

Supplementary data

Figure S1. Genotype analysis of the KPC-Kp isolates performed with the DiversiLab™ strain typing system (Bacterial BarCodes, bioMérieux). A related KPC-Kp strain was identified among the 50 isolates analysed. The eight isolates collected at the LTACH and FL-7 were related to KPC-Kp strains previously detected in the eastern USA.⁴ The index *K. pneumoniae* (1534) identified in 1996 in North Carolina, FL-10 and FL-11 were not related to the main KPC-Kp cluster (genetic homology <90%). Results were interpreted using the modified Kullback-Leibler method.

Table S1. Clinical characteristics and outcomes of patients with ertapenem-resistant *K. pneumoniae* isolates from the South Florida LTACH

Isolate	Age/ sex	Underlying conditions ^a	Previous use of antibiotics (last 2 weeks) ^b	Charlson weighted index	Risk factors ^c	Site of infection/colonization ^d	Rectal colonization	Empirical treatment [agent (daily dose)] ^b	Antimicrobial therapy administered after ID/AST				Treatment outcome	Patient outcome and comments ^{a,b}
									agent ^b	timing from infection onset	duration (days)	daily dose		
#1	61/F	CLD, CTD, gastric ulcer, DM2, CRF	CIP	4	Bc, CVC, Trac and MV	UTI, BSI	present	FEP (1000 mg every 24 h), MEM (1000 mg every 8 h)	IMP TIG	3 days after 4 days after	4 10	500 mg every 8 h 50 mg every 12 h	relapse	alive and in LTACH at the end of study period; persistent urinary tract and rectal colonization
#2	59/F	CLD, RF, dementia	SAM, CIP, TOB	2	Bc, CVC, Trac and MV	UTI	not tested	SAM (3000 mg every 6 h), CIP (500 mg every 12 h), TOB (80 mg every 8 h)	FEP	5 days after	1	unknown	failure	died 1 day after starting definitive treatment with FEP
#3	55/F	CLD, CAD, HF, CTD, DM2	FEP, ATM	4	Bc, CVC, Trac and MV, corticosteroids, endoscopy, ICU stay	BSI	not tested	LEV (500 mg every 24 h)	IMP SXT COL	3 days after 6 days after 5 days after	2 1 10	500 mg every 6 h 160/800 mg every 12 h 150 mg every 12 h	failure	died 18 days after onset of infection
#4	55/F	CLD, DM2, lung CA	CIP, TZP	8	Bc, CVC, corticosteroids	UTI	not tested	FEP (1000 mg every 24 h)	FEP	1 days after	2	1000 mg every 24 h	failure	died of lung CA and CAD 3 days after onset of urinary infection with KPC-Kp
#5	90/F	CLD, MI, dementia, NP, DVT	FEP, GEN, CFZ	5	Bc, CVC, TPN, PEG tube	BSI	not tested	FEP (1000 mg every 12 h), GEN (120 mg every 12 h)	TIG GEN	5 days after 4 days after	10 14	50 mg every 12 h 120 mg every 24 h	failure	died of pancreatitis and polymicrobial sepsis 18 days after onset of illness with KPC-Kp
#6	91/M	CAD, MI, HF, CRF, dementia, prostate CA	IMP, MEM	5	Bc, ICU stay	LRTI	not tested	IMP (500 mg every 8 h), FEP (unknown dose)	FEP SAM CFZ AMX GEN	first day 4 days after 4 days after 4 days after 6 days after	8 2 1 5 1	unknown unknown unknown unknown unknown	not assessable	died of polymicrobial urosepsis, not involving KPC-Kp, 8 days after onset of illness

^aCA, carcinoma; CAD, coronary artery disease; CLD, chronic lung disease; CRF, chronic renal failure; CTD, connective tissue disease; DM2, type II diabetes mellitus; DVT, deep vein thrombosis; HF, heart failure; MI, myocardial ischemia; NP, necrotizing pancreatitis; RF, respiratory failure.

^bSAM, ampicillin/sulbactam; AMX, amoxicillin; ATM, aztreonam, CFZ, cefazolin; CIP, ciprofloxacin; COL, colistin; FEP, cefepime; GEN, gentamicin; IMP, imipenem; LEV, levofloxacin; MEM, meropenem; SXT, trimethoprim/sulfamethoxazole; TIG, tigecycline; TOB, tobramycin; TZP, piperacillin/tazobactam. Notably, only antimicrobial treatments for Gram-negative bacteria were taken into consideration.

^cBc, bladder catheter; CVC, central vascular catheter; ICU, intensive care unit; MV, mechanical ventilation; TPN, total parenteral nutrition; Trac, tracheostomy.

^dUTI, urinary tract infection; BSI, bloodstream infection; LRTI, lower respiratory tract infection.