

**TABLE S1** Sequence Type Distribution of 139 CTX-M-producing *E. coli* isolates from different sources

Clonal complex	ST	Number of isolates						Phylogenetic group
		Water (n=26)	Pig (n=31)	Patient (n=36)	Healthy (n=46)	human	Total (n=139)	
10	10	3	7	1	3		14	A
	48		2				2	A
	617	1	1				2	A
	43				1		1	A
23	23	1			1		2	A
	410			1			1	A
	88		1				1	A
	641		2				2	B1
86	453				1		1	B1
	101	101		2			2	B1
	168	93	1			1	2	A
	177	155	1				1	B1
354	354			1	1		2	D
	38	38	4		3	9	16	D
	40	40			1		1	B1
	405	405	2	1	2	1	6	D
46	46		1	1			2	A
	95	95			1	1	2	B2
	205	205	2				2	D
	226	226				2	2	A
69	69				1		1	D
	398	398		1			1	A
	649	162		1			1	D
	62				2		2	D
117		117	2				2	D
	131	4		10	6		20	B2
	295	1					1	B1
	361		1				1	B2
457			2				2	D
	648	3		7	9		19	D
	697				1		1	A
	744			1	1		2	A
746					1		1	A
	773				1		1	A
	1081		1				1	B1
	1112		1				1	A
1193				3			3	B2
	1196		1				1	B1

1684		1	1	A
2003	2		2	D
2035	1		1	A
2345	1		1	B2
3136	1		1	B2
3177		1	1	D
New 3484	1		1	B2
New 3485	1		1	D
New 3724		1	1	B2
New 3725	1		1	A
New 3744	1		1	A
New 3745	1		1	A
New 3746	1		1	B1

**TABLE S2** Distribution of CTX-M subgroups among 139 *E. coli* isolates from different sources

CTX-M type	Number of isolates					Phylogenetic group
	Water (n=26+2 <sup>a</sup> )	Pig (n=31+1 <sup>a</sup> )	Patient (n=36+3 <sup>a</sup> )	Healthy human (n=46+1 <sup>a</sup> )	Total (n=139+7 <sup>a</sup> )	
CTX-M-9 group	16	21	27	42	106	A,B1,B2,D
CTX-M-14	11	9	21	34	75	A,B1,B2,D
CTX-M-24		2	2	3	7	A,B1,B2,D
CTX-M-27	1	1	3	2	7	A, B2,D
CTX-M-65	4	5	1	3	13	A,B1,B2,D
CTX-M-98		2			2	A
CTX-M-104		1			1	D
CTX-M-121		1			1	B2
CTX-M-1 group	12	11	12	5	40	A,B1,B2,D
CTX-M-3	1		1	1	3	A,D
CTX-M-15	6		4	2	12	A, B2,D
CTX-M-55	5	11	6	2	24	A,B1,B2,D
CTX-M-123			1		1	A

<sup>a</sup>: these isolates harbors both CTX-M-9 group and CTX-M-1 group ESBLs.

**TABLE S3** Resistance rates of ESBLs-producing *E. coli* isolates and *p* values of various classifications<sup>a</sup>

Antimicrobial agents	water isolates (N=26)	healthy human (N=46)	<i>p</i> <sup>b</sup>	pig feces (N=31)	hospitalized patients (N=36)	<i>p</i>	hospitalized patients (N=36)	healthy human (N=46)	<i>p</i>
ceftazidime	34.6	6.5	<b>0.006</b>	16.1	47.2	<b>0.009</b>	47.2	6.5	<b>0.000</b>
aztreonam	69.2	19.6	<b>0.000</b>	61.3	78.4	0.184	78.4	19.6	<b>0.000</b>
cefoxitin	19.2	0.0	<b>0.005</b>	0.0	11.1	0.118	11.1	0.0	0.034
cefepime	19.2	4.3	0.090	9.7	47.2	<b>0.001</b>	47.2	4.3	<b>0.000</b>
levofloxacin	76.9	37.0	<b>0.001</b>	48.4	88.9	<b>0.000</b>	88.9	37.0	<b>0.000</b>
moxifloxacin	76.9	41.3	<b>0.006</b>	48.4	88.9	<b>0.000</b>	88.9	41.3	<b>0.000</b>
cefoperazone/sulbactam	15.4	4.3	0.180	3.2	41.7	<b>0.000</b>	41.7	4.3	<b>0.000</b>
ciprofloxacin	76.9	41.3	<b>0.006</b>	48.4	88.9	<b>0.000</b>	88.9	41.3	<b>0.000</b>

**TABLE S3** Resistance rates of ESBLs-producing *E. coli* isolates and *p* values of various classifications (**continued table**)

Antimicrobial agents	ST131 (N=20)	ST38 (N=16)	<i>p</i>	ST648 (N=19)	ST38 (N=16)	<i>p</i>	ST10 cplx (N=19)	ST38 (N=16)	<i>p</i>
aztreonam	65.0	18.8	<b>0.008</b>	31.6	18.8	0.460	63.2	18.8	0.016
levofloxacin	75.0	18.8	<b>0.002</b>	100.0	18.8	<b>0.000</b>	68.4	18.8	<b>0.006</b>
moxifloxacin	75.0	18.8	<b>0.002</b>	100.0	18.8	<b>0.000</b>	68.4	18.8	<b>0.006</b>

ciprofloxacin	75.0	18.8	<b>0.002</b>	100.0	18.8	<b>0.000</b>	68.4	18.8	<b>0.006</b>
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<sup>a</sup> $p<0.01$ , the significant differences level. This table only shows the antibiotics with a significant difference, while the other antibiotics without significant differences were not included.