

Table S2. Country-stratified pooled antimicrobial resistance estimates for Gram-negative bacteria isolated from surgical site infections, with between-country comparison

Species / Antibiotic / Country	Resistant/Total	Resistance (%)	95% CI	I ² (%)	P-value*
Acinetobacter baumannii – Amikacin	27/47	63.6	29.8–92.5	66.3	
Egypt	18/22	82.8	62.6–97.0	0.0	0.071
Iraq	2/3	72.7	3.9–100.0	0.0	
Türkiye	7/22	35.2	5.7–71.3	50.5	
Acinetobacter baumannii – Gentamicin	37/56	66.5	52.6–79.3	0.0	
Egypt	16/22	73.0	51.3–90.8	0.0	0.669
Iran	8/12	66.7	37.1–91.0	—	
Türkiye	13/22	59.4	36.6–80.5	0.0	
Acinetobacter baumannii – Imipenem	39/61	73.3	26.5–100.0	88.4	
Egypt	20/22	91.7	74.4–100.0	0.0	0.008
Iran	13/13	100.0	87.2–100.0	—	
Iraq	2/3	72.7	3.9–100.0	0.0	
Türkiye	4/23	21.4	0.0–72.7	78.6	
Acinetobacter baumannii – Meropenem	23/25	99.5	85.0–100.0	0.0	
Egypt	21/22	96.8	82.3–100.0	0.0	0.169
Iraq	2/3	72.7	3.9–100.0	0.0	
Escherichia coli – Amikacin	37/133	29.0	4.0–62.8	92.6	
Egypt	22/40	54.8	36.0–73.0	28.0	0.039
Iraq	4/21	18.7	3.5–39.7	0.0	
Türkiye	11/72	17.6	0.0–87.8	97.1	
Escherichia coli – Amoxicillin-clavulanate	45/58	84.1	55.1–100.0	78.6	
Egypt	28/40	70.6	21.1–100.0	90.3	0.300
Iraq	17/18	96.6	78.8–100.0	0.0	
Escherichia coli – Ceftazidime	65/133	69.2	28.6–98.2	94.8	
Egypt	25/40	64.0	35.8–88.1	68.1	0.082
Iraq	18/19	96.5	79.7–100.0	0.0	
Türkiye	22/74	42.4	0.0–100.0	98.1	
Escherichia coli – Gentamicin	59/135	53.4	22.8–82.7	91.5	
Egypt	26/40	64.7	17.1–99.2	89.8	0.581
Iraq	14/21	67.1	44.3–86.7	0.0	
Türkiye	19/74	33.0	0.0–87.7	95.4	
Escherichia coli – Imipenem	15/135	9.0	0.1–25.9	81.8	
Egypt	12/40	28.6	8.3–54.1	62.2	0.078
Iraq	1/21	3.4	0.0–18.5	0.0	
Türkiye	2/74	2.2	0.0–17.8	77.5	
Escherichia coli – Meropenem	10/61	8.1	0.0–32.2	79.5	
Egypt	10/40	21.0	0.0–62.0	85.8	0.141
Iraq	0/21	0.0	0.0–8.6	0.0	
Klebsiella pneumoniae – Amikacin	55/107	37.6	6.8–74.1	91.1	
Egypt	42/58	72.5	60.1–83.5	0.0	0.013
Iraq	11/21	34.9	0.0–93.3	63.1	
Türkiye	2/28	7.0	0.0–51.5	80.8	
Klebsiella pneumoniae – Amoxicillin-clavulanate	68/79	86.1	53.3–100.0	85.4	
Egypt	50/58	91.5	53.0–100.0	91.4	0.454
Iraq	18/21	57.6	0.0–100.0	88.5	

Klebsiella pneumoniae – Ceftazidime	72/107	58.4	24.2–89.2	89.8	<0.001
Egypt	52/58	89.8	80.2–96.7	0.0	
Iraq	14/21	42.5	0.0–100.0	77.7	
Türkiye	6/28	23.5	2.0–54.9	54.1	
Klebsiella pneumoniae – Ceftriaxone	67/79	85.1	63.5–99.0	68.1	0.537
Egypt	49/58	84.7	73.9–93.2	0.0	
Iraq	18/21	57.6	0.0–100.0	88.5	
Klebsiella pneumoniae – Gentamicin	61/106	61.0	26.4–91.1	89.7	0.074
Egypt	39/58	69.1	11.0–100.0	95.7	
Iraq	16/21	80.9	56.5–98.0	0.0	
Türkiye	6/27	26.2	0.6–65.0	64.6	
Klebsiella pneumoniae – Imipenem	25/107	14.8	1.3–35.5	76.6	0.073
Egypt	21/58	35.6	18.1–55.1	55.1	
Iraq	3/21	9.0	0.0–30.5	0.0	
Türkiye	1/28	2.4	0.0–26.7	60.0	
Klebsiella pneumoniae – Meropenem	30/79	34.5	19.3–51.0	36.7	0.035
Egypt	26/58	44.8	32.0–58.0	0.0	
Iraq	4/21	14.0	0.2–37.2	0.0	
Pseudomonas aeruginosa – Amikacin	43/120	32.7	7.5–63.5	87.3	<0.001
Egypt	18/30	58.2	10.1–98.3	87.5	
Iran	19/29	67.1	46.4–85.4	0.0	
Iraq	0/9	0.0	0.0–18.2	0.0	
Türkiye	6/52	15.2	0.0–47.7	73.4	
Pseudomonas aeruginosa – Cefepime	16/39	31.6	0.9–74.0	72.8	0.582
Iran	10/30	19.9	0.0–65.6	66.7	
Iraq	6/9	46.6	0.0–100.0	80.2	
Pseudomonas aeruginosa – Ceftazidime	64/121	65.4	32.7–92.6	89.3	0.003
Egypt	28/30	95.6	78.2–100.0	45.3	
Iran	16/30	53.6	33.9–72.9	0.0	
Iraq	7/9	62.0	0.0–100.0	88.6	
Türkiye	13/52	32.5	3.5–71.0	77.9	
Pseudomonas aeruginosa – Ciprofloxacin	22/39	55.5	33.8–76.4	14.6	0.651
Iran	17/30	57.2	37.4–76.1	0.0	
Iraq	5/9	38.3	0.0–100.0	70.5	
Pseudomonas aeruginosa – Gentamicin	61/121	58.6	34.3–81.3	80.0	0.130
Egypt	23/30	77.5	31.2–100.0	84.5	
Iran	17/30	75.7	18.0–100.0	78.8	
Iraq	5/9	38.3	0.0–100.0	70.5	
Türkiye	16/52	30.0	17.6–43.9	0.0	
Pseudomonas aeruginosa – Imipenem	41/121	37.6	13.9–64.2	83.3	<0.001
Egypt	17/30	56.7	38.1–74.5	0.0	
Iran	18/30	77.2	23.1–100.0	75.6	
Iraq	1/9	7.4	0.0–41.5	0.0	
Türkiye	5/52	10.1	0.1–28.3	42.6	
Pseudomonas aeruginosa – Meropenem	36/69	51.0	28.8–73.1	57.9	0.029

Egypt	17/30	56.7	38.1–74.5	0.0
Iran	18/30	77.2	23.1–100.0	75.6
Iraq	1/9	7.4	0.0–41.5	0.0

**P value from Cochran Q test for between-country differences, reported only where ≥ 2 countries each contributed ≥ 2 studies*
Abbreviations: CI, Confidence interval; I², Heterogeneity.