**Supplemental table 1.** Antibiotic susceptibility for all ESBL and non-ESBL strains used as determined on Vitek 2 automated system

ANTIBIOTIC	E16	E10	E 94	9189	9142	BRA
Amikacin	S	S	S	S	S	S
Amoxicillin/Clavulanic acid	S	S	R	S	S	S
Ampicillin	R	R	R	S	S	S
Cefalothin	R	R	R	S	S	S
Cefaclor	R	R	R	S	S	S
Cefotaxime	R	R	R	S	S	S
Cefoxitin	S	S	S	S	S	S
Ceftazidime	R	R	R	S	S	S
Ciprofloxacin	S	S	R	S	S	S
Gentamicin	S	S	S	S	S	S
Imipenem	S	S	S	S	S	S
Ticarcillin/Clavulanic acid	S	R	R	S	S	S

E16, E10, E94: ESBL clinical strains

9189, 9142, BRA: non-ESBL clinical strains

**S:** sensitive

**R:** resistant

**Supplemental table 2.** Number of kidneys with histopathological alterations at the 1<sup>st</sup>, 2<sup>nd</sup> 6<sup>th</sup> post-infection (PI) day. Mice infected with ESBL strain E94 (n=21) and non-ESBL producing strain BRA (n=21) remained without antibiotic treatment (3<sup>rd</sup> experiment), whereas others infected with ESBL strain E94 (n=22) and non-ESBL producing strain BRA (n=22) were treated with ceftriaxone (4<sup>th</sup> experiment). Grades of histopathological alterations are defined in Methods.

	No treatment			Ceftriaxone treatment			
	ESBL	Non-ESBL	P value	ESBL	Non-ESBL	P value	
Grade	0/1/2/3/4/5	0/1/2/3/4/5		0/1/2/3/4/5	0/1/2/3/4/5		
PI Day 1	2/8/2/0/2/0	2/4/4/2/2/0	0.246	0/2/3/3/4/2	1/5/9/1/0/0	0.009	
PI Day 2	3/4/6/1/0/0	1/6/5/2/0/0	0.635	0/5/4/3/1/1	1/4/4/4/1/0	0.839	
PI Day 6	3/6/0/5/0/0	3/7/0/2/1/1	0.982	0/3/6/3/2/0	4/7/3/0/0/0	0.000	
P value	0.945	0.554		0.270	0.002		

Median scores were rounded up.

Bold face number indicates P < 0.05

Histopathological evaluation results were analyzed by non-parametric Kruskal-Wallis test followed by Mann-Whitney-U test to reveal the source of the differences.