (51.5)	22	8 (36.4)	16 (69.6)
Combination therapy	49	44 (89.8)	12 (24.5)	60	19 (31.7)	41 (68.3)
Carbapenems	17	14 (82.4)	5 (29.4)	19	6 (31.6)	11 (57.9)
Tigecycline	11	11 (100)	3 (27.3)	11	4 (36.4)	8 (72.7)
Amikacin	11	11 (100)	1 (9.1)	15	7 (46.7)	11 (73.3)
Fosfomycin	7	5 (71.4)	3 (42.9)	10	0 (0)	9 (90)
Aztreonam	2	2 (100)	0 (0)	0	-	-
Other Drugs	1	1 (100)	0 (0)	5	2 (40)	2 (40)
Minocycline	1	1 (100)	0 (0)	3	1 (33.3)	1 (33.3)
Moxifloxacin	0	-	-	1	1 (100)	0 (0)
SMZ/TMP <sup>a</sup>	0	-	-	1	0 (0)	1 (100)

<sup>a</sup>SMZ/TMP = sulfamethoxazole/trimethoprim.**Table S3.** Comparison of safety between CAZ/AVI group and PMB group with different types of laboratory parameters.

Group	Laboratory parameters	Before Treatment	After Treatment	P-value
CAZ/AVI	ALT (U/L)	23 (14-30.3)	28.5 (17.8-45)	<0.001

	AST (U/L)	29.5 (21.5-44.3)	34 (22.5-73.8)	0.035
	TBil ( $\mu$ mol/L)	15.9 (12.7-21.3)	17.5 (10.5-27.7)	0.487
	CrCl (mL/min)	76.7 (46.4-119.8)	80.0 (41.6-120.7)	0.310
	BUN (mmol/L)	8.6 (6.1-13.1)	11.9 (6.3-26.0)	0.013
	APTT (s)	32.5 (28.9-39.0)	32.2 (28.1-36.9)	0.240
	PT (s)	13.6 (12.7-15.5)	14.2 (12.3-17.2)	0.085
	Fib (g/L)	2.8 (2.1-3.6)	3.3 (2.3-4.7)	0.112
PMB	ALT (U/L)	17 (10-41)	19 (12.5-34)	0.683
	AST (U/L)	28 (18.5-56)	28 (19-69.5)	0.431
	TBil ( $\mu$ mol/L)	14.8 (11.3-25.7)	18.4 (11.1-46.1)	0.062
	CrCl (mL/min)	56.8 (39.0-95.1)	48.3 (30.9-70.6)	<0.001
	BUN (mmol/L)	13.4 (7.3-26.0)	7.2 (4.1-11.5)	<0.001
	APTT (s)	31.0 (28.3-34.3)	32.2 (28.7-35.5)	0.482
	PT (s)	13.4 (12.2-15.3)	13.8 (12.1-16.7)	0.235
	Fib (g/L)	3.5 (2.8-4.4)	3.6 (3.0-4.4)	0.434

*Statistical methods: Wilcoxon rank sum test*