

Table S1: Type of β -lactams carbapenem-resistance genes in Gram-negative bacterial isolates by CARD, Pathogenwatch and Resfinder

[illegible]

Table S2: Antimicrobial-resistance profile of 17 carbapenem-resistance Gram-negative bacteria (CR-GNB)

*Strain	CTX-M variants	TEM variants	OXA variants	NDM variants	SHV variants	DIM variants	PDC variants	PAO variants
AB01	1	1	0	1	1	0	0	0
EC02	1	0	1	1	0	0	0	0
EC03	1	1	0	1	1	0	0	0
EC04	1	0	0	0	1	0	0	0
EC05	1	1	1	1	1	1	1	1
EC06	1	1	1	1	1	0	0	0
EC07	1	1	1	1	1	0	0	0
EC08	1	1	1	1	0	0	0	0
EC09	0	0	0	0	0	0	0	0
EC10	0	1	1	1	1	0	0	0
KP11	1	0	1	0	0	0	0	0
KP12	1	0	0	1	1	0	0	0
KP13	1	0	1	0	0	1	0	1
KP14	1	0	0	1	0	0	0	0
KP15	1	0	1	1	0	0	0	0
PA16	0	1	1	0	1	0	0	0
PA17	1	0	0	0	0	0	0	0

***AB:** Acinetobacter baumannii; **EC:** Escherichia coli; **PA:** Pseudomonas aeruginosa; **KP:** Klebsiella pneumonia; **1:** present; **0:** absent

Table S3: Distribution of β -lactams carbapenem-resistance genes in E. coli, A. baumannii, P. aeruginosa, and K. pneumoniae

	blaCTX-M	blaNDM	blaSHV	blaTEM	blaOXA
E. coli	17	3	8	6	4
A. baumannii	15	1	16	6	0
P. aeruginosa	1	1	3	2	2
K. pneumoniae	32	4	4	1	4

Figure S1: Distribution of subtype of carbapenem-resistance genes in their respective groups of GNB isolates

