

Supplementary Material

Use of hospital resources due to carbapenem-resistant Gram-negative bacteria: a real clinical-practice-based study in Spain

Table S1. Other primary diagnoses at hospital admission (collected in the category "Other" from of the electronic Case Report Form)

Other hospital admission diagnoses
<ul style="list-style-type: none">• Respiratory insufficiency• Cardiac insufficiency• Politraumatism• Urinary infection• Hemorrhagic cystitis• Hepatic failure• General syndrome• Endocarditis• Rectorrhagia• Gastrointestinal bleeding• Obstructive jaundice• Pulmonary emphysema and pneumothorax• Pancreatitis• Hyperglycemic decompensation• Rabdomiolysis• Study of deterioration of kidney function• Cerebellar and disautonomic syndrome• Guillain-Barré syndrome• Percutaneous nephrostomy• Cellular rejection kidney transplant• Colon neoplasia surgery• Percutaneous nephrostomy

Table S2. Distribution of antibiotics prescribed as monotherapy in CRGN patients and most frequent combined antibiotic therapy

	n
Monotherapy antibiotics	
Colistin	15
Levofloxacin	9
Cotrimoxazole	7
Meropenem	7
Piperacillin/tazobactam	7
Ciprofloxacin	5
Ceftazidime	5
Ceftolozane/tazobactam	4
Tobramycin	3
Ceftazidime/avibactam	3
Amikacin	1
Cefotaxime	1
Amoxicillin clavulanic	1
Most common combined antibiotic therapy	
Colistin + tigecycline	18
Colistin + meropenem	9
Colistin + cotrimoxazole	3
Colistin + piperacillin/tazobactam	3
Colistin + ceftazidime	2

Table S3. Differences between groups split by site

	VdH (n=50)		CHUS (n=50)		HUVM (n=30)		F	p Value
	Mean	SD	Mean	SD	Mean	SD		
Days in ICU	39.9	34.65	19.4	15.90	43.1	26.97	10.13	0.001*‡§
Total hospitalization days	67.9	36.63	49.4	37.58	66.2	30.67	3.87	0.023*‡
Days in isolation	32.6	26.13	25.3	26.00	56.8	45.31	6.05	0.003*†§
Days from hospital admission to CRGN identification	31.7	21.18	20.3	17.27	30.9	19.77	5.04	0.008*‡
Days from ICU admission to CRGN identification	22.9	20.55	8.9	8.59	22.2	20.04	10.35	0.001*‡§
Days in antibiotic treatment	16.4	17.31	9.0	7.18	10.3	6.76	5.06	0.008*‡
Days in ventilation	38.9	32.19	17.6	15.82	35.7	20.87	8.28	0.001*‡§
Days in dialysis	25.6	34.75	7.9	6.93	25.5	17.54	3.22	0.059

Abbreviations: CHUS = Santiago University Hospital; CRGN = Carbapenem-resistant gram negative bacteria; HUVM = Virgen de la Macarena Hospital; ICU = intensive care unit; SD = standard deviation; VdH = Vall d'Hebron Hospital

*p<0.05

Post-hoc tests of pair-wise differences: [†]VdH – CHUS, [‡]VdH – HUVM, [§] CHUS – HUVM

Table S4. Differences between groups split by diagnosis at admission

	Septic shock (n=28)		Other diagnosis (n=102)			
	Mean	SD	Mean	SD	t	p Value
Days in ICU	20.6	21.09	36.1	29.82	-2.57	0.011*
Total hospitalization days	40.7	23.48	65.8	37.68	-4.33	0.001*
Days in isolation	18.6	14.68	36.7	32.75	-3.90	0.001*
Days from hospital admission to CRGN identification	17.3	13.35	29.8	20.74	-3.86	0.001*
Days from ICU admission to CRGN identification	8.9	12.46	19.7	18.62	-3.62	0.001*
Days in antibiotic treatment	8.5	11.01	13.2	12.66	-1.77	0.079
Days in ventilation	23.9	20.70	32.3	27.53	-1.29	0.201
Days in dialysis	11.8	9.45	17.6	23.09	-0.90	0.380

Abbreviations: CRGN = Carbapenem-resistant Gram-negative bacteria; ICU = intensive care unit; SD = standard deviation

*p<0.05

Table S5. Differences between groups split by admission ward

	ICU admission (n=41)		Other ward admission (n=89)			
	Mean	SD	Mean	SD	t	p Value
Days in ICU	29.8	23.34	34.1	31.03	-0.80	0.427
Total hospitalization days	48.3	30.35	65.9	37.91	-2.62	0.010*
Days in isolation	26.8	25.22	35.3	32.62	-1.40	0.165
Days from hospital admission to CRGN identification	18.9	17.08	30.9	20.23	-3.30	0.001*
Days from ICU admission to CRGN identification	18.8	17.08	16.7	18.46	0.65	0.517
Days in antibiotic treatment	11.4	10.73	12.5	13.18	-0.44	0.664
Days in ventilation	31.5	25.15	30.5	27.32	0.20	0.841
Days in dialysis	10.0	8.25	17.4	21.51	-0.87	0.391

Abbreviations: CRGN = Carbapenem-resistant Gram-negative bacteria; ICU = intensive care unit; SD = standard deviation

*p<0.05