

1 **Supplemental material**

2 **Table S1.** Characteristics of isolates with false negative results

Group	Isolate	Source	Phenotype (β -lactamase)	MIC (mg/L) ^a		
				Cefotaxime	Ceftazidime	Cefepime
Contemporary clinical isolates	<i>E. coli</i>	Urine	Plasmid AmpC (CMY-2)	8	4	≤ 1
	<i>E. coli</i>	Urine	Plasmid AmpC (CMY-2)	8	4	≤ 1
	<i>E. coli</i>	Urine	Plasmid AmpC (CMY-2)	>32	>16	8
	<i>E. cloacae</i>	Wound	AmpC hyperproduced	>32	>16	8
	<i>M. morgani</i>	Urine	AmpC hyperproduced	>32	>16	≤ 1
	<i>P. stuartii</i>	Catheter	AmpC hyperproduced	>32	8	≤ 1
Isolates with characterized mechanism	<i>E. coli</i>	Urine	Plasmid AmpC (CMY-2)	4	8	16
	<i>E. coli</i>	Urine	Plasmid AmpC (CMY-2)	4	8	>16
	<i>E. coli</i>	Urine	Plasmid AmpC (CMY-2)	4	8	>16

3 ^a S: ≤ 1 mg/L; I: 2-4 mg/L for ceftazidime and cefepime, 2 mg/L for cefotaxime; R: >4 for
4 ceftazidime and cefepime, >2 mg/L for cefotaxime (1).

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6 **Table S2.** Characteristics of isolates with non-interpretable results

Group	Isolate	Source	Phenotype (β -lactamase)	MIC (mg/L) ^a		
				Cefotaxime	Ceftazidime	Cefepime
Contemporary clinical isolates	<i>E. coli</i>	Wound	Wild type (-)	≤ 1	≤ 1	≤ 1
	<i>E. coli</i>	Urine	ESBL (SHV-12)	4	>16	8
	<i>E. coli</i>	Urine	ESBL (SHV-12)	8	4	≤ 1
	<i>E. coli</i>	Wound	ESBL (SHV-2)	8	4	1
	<i>K. pneumoniae</i>	Urine	Carbapenemase (VIM-1)	>32	>16	>16
Isolates with characterized mechanism	<i>E. coli</i>	Urine	Carbapenemase (VIM-1)	>32	>16	>16
	<i>E. coli</i>	Urine	Carbapenemase (VIM-1)	>32	>16	>16
	<i>E. coli</i>	Wound	Carbapenemase (VIM-1)	>32	>16	>16
	<i>K. pneumoniae</i>	Catheter	Carbapenemase (VIM-1)	>32	>16	>16
	<i>K. pneumoniae</i>	Urine	Carbapenemase (VIM-1)	>32	>16	>16

7 ^a S: ≤ 1 mg/L; I: 2-4 mg/L for ceftazidime and cefepime, 2 mg/L for cefotaxime; R: >4 for
8 ceftazidime and cefepime, >2 mg/L for cefotaxime (1).

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11 **References**

- 12 1. European Society of Clinical Microbiology and Infectious Diseases. *EUCAST Clinical*
13 *Breakpoints* *Version* *3.1*
14 http://www.eucast.org/fileadmin/src/media/PDFs/EUCAST_files/Breakpoint_tables/Breakpoint_table_v_3.1.pdf(20December, date last accessed)
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