

# *mcr-1* in *Enterobacteriaceae* from Companion Animals, Beijing, China, 2012–2016

## Technical Appendix

**Technical Appendix Table 1.** Antimicrobial drug MICs of colistin-resistant *Escherichia coli* from companion animals (n=56)\*

Antimicrobial agents†	<i>mcr-1</i> -positive <i>E. coli</i> (n = 47)			<i>mcr-1</i> -negative <i>E. coli</i> (n = 9)			p value‡
	MIC <sub>50</sub> , µg/mL	MIC <sub>90</sub> , µg/mL	Resistance, %	MIC <sub>50</sub> , µg/mL	MIC <sub>90</sub> , µg/mL	Resistance, %	
Colistin	8	256	100.0%	4	16	100.0%	NA
Polymyxin B	8	64	100.0%	4	16	100.0%	NA
Amoxicillin-clavulanic acid	64/32	>128/64	70.2%	16/8	16	33.3%	0.0296
Ampicillin	>256	>256	97.9%	128	64/32	66.7%	0.0111
Tigecycline	0.5	1	2.1%	0.25	>256	0.0%	NA
Enrofloxacin	32	64	74.5%	0.25	0.5	44.4%	0.1121
Cefotaxime	>256	>256	91.5%	128	128	66.7%	0.0740
Chloramphenicol	128	>256	89.4%	4	>256	22.2%	0.0002
Gentamicin	>256	>256	85.1%	64	>256	55.6%	0.0632
Imipenem	0.25	0.5	0.0%	0.25	>256	0.0%	NA

\*Colistin-resistant *Escherichia coli* was isolated from 57 samples, including 1 from an owner of a companion animal that was excluded from this table; NA, not applicable.

†The MICs of amoxicillin-clavulanate, ampicillin, enrofloxacin, cefotaxime, chloramphenicol, gentamicin, and imipenem were interpreted according to the CLSI document VET01S 3<sup>rd</sup> ed. The MIC of colistin, polymyxin B, and tigecycline were interpreted according to the European Committee on Antimicrobial Susceptibility Testing clinical breakpoints (version 6.0).

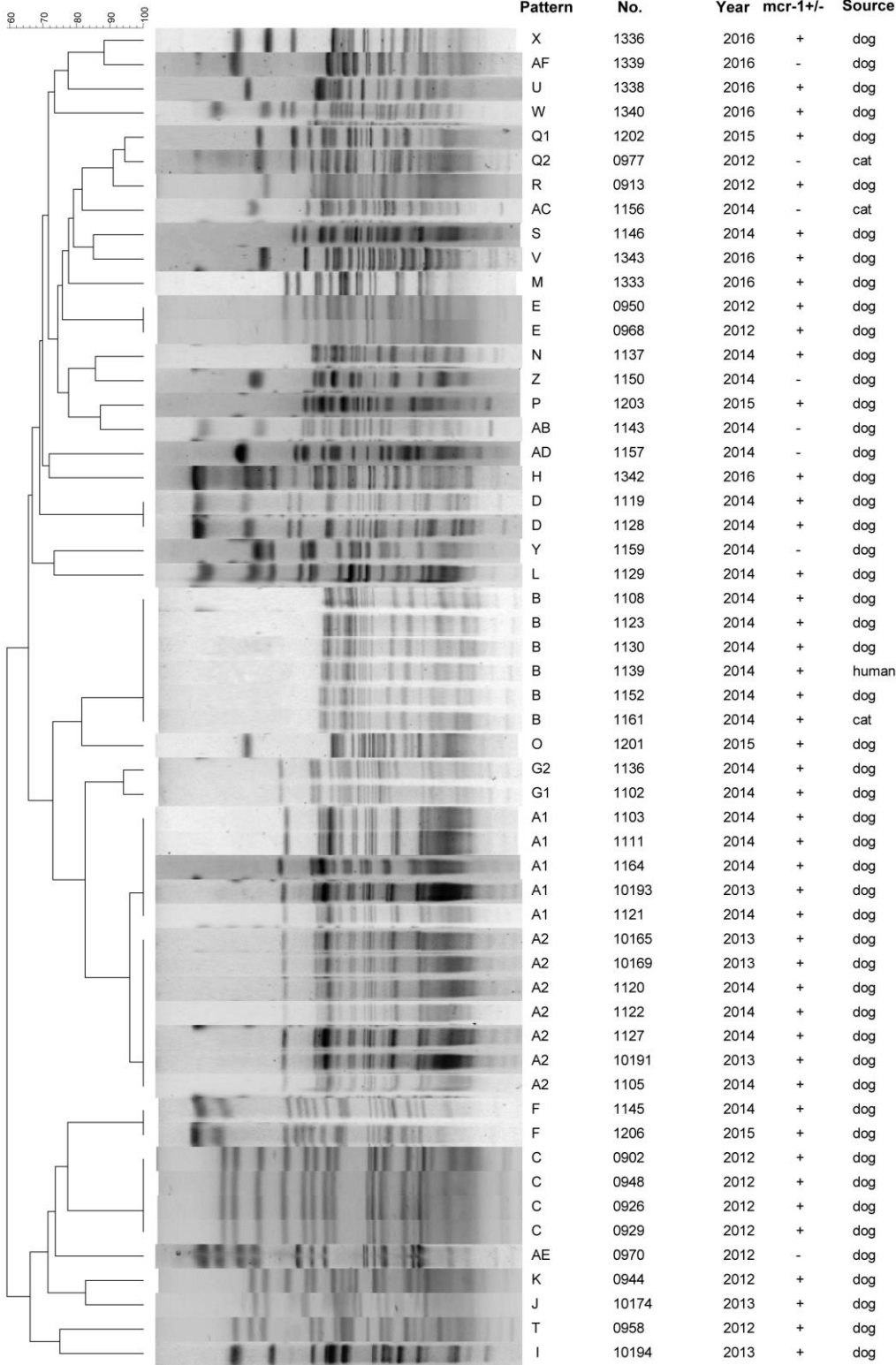
‡p values were determined by Fisher exact test.

**Technical Appendix Table 2.** Characterization of pet foods and the presence of *mcr-1* gene

Type of pet food	Year of production	Ingredients	Pet food sample numbers*	Origin	<i>mcr-1</i> -positive pet food
Dry foods	2015	Chicken meal	15–19, 22	China	16, 19
Dry foods	2015	Chicken meal	20	Belgium	20
Dry foods	2015	Chicken meal	27	Australia	0
Dry foods	2015	Chicken, fish/pork	21, 23, 27, 29, 30, 34, 35	China	21, 34, 35
Dry foods	2016	Chicken	24–26	China	0
Dry foods	2015	Chicken	31, 32	USA	0
Dry foods	2015	Fish/chicken	33	Germany	0
Semi-moist foods	2016	Chicken	1,2,5	China	0
Semi-moist foods	2016	Chicken, bovine spleen	6–8	China	0
Semi-moist foods	2016	Chicken, pork/fish	3, 4	China	0
Canned wet foods	2016	Chicken, beef, mutton	9–11	Thailand	0
Canned wet foods	2016	Chicken	12–14	Italy	14

\*Total: 35 samples of pet foods. Numbers 2, 4, 5, 33, and 34 are cat food; remaining samples are dog food

Dice (Opt:1.50%) (Tol:1.5%-1.5%) (H>0.0% S>0.0%) [0.0%-100.0%]  
 PFGE PFGE



**Technical Appendix Figure.** XbaI pulsed-field gel electrophoretic analysis of colistin-resistant *Escherichia coli*.