

1 Supplementary materials

2 **Table S1.** SNP based clonal overlaps of ESBL-Ec strains isolated from poultry meat and urine
3 samples

No. of clonal overlaps	Strain ID	Source	Sequence type	O:H type	No. of SNP difference
Poultry meat					
1	12-1-ChFC2 S31	Free-ranged chicken	2179	O9:H9	16
	3-9-ChBE1	Broiler chicken	2179	O9:H9	16
2	16-12-ChBE1	Broiler chicken	359	O11:H4	1
	16-12-DucE1	Duck	359	O11:H4	1
3	21-7-DucE1 S45	Duck	1421	O9:H4	12
	21-7-ChFE1S44	Free-ranged chicken	1421	O9:H4	12
4	7-8-ChBE1	Broiler chicken	3489	O147:H40	0
	14-2-PigC1 S32	Pigeon	3489	O147:H40	0
5	6-13-Duc E1	Duck	1716	O81:H45	0
	6-13-ChBE1	Broiler chicken	1716	O25:H9	0
6	7-2-ChFC3	Free-ranged chicken	10	O89:H9	9:Pig, 8:Duc
	6-7-PigE-1	Pigeon	10	O89:H9	9:Ch, 1:Duc
	6-7-DucE1 S43	Duck	10	O89:H9	8:CH, 1:Pig
7	12-7-PigE1	Pigeon	1588	O183:H34	0
	12-7-DucE1	Duck	1588	O183:H34	0
8	18-7-DucE1	Duck	3052	O8:H52	19
	13-10-DucE1	Duck	3052	O7:H18	19
9	12-10-PigE1	Pigeon	38	O153:H30	13
	11-9-PigE1	Pigeon	38	O153:H30	13
UTI patients					
1	AD-659	Adult	38	O86:H18	0
	AD-530	Adult	38	O86:H18	0
2	AD-682	Adult	648	O1:H6	2
	AD-673	Adult	648	O1:H6	2
3	AD-211	Adult	827	O4:H1	0
	AD-193	Adult	827	O4:H1	0
4	AD-295	Adult	1193	O75:H5	5:AD-119
	AD-119	Adult	1193	O75:H5	5:AD-295
	AD-688	Adult	1193	O75:H5	16:AD-535, 19:AD-677
	AD-580	Adult	1193	O75:H5	18:AD-535, 21:AD-677
	AD-677	Adult	1193	O75:H5	9:AD-535, 21:AD-580, 16:AD-640, 17:AD-665, 19:AD-688

	AD-640	Adult	1193	O75:H5	17:AD-535, 19:AD677
	AD-665	Adult	1193	O75:H5	14:AD-535, 17:AD-677
	AD-535	Adult	1193	O75:H5	18:AD-580, 17:AD-640, 14:AD-665, 9:AD-667
5	AD-613	Adult	131	O16:H5	14
	AD-633	Adult	131	O16:H5	14
6	AD-586	Adult	131	O25:H4	18:AD-364, 13:AD-660
	AD-660	Adult	131	O25:H4	13:AD-586
	AD-364	Adult	131	O25:H4	18:AD-586
7	AD-563	Adult	131	O25:H4	19:AD-624, 11:AD-101
	AD-624	Adult	131	O25:H4	19:AD-563
	AD-101	Adult	131	O25:H4	11:AD-563
8	AD-545	Adult	131	O25:H4	12:AD-620, 17:AD-622, 15:AD-674, 9:CH-151
	AD-674	Adult	131	O25:H4	15:AD-545, 15:AD-620, 20:AD-622, 12:CH151
	CH-151	Child	131	O25:H4	9:AD-545, 9:AD-620, 14:AD-622, 12:AD-674
	AD-620	Adult	131	O25:H4	12:CH-545. 15:AD-622, 15:AD-674, 9:CH-151
	AD-622	Adult	131	O25:H4	17:AD-545, 15:AD-620, 20:AD-674, 14:CH-151
9	AD-342	Adult	131	O25:H4	1
	AD-398	Adult	131	O25:H4	1
10	AD-082	Adult	131	O25:H4	14
	AD-486	Adult	131	O25:H4	14
11	AD-423	Adult	131	O25:H4	2
	AD-444	Adult	131	O25:H4	2
12	AD-184	Adult	131	O25:H4	20:AD-109, 15:CH-173
	CH-173	Child	131	O25:H4	15:AD-184
	AD-109	Adult	131	O25:H4	20:AD-109

Table S2. MGE carrying antibiotic resistance genes potentially linked to plasmid

# MGE	ID of isolate	Source of isolate	MGE type	Plasmid type	ARG
1	1-10-ChBE1	Chicken	Tn2	IncN	<i>bla</i> _{TEM-1B_1}
	11-12-ChFE1	Chicken	Tn2	IncN	<i>bla</i> _{TEM-1B_1}
	11-6-ChFE1	Chicken	Tn2	IncI γ /K1	<i>bla</i> _{TEM-1B_1}
	6-11-DucE1_S58	Duck	Tn2	IncX1	<i>bla</i> _{TEM-1B_1}
	6-6-ChFE1	Chicken	Tn2	IncFIB	<i>bla</i> _{TEM-1B_1}
	8-9-ChFE1	Chicken	Tn2	IncFIB	<i>bla</i> _{TEM-1B_1}
	13-8-ChBE1_S50	Chicken	Tn2	IncI γ /K1	<i>bla</i> _{TEM-1B_1}
	16-12-ChBE1	Chicken	Tn2	IncN	<i>bla</i> _{TEM-1B_1}
	16-12-DucE1	Duck	Tn2	Not Determined	<i>bla</i> _{TEM-1B_1}
	16-7-ChBE1_S46	Chicken	Tn2	IncHI1B	<i>bla</i> _{TEM-1B_1}
	21-12-ChFE1	Chicken	Tn2	Not Determined	<i>bla</i> _{TEM-1B_1}
2	13-6-ChFE1_S39	Chicken	Tn1721	IncI γ /K1	<i>tet</i> (A)_6
3	13-2-ChBC3	Chicken	ISVsa3	IncFIA	<i>floR</i> _2
4	13-7-DucE1	Duck	IS26	IncX1	<i>sul3</i> _2
	13-7-DucE1	Duck	IS26	IncX1	<i>bla</i> _{TEM-1B_1}
5	4-6-PigE1	Pigeon	Tn6114	IncI γ /K1	<i>bla</i> _{CMY-2_1}
6	4-6-PigE1	Pigeon	ISAp11	IncP	<i>mcr</i> -1.1_1
7	6-6-ChFE1	Chicken	IS26	IncFIB	<i>dfrA14</i> _5
8	AD-040	Human	IS26	IncFIA	<i>sul2</i> _2
	AD-040	Human	IS26	IncFIA	<i>aph</i> (3'')-Ib_5
	AD-040	Human	IS26	IncFIA	<i>aph</i> (6)-Id_1
	AD-040	Human	IS26	IncFIA	<i>tet</i> (A)_6
	CH-151	Human	IS26	IncFIA	<i>tet</i> (A)_6
	CH-151	Human	IS26	IncFIA	<i>aph</i> (6)-Id_1
	CH-151	Human	IS26	IncFIA	<i>aph</i> (3'')-Ib_5
	CH-151	Human	IS26	IncFIA	<i>sul2</i> _2

Table S3. MGE carrying antibiotic resistance genes potentially linked to chromosome

# MGE	ID of isolates	Source of isolate	MGE type	ARG
1	1-11-ChBE1_S57	Chicken	Tn7	<i>ant(3'')-Ia_1</i>
	1-11-ChBE1_S57	Chicken	Tn7	<i>dfrA1_8</i>
	11-9-PigE1_S55	Pigeon	Tn7	<i>dfrA1_8</i>
	11-9-PigE1_S55	Pigeon	Tn7	<i>ant(3'')-Ia_1</i>
	CH-119	Human	Tn7	<i>ant(3'')-Ia_1</i>
	CH-119	Human	Tn7	<i>dfrA1_8</i>
	7-6-PigE1	Pigeon	Tn7	<i>dfrA1_8</i>
	7-6-PigE1	Pigeon	Tn7	<i>ant(3'')-Ia_1</i>
2	5-9-PigE1	Pigeon	ISVsa3	<i>floR_2</i>
3	22-7-ChBE1	Chicken	Tn1721	<i>tet(A)_6</i>
4	7-8-DucE1	Duck	ISSen9	<i>tet(B)_2</i>
5	AD-221	Human	GI _{sul2}	<i>sul2_2</i>

Figure S1. Maximum-likelihood SNP-based phylogenetic tree of ST131 ESBL-Ec strains (n=61) isolated from urine samples showing the clonal distribution

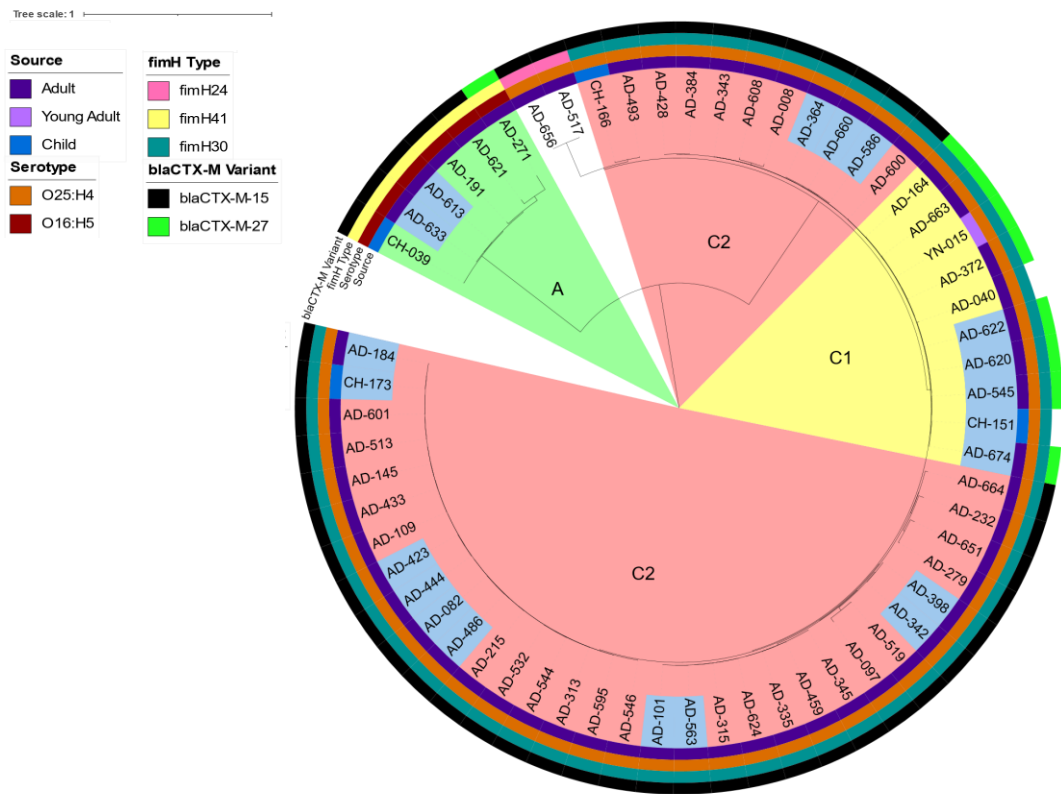


Figure S2. Pangenome analysis of 4 shared lineages (ST10, ST38, ST457, and ST648) found in both poultry meat and urinary sources

