

**Table S3:** Occurrence of *mcr* genes in *E. coli* isolates from samples obtained from (i) diseased pigs or (ii) healthy pigs with defined *E. coli* pathotypes/VAG-typed *E. coli*. Studies that involved the screening of other animals/humans were included only for data as defined under (i) and (ii).

Country <sup>a</sup>	Year of isolation	Source of samples <sup>b</sup>	No. of <i>E. coli</i> isolates tested for <i>mcr</i> genes <sup>c</sup>	<i>mcr-1</i>	<i>mcr-2</i>	<i>mcr-3</i>	<i>mcr-4</i>	<i>mcr-5</i>	<i>mcr-6 – mcr-10</i>	Reference
				% (no. of positive isolates per no. of tested isolates)					no. of pos. isolates	
AUT	n.t.	Clinical samples of suckling and weaning pigs	102 Ec (22.5% ETEC, 4.9% EDEC)	2.9% (3/102)	0% (0/102)	0% (0/102)	0% (0/102)	0% (0/102)	n.t.	[44]
BEL	2011-2012	Diarrheic pigs	53 ColR Ec	13.2% (7/53)	20.8% (11/53)	n.t.	n.t.	n.t.	n.t.	[17, 45]
CHN	2015-2016	PWD	5 Ec: 3 hybrid ETEC/STEC, 2 aEPEC	100% (5/5) (3 <i>mcr-1</i> & <i>mcr-3</i> )	0% (0/5)	60% (3/5) (3 <i>mcr-1</i> & <i>mcr-3</i> )	0% (0/5)	0% (0/5)	0/5	[49]
CHN	2017-2018	5 swine farms	86 Ec which were positive for at least one VAG associated with porcine ExPEC	100% (86/86)	0% (0/86)	0% (0/86)	0% (0/86)	0% (0/86)	n.t.	[46]
CHN	2020-2021	Diarrheic pigs	19 ETEC	0% (0/19)	0% (0/19)	0% (0/19)	0% (0/19)	0% (0/19)	0/19	[50]
ESP	1999-2018	Clinical cases of diarrhoea in neonatal and post-weaned piglets	200	7% (14/200)	0% (0/200)	0% (0/200)	13% (27/200)	3% (6/200)	n.t.	[32]
ESP	2005-2014	PWD	70 (10/year)	20.0% (14/70)	0% (0/90)	0% (0/90)	1.4% (1/70)	0% (0/70)	n.t.	[8]
ESP	2006-2016	Enteric colibacillosis	481 Ec tested for <i>mcr-1</i>	25.6% (123/481) (3 <i>mcr-1</i> & <i>mcr-4</i> ,	0% (0/65)	0% (0/65)	4.6% (3/65)	6.2% (4/65)	n.t.	[26]

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				% (no. of positive isolates per no. of tested isolates)					no. of pos. isolates	
ESP	2006-2016	Enteric colibacillosis	65/123 <i>mcr-1</i> -pos. Ec tested for <i>mcr-2</i> , -3, -4, -5 35 <i>mcr</i> -positive (35/499 investigated isolates)	4 <i>mcr-1</i> & <i>mcr-5</i> 54.3% (19/35) (2 <i>mcr-1</i> & <i>mcr-4</i> )	0% (0/35)	0% (0/35)	(3 <i>mcr-1</i> & <i>mcr-4</i> ) 45.7% (16/35) (2 <i>mcr-1</i> & <i>mcr-4</i> )	(4 <i>mcr-1</i> & <i>mcr-5</i> ) 5.7% (2/35)	n.t.	[10]
ESP	2006-2016	Diarrheic piglets and pork meat	11 APEC-, UPEC-, and ExPEC-like	45.5% (5/11)	0% (0/11)	0% (0/11)	0% (0/11)	0% (0/11)	0/11	[51]
ESP	2006-2017	PWD	186 Ec: 86.5 % ETEC (161/186) 5.4% STEC (10/186) 8.1% hybrid ETEC/STEC (15/186)	19.9% (37/186) (2 <i>mcr-1</i> & <i>mcr-4</i> , 2 <i>mcr-1</i> & <i>mcr-5</i> )	0% (0/186)	0% (0/186)	54.8% (102/186) (2 <i>mcr-1</i> & <i>mcr-4</i> , 1 <i>mcr-4</i> & <i>mcr-5</i> )	2.7% (5/186) (2 <i>mcr-1</i> & <i>mcr-5</i> , 1 <i>mcr-4</i> & <i>mcr-5</i> ]	n.t.	[3,9]
ITA	2015-2016	PWD	51	72.5% (37/51)	0% (0/14 <i>mcr-1</i> -negative)	n.t.	n.t.	n.t.	n.t.	[11]
ITA	After 2019	Supected enteritis	1	0% (0/1)	0% (0/1)	0% (0/1)	0% (0/1)	0% (0/1)	<i>mcr-9</i> (1/1) <i>mcr-6</i> , -7, -8, -10 (0)	[52]
ITA, ESP, BEL	2015-2016	PWD	125 (50 ColR) ITA: 34, Spain: 43, BEL: 48	25.6% (32/125)	2.4% (3/125) (BEL: P 2, CA 1; see Ref. [1])	0% (0/125)	8.8% (11/125)	n.t.	n.t.	[12]
JPN	2011-2015	4 pigs with edema	4 Ec (4/4 STEC)	100% (4/4)	n.t.	n.t.	n.t.	n.t.	n.t.	[47]

Country <sup>a</sup>	Year of isolation	Source of samples <sup>b</sup>	No. of <i>E. coli</i> isolates tested for <i>mcr</i> genes <sup>c</sup>	<i>mcr-1</i>	<i>mcr-2</i>	<i>mcr-3</i>	<i>mcr-4</i>	<i>mcr-5</i>	<i>mcr-6 – mcr-10</i>	Reference
				% (no. of positive isolates per no. of tested isolates)					no. of pos. isolates	
JPN	2004-2014	disease from one farm Diseased swine	684 (309/684 ColR)	13% (90/684)	n.t.	n.t.	n.t.	n.t.	n.t.	[48]
JPN	2008-2015	PWD	120	30% (36/120) (5 <i>mcr-1</i> & <i>mcr-5</i> )	0% (0/120)	8.3% (10/120)	0% (0/120)	28.3% (34/120) (5 <i>mcr-1</i> & <i>mcr-5</i> )	<i>mcr-9</i> (1/120) <i>mcr-6, -7, -8, -10</i> (0/120)	[30,31]
KOR	2007-2016	PWD (100 herds)	364	1.1% (4/364) (3 <i>mcr-1</i> & <i>mcr-3</i> )	0% (0/364)	2.2% (8/364) (3 <i>mcr-1</i> & <i>mcr-3</i> )	n.t.	n.t.	n.t.	[35]
KOR	2011-2018	Diseased pigs	31	n.t.	n.t.	45.2% (14/31)	n.t.	n.t.	n.t.	[36]
THA	2007-2013	Clinically sick pigs	2 ColR	100% (2/2) (2 <i>mcr-1</i> & <i>mcr-3</i> )	0% (0/2)	100% (2/2) (2 <i>mcr-1</i> & <i>mcr-3</i> )	0% (0/2)	n.t.	n.t.	[37]
THA	2011-2018	Diarrheic pigs	100	20% (20/100) (13 <i>mcr-1</i> & <i>mcr-3</i> )	0% (0/100)	70% (70/100) (13 <i>mcr-1</i> & <i>mcr-3</i> )	0% (0/100)	n.t.	n.t.	[38]
THA	2017-2020	Healthy farrowing sows and suckling piglets	70 ColR Ec: 20 <i>mcr</i> -pos. Ec tested for VAGs present in ETEC and EHEC - non-pathogenic (8/20), ETEC-like (6/20), ETEC (5/20), hybrid	24.3% (17/70)	0% (0/70)	4.3% (3/70)	0% (0/70)	0% (0/70)	<i>mcr-6, -7, -8</i> (0/70) <i>mcr-9, -10</i> n.t.	[33]

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				% (no. of positive isolates per no. of tested isolates)					no. of pos. isolates	
THA	2018-2019	Diarrheic pigs during edema disease outbreak	EHEC-ETEC (1/20) 37 (12 non-pathogenic Ec, 9 ETEC-like, 7 AEEC, 5 ETEC, 2 Adhesive Fimbriae Ec, 1 STEC, 1 EDEC)	48.6% (18/37) (10 <i>mcr-1</i> & <i>mcr-3</i> )	0% (0/37)	54.1% (20/37) (10 <i>mcr-1</i> & <i>mcr-3</i> )	0% (0/37)	0% (0/37)	0/37	[39]
TWN	2012-2016	Diseased swine	In total 492 Ec (2012: 96 Ec, 2013: 252 Ec, 2016: 144 Ec)	29.7% (146/492)	n.t.	n.t.	n.t.	n.t.	n.t.	[29]

<sup>a</sup> 3-letter country abbreviation: AUT, Austria; BEL, Belgium; CHN, China; ESP, Spain; ITA, Italy; JPN, Japan; KOR, The Republic of Korea; THA, Thailand; TWN, Taiwan.

<sup>b</sup> Abbreviation: PWD, Post-weaning diarrhea

<sup>c</sup> Abbreviations: AEEC, attaching and effacing *E. coli*; aEPEC, atypical enteropathogenic *E. coli*; APEC, avian pathogenic *E. coli*; ColR, colistin resistant; Ec, *E. coli*; EDEC, edema disease *E. coli*; EHEC, enterohaemorrhagic *E. coli*; ETEC, enterotoxigenic *E. coli*; ETEC-like, enterotoxigenic-like *E. coli*; ExPEC, extraintestinal pathogenic *E. coli*; STEC, Shiga toxin producing *E. coli*; UPEC, uropathogenic *E. coli*; VAGs, virulence-associated genes.

n.t. = not tested