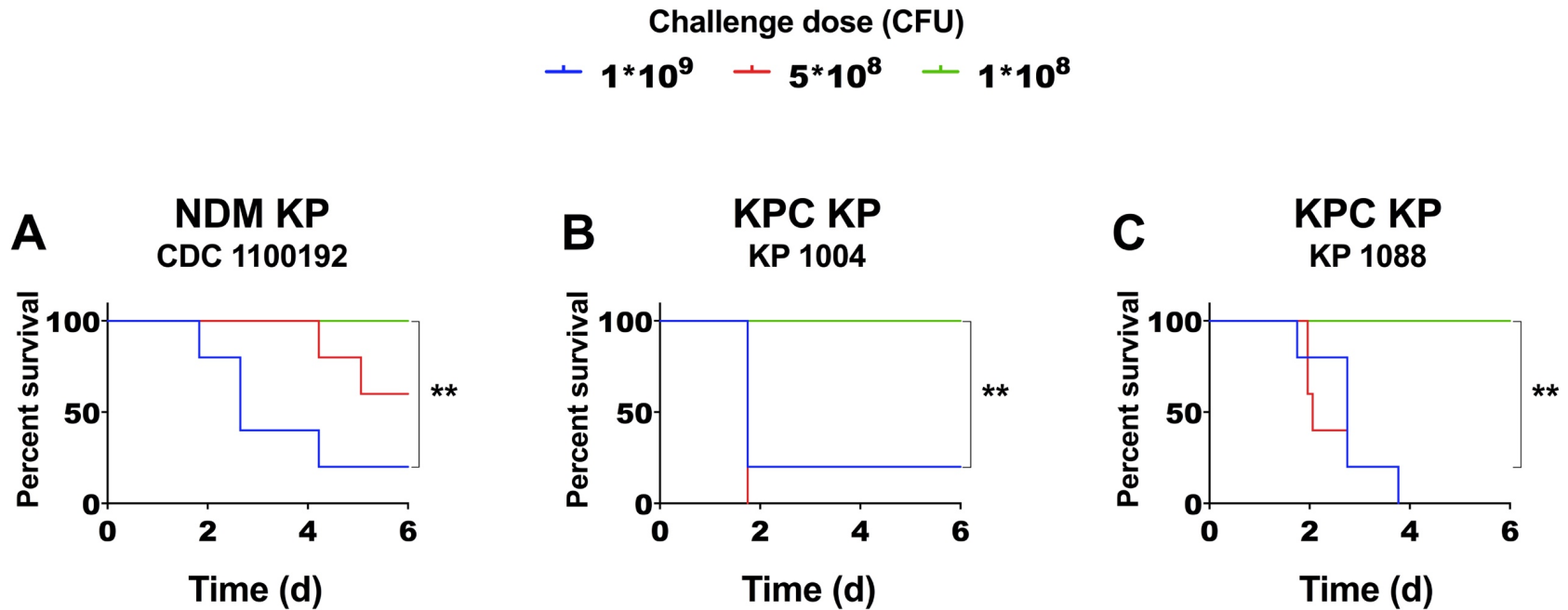


Supplemental Figure S1. (A) No bactericidal activity was seen in NDM KP treated solely with ceftazidime (CAZ) at high doses (16 mg/L) or LL-37 (8 μM) ± CAZ (16 mg/L). (B) ceftazidime-avibactam (CZA) synergizes with LL-37 (8 μM) to kill NDM KP in a dose dependent fashion without bacterial regrowth at 24 h after treatment. *****P*<0.0001; Kruskal Wallis one-way ANOVA.

Murine lung infection mortality



Supplemental Figure S2. Seven-day murine survival curves after intratracheal inoculation with increasing doses of (A) NDM KP and (B-C) KPC KP. (A) High bacterial inoculums of 1×10^9 CFU/mL and (B-C) 5×10^8 CFU/mL are required to yield (>50%) mortality by 72 h (n=5 per group). ** $P < 0.001$; log-rank test.

Supplemental Table S1. Summary of β -lactam resistance determinants in the carbapenemase-encoding *Klebsiella pneumoniae* strains used in this study. Minimum inhibitory concentration (MIC) of β -lactamase inhibitor, avibactam (AVI), and human cathelicidin LL-37 in 5% Luria broth (LB) in Roswell Park Memorial Institute (RPMI) 1640 tissue culture medium are also provided.

<i>K. pneumoniae</i> strain	β -lactam Resistance Genes	Major Porin Mutations	MIC 5%LB-RPMI	
			AVI (mg/L)	LL-37 (μ M)
CDC 1100192	NDM-1, CTX-M-1, CMY-2		64	64
KP1100	KPC		32	32
CDC 0049	NDM-1, CMY-6, CTX-M-15, OXA-1, TEM-1B	OmpK35	32	32
CDC 0158	NDM-1, CTX-M-15, OXA-1, TEM-1B		32	8
KP1088	KPC-3, SHV-1, TEM-1	OmpK35, OmpK36	32	8
KP1004	KPC-2, TEM-1, SHV-11	OmpK35, OmpK36	>64	16

NDM=New Delhi metallo- β -lactamase; CTX=cefotaxime extended- β -lactamase; CMY= plasmid-mediated, cephamycin-hydrolyzing class C β -lactamase; KPC=*Klebsiella pneumoniae* carbapenemase; OXA=carbapenem-hydrolyzing oxacillinase; TEM=Temoniera extended- β -lactamase; SHV=sulphydryl variable- β -lactamase; OmpK=outer membrane protein K.