Contents

Supplemental table 1. Extracted data summary

Host		Bacteria	No. of papers	*mcr* types	Plasmid types	Countries
Water	Sewage rivers and seas	P. *E. coli*	4	*mcr*-1	IncX4, IncHI2, IncI2, others	Brazil[1], China[2], Italy[3], Spain[4]
		Salmonella spp.	1	*mcr*-5	ColE	Germany[5]
		K. pneumoniae	3	*mcr*-1	IncHI2, IncI2, IncP	China[6,7], Spain[4]
		Other bacteria	15	*mcr*-1 *mcr*-3	IncHI2, IncI2	Algeria[8], China[7,9-11], China[10,12-16], Norway[17], Malaysia[18], Switzerland[19]
Animal	Swine	P. *E. coli*	26	*mcr*-1 *mcr*-2 *mcr*-3 *mcr*-4	IncX4, IncHI2, IncI2, others	Belgium[20-22], Brazil[23], China[13,22,24-35], Estonia[36], Germany[37], Laos[38], Portugal[39], South Korea[40]Spain[22,41,42], United Kingdom[43,44], U.S[45], Venezuela[46], Vietnam[47]
		Salmonella spp.	4	*mcr*-1 *mcr*-4	IncHI2, IncI2	China[48], Italy[22], Spain[41], United Kingdom[43]
		K. pneumoniae	2	*mcr*-1 *mcr-8*	IncHI2, IncI2, IncP	China[49] Portugal[39]
		Other Bacteria	12	*mcr*-1 *mcr*-2 *mcr*-3 *mcr*-5 *mcr*-6	IncI2	China[50-53], England[54,55], Japan[56], France[57,58], Lebanon[59], Germany[60]Spain[58,61], Vietnam[47]
	Poultry	P. *E. coli*	25	*mcr*-1 *mcr-3*	IncX4, IncHI2, IncI2, others	Algeria[38,62], Argentina[63], Brazil [23], China[12,14,31,64-70], Egypt[64,71], Italy[69,72], Pakistan[73], Portugal[74], Spain[41], Tunisia[75,76], Vietnam[77]
		Salmonella spp.	7	*mcr*-1 *mcr*-5	IncI2, IncP, ColE	China[78-82], Germany[5], Italy[83]
		K. pneumoniae	4	*mcr*-1 *mcr-7*		China[49,78,144,145]
			12	*mcr*-1	IncI2	

		Other Bacteria				Brazil[84], China[85,86], France[57,58], Germany[87], Lebanon[88], Netherland[58], Japan[56], Pakistan[89]
	Cattle	P. *E. coli*	5	*mcr*-1 *mcr*-2 *mcr*-3	IncHI2, IncX4, others	Belgium[20,21], Egypt[90], France[91], Spain[92]
		Other Bacteria	1	*mcr*-1	IncI2	Japan[56]
	Other animals	P. *E. coli*	10	*mcr*-1	IncHI2, IncX4, others	Argentina[87], Brazil[1], China [14,16], France[93], Germany[94], Italy[69,94], Lithuania[95], Vietnam[96]
		Other Bacteria	1	*mcr*-1	IncX	China[97]
Food	Pork	P. *E. coli*	3	*mcr*-1	IncX4	China[26,98], Japan[99]
		Salmonella spp.	1	*mcr*-1 *mcr*-2	IncX4	Belgium[100]
		Other Bacteria	1	*mcr*-1	NA	China[50]
	Chicken meat	P. *E. coli*	11	*mcr*-1	IncX4, incI2, others	China[12,14,26,98,101,102], Japan[99], Italy[83], Netherland[103], Switzerland[104], Turkey[105]
		Salmonella spp.	3	*mcr*-1 *mcr*-5	IncHI2, IncX4, others	China[82], England and wales[106], Germany[5], Italy[83]
		Other Bacteria	1	*mcr*-3	Chromosome, Others	China[107]
	Beef	P. *E. coli*	2	*mcr*-1	other	Canada[108], China[98]
	Other foods	P. *E. coli*	6	*mcr*-1	UN	China[109,110], Colombia[111], Switzerland[19], Vietnam[112]
		Salmonella spp.	2	*mcr*-1	IncHI2	China[113,114],Colombia[111], Portugal[115]
		K. pneumoniae	1	*mcr*-1	UN	Colombia[111]
		Other Bacteria	2	*mcr*-1	IncHI2	Bolivia[116], China[110]
Human	Fecal	P. *E. coli*	24	*mcr*-1	IncX4, IncHI2, IncI2	Austria[117], Cambodia[118], China[98,119-126], Japan[127-130], Finland[131], Netherland[132,133], South Korea[134], Spain[135], U.S.[136,137], Switzerland[104,138,139],

		Salmonella spp.	5	*mcr*-1	IncX4, IncHI2, IncI2, others	China[142-48,81,140]
		K. pneumoniae	4	*mcr*-1	IncX4	Italy[143], France[144], U.S[145], Japan[129]
		Other Bacteria	3	*mcr*-1 *mcr-3*	IncX4 IncI2	China[146,147] Vietnam [148]
	Other samples	P. *E. coli*	53	*mcr*-1 *mcr-3*	IncX4, IncI2, others	Algeria[149], Australia[150], Argentina and Canada[151], Belgium [152], Brazil[1,153], Bahrain, K.S.A and U.A.E[154], China[7,32,98,119,155-170], Ecuador[171], Egypt[172], Hungary[173], Italy[3,8,174-176], Malaysia[18], Norway [177],Oman[178], Poland[179], Portugal[180,181], Spain[182-184], Singapore[185], South Africa[186-188], South Korea[189], Thailand[190,191], U.S.[192-194], Vietnam[195]
		Salmonella spp.	3	*mcr*-1	IncX4, IncI2	China[32], Denmark[196], U.S[145]
		K. pneumoniae	7	*mcr*-1	IncX4	Brazil[197], China[32,156,161], Thailand[198], India[199], Portugal[200]
		Other Bacteria	5	*mcr*-1 *mcr-3*	NA	China[11,168,201], Italy[166], Singapore[202], South Korea[189]

- N.B: About 63 articles included data on more than one host.
- NA: Data are not available.

Supplemental table 2. Data included in the systematic review

N	DOI	The title of the reference	Year	Country	Continent	Host	Sample type	Species	No. of Strain	Total *mcr*-1 gene	Total sum of other *mcr* genes	Other *mcr* types	Total *mcr* genes	Plasmids Count	Plasmid Types	ST of *E.coli* carrying *mcr*-1	Count of ST of E.coli carrying mcr-1
1	10.1128/AAC.01075-16	*mcr -1.2, a New mcr Variant Carried on a Transferable Plasmid from a Colistin-Resistant KPC Carbapenemase-Producing Klebsiella pneumoniae Strain of Sequence Type 512*	2014	Italy	Europe	Human	Fecal	*Klebsiella pneumoniae*	1	2		mcr1.2	2	1	IncX4		
2	10.3201/eid2305.161942	*mcr*-1 Colistin Resistance in ESBL-Producing *Klebsiella pneumoniae*, France.	2016	France	Europe	Human	Fecal	*Klebsiella pneumoniae*		1			1	1	IncX4		
3	10.1128/AAC.01272-17	Chromosome-Mediated *mcr*-3 Variants in *Aeromonas veronii* from Chicken Meat	2015	China	Asia	Poultry	Chicken meat	*Aeromonas veronii*	16		2	mcr3.2	2	2	Chromsomal		
4	10.1128/AAC.00234-17	Colistin-Resistant *mcr*-1-Positive *Escherichia coli* on Public Beaches, an Infectious Threat Emerging in Recreational Waters.	2016	Brazil	South America	Water	Water	P. *Escherichia coli* Serotype (ONT:H55, O9:H4, O54:H32)		3			3	3	IncX4	10	2
		Colistin-Resistant *mcr*-1-Positive *Escherichia coli* on Public Beaches, an Infectious Threat Emerging in Recreational Waters.	2016	Brazil	South America	Poultry	Migratory penguin	P. *Escherichia coli* Serotype (ONT:H32)		1			1	1	IncX4	46	1
		Colistin-Resistant *mcr*-1-Positive *Escherichia coli* on Public Beaches, an Infectious Threat Emerging in Recreational Waters.	2016	Brazil	South America	Human	Blood , Urine, Abdomen	P. *Escherichia coli* Serotype (ONT:H9)		1			1	1	IncX4	1638	1
		Colistin-Resistant *mcr*-1-Positive *Escherichia coli* on Public Beaches, an Infectious Threat Emerging in Recreational Waters.														46	1
		Colistin-Resistant *mcr*-1-Positive *Escherichia coli* on Public Beaches, an Infectious Threat Emerging in Recreational Waters.														101	1
5	10.3201/eid2308.170162	*mcr*-1 and blaKPC-3 in *Escherichia coli* Sequence Type 744 after Meropenem and Colistin Therapy, Portugal	2016	Portugal	Europe	Human	Urine	P. *Escherichia coli*		1			1	1	IncX4	744	1
6	10.1016/j.jgar.2017.01.007	Green-based real-time PCR method for improved detection of *mcr*-1-mediated colistin resistance in human stool samples.	2015	Switzerland	Europe	Human	Fecal	P. *Escherichia coli*		3			3				
7	10.1016/j.diagmicrobio.2017.07.005	Case report of transient *mcr*-1-haboring Escherichia coli with concurrent Staphylococcus aureus bacteremia in Long Beach, California.	2016	United States	North America	Human	Blood and urine	P. *Escherichia coli*		1			1				

8	10.1016/j.ijantimicag.2017.06.011	Colistin resistance gene *mcr*-1 in gut flora of children.	2016	China	Asia	Human	Fecal	P. *Escherichia coli*	14	16			16	16	IncX4	117	1
		Colistin resistance gene *mcr*-1 in gut flora of children.	2016	China	Asia	Human	Fecal	*Citrobacter freundii*		1			1	1	IncX4	101	1
		Colistin resistance gene *mcr*-1 in gut flora of children.														131	1
		Colistin resistance gene *mcr*-1 in gut flora of children.														1638	1
		Colistin resistance gene *mcr*-1 in gut flora of children.														2967	1
		Colistin resistance gene *mcr*-1 in gut flora of children.														1193	1
		Colistin resistance gene *mcr*-1 in gut flora of children.														583	1
		Colistin resistance gene *mcr*-1 in gut flora of children.														1485	1
		Colistin resistance gene *mcr*-1 in gut flora of children.														3944	1
		Colistin resistance gene *mcr*-1 in gut flora of children.														773	1
9	10.1128/mBio.00543-17	Novel Plasmid-Mediated Colistin Resistance Gene *mcr*-3 in *Escherichia col*.	2015	China	Asia	Swine	Fecal	P. *Escherichia coli*			1	mcr3	1	1	IncHI2		
10	10.1371/journal.pone.0172997	*mcr*-1 identified in Avian Pathogenic *Escherichia coli* (APEC).	2010	Egypt	Africa	Poultry	N.A	P. *Escherichia coli*	980	4			4				
		mcr-1 identified in Avian Pathogenic *Escherichia coli* (APEC).	2012-2015	China	Asia	Poultry	N.A	P. *Escherichia coli*		8			8				
11	10.1016/j.ijantimicag.2016.12.018	Prevalence of the *mcr*-1 colistin resistance gene in extended-spectrum β-lactamase-producing *Escherichia coli* from human faecal samples collected in 2012 in rural villages in Shandong Province, China.	2012	China	Asia	Human	Fecal	P. *Escherichia coli*	706	24			24				
12	10.1016/S1473-3099(16)30527-8	Prevalence, risk factors, outcomes, and molecular epidemiology of *mcr*-1-positive *Enterobacteriaceae* in patients and healthy adults from China: an epidemiological and clinical study.	2007-2015	China	Asia	Human	Fecal	P. *Escherichia coli*	5332	76			76	13	IncX4	116	55
		Prevalence, risk factors, outcomes, and molecular epidemiology of *mcr*-1-positive *Enterobacteriaceae* in patients and healthy adults from China: an epidemiological and clinical study.	2007-2015	China	Asia	Human	Fecal	*Klebsiella pneumoniae*	348	13			13	14	IncI2	602	1
		Prevalence, risk factors, outcomes, and molecular epidemiology of *mcr*-1-positive *Enterobacteriaceae* in patients and healthy adults from China: an epidemiological and clinical study.	2007-2015	China	Asia	Human	Fecal	*Enterobacter cloacae*	890	1			1	7	INCf	101	1

		Prevalence, risk factors, outcomes, and molecular epidemiology of *mcr*-1-positive *Enterobacteriaceae* in patients and healthy adults from China: an epidemiological and clinical study.	2007-2015	China	Asia	Human	Fecal	*Enterobacter aerogenes*	162	1			1	6	IncFIB	410	1
		Prevalence, risk factors, outcomes, and molecular epidemiology of *mcr*-1-positive *Enterobacteriaceae* in patients and healthy adults from China: an epidemiological and clinical study.												6	Inck	95	1
		Prevalence, risk factors, outcomes, and molecular epidemiology of *mcr*-1-positive *Enterobacteriaceae* in patients and healthy adults from China: an epidemiological and clinical study.														10	2
		Prevalence, risk factors, outcomes, and molecular epidemiology of *mcr*-1-positive *Enterobacteriaceae* in patients and healthy adults from China: an epidemiological and clinical study.														117	1
		Prevalence, risk factors, outcomes, and molecular epidemiology of *mcr*-1-positive *Enterobacteriaceae* in patients and healthy adults from China: an epidemiological and clinical study.														405	1
		Prevalence, risk factors, outcomes, and molecular epidemiology of *mcr*-1-positive *Enterobacteriaceae* in patients and healthy adults from China: an epidemiological and clinical study.														131	1
		Prevalence, risk factors, outcomes, and molecular epidemiology of *mcr*-1-positive *Enterobacteriaceae* in patients and healthy adults from China: an epidemiological and clinical study.														354	1
		Prevalence, risk factors, outcomes, and molecular epidemiology of *mcr*-1-positive *Enterobacteriaceae* in patients and healthy adults from China: an epidemiological and clinical study.														648	1
		Prevalence, risk factors, outcomes, and molecular epidemiology of *mcr*-1-positive *Enterobacteriaceae* in patients and healthy adults from China: an epidemiological and clinical study.														617	1

		Prevalence, risk factors, outcomes, and molecular epidemiology of *mcr*-1-positive *Enterobacteriaceae* in patients and healthy adults from China: an epidemiological and clinical study.														457	1
		Prevalence, risk factors, outcomes, and molecular epidemiology of *mcr*-1-positive *Enterobacteriaceae* in patients and healthy adults from China: an epidemiological and clinical study.														410	1
		Prevalence, risk factors, outcomes, and molecular epidemiology of *mcr*-1-positive *Enterobacteriaceae* in patients and healthy adults from China: an epidemiological and clinical study.														1193	1
		Prevalence, risk factors, outcomes, and molecular epidemiology of *mcr*-1-positive *Enterobacteriaceae* in patients and healthy adults from China: an epidemiological and clinical study.														354	1
		Prevalence, risk factors, outcomes, and molecular epidemiology of *mcr*-1-positive *Enterobacteriaceae* in patients and healthy adults from China: an epidemiological and clinical study.														156	1
13	10.1016/S1473-3099(16)30528-X	Prevalence of *mcr*-1 in *Escherichia coli* and *Klebsiella pneumoniae* recovered from bloodstream infections in China: a multicentre longitudinal study	2013-2014	China	Asia	Human	Blood	P. *Escherichia coli*	1495	20			20	15	IncI2	167	1
		Prevalence of *mcr*-1 in *Escherichia coli* and *Klebsiella pneumoniae* recovered from bloodstream infections in China: a multicentre longitudinal study	2013-2014	China	Asia	Human	Blood	*Klebsiella pneumoniae*	571	1			1	1	IncX4	10	2
		Prevalence of *mcr*-1 in *Escherichia coli* and *Klebsiella pneumoniae* recovered from bloodstream infections in China: a multicentre longitudinal study												4	IncX4	2973	1
		Prevalence of *mcr*-1 in *Escherichia coli* and *Klebsiella pneumoniae* recovered from bloodstream infections in China: a multicentre longitudinal study														354	1
		Prevalence of *mcr*-1 in *Escherichia coli* and *Klebsiella pneumoniae* recovered from bloodstream infections in China: a multicentre longitudinal study														3028	1
		Prevalence of *mcr*-1 in *Escherichia coli* and *Klebsiella pneumoniae* recovered from bloodstream infections in China: a multicentre longitudinal study														354	1

		Prevalence of *mcr*-1 in *Escherichia coli* and *Klebsiella pneumoniae* recovered from bloodstream infections in China: a multicentre longitudinal study														156	1
		Prevalence of *mcr*-1 in *Escherichia coli* and *Klebsiella pneumoniae* recovered from bloodstream infections in China: a multicentre longitudinal study														1011	1
		Prevalence of *mcr*-1 in *Escherichia coli* and *Klebsiella pneumoniae* recovered from bloodstream infections in China: a multicentre longitudinal study														393	1
		Prevalence of *mcr*-1 in *Escherichia coli* and *Klebsiella pneumoniae* recovered from bloodstream infections in China: a multicentre longitudinal study														69	1
		Prevalence of *mcr*-1 in *Escherichia coli* and *Klebsiella pneumoniae* recovered from bloodstream infections in China: a multicentre longitudinal study														218	1
		Prevalence of *mcr*-1 in *Escherichia coli* and *Klebsiella pneumoniae* recovered from bloodstream infections in China: a multicentre longitudinal study														1193	1
		Prevalence of *mcr*-1 in *Escherichia coli* and *Klebsiella pneumoniae* recovered from bloodstream infections in China: a multicentre longitudinal study														853	1
		Prevalence of *mcr*-1 in *Escherichia coli* and *Klebsiella pneumoniae* recovered from bloodstream infections in China: a multicentre longitudinal study														58	1
		Prevalence of *mcr*-1 in *Escherichia coli* and *Klebsiella pneumoniae* recovered from bloodstream infections in China: a multicentre longitudinal study														44	1
		Prevalence of *mcr*-1 in *Escherichia coli* and *Klebsiella pneumoniae* recovered from bloodstream infections in China: a multicentre longitudinal study														131	1
		Prevalence of *mcr*-1 in *Escherichia coli* and *Klebsiella pneumoniae* recovered from bloodstream infections in China: a multicentre longitudinal study														117	2
		Prevalence of *mcr*-1 in *Escherichia coli* and *Klebsiella pneumoniae* recovered from bloodstream infections in China: a multicentre longitudinal study														457	1
14	10.1128/AAC.02623-16	Detection of the *mcr*-1 Gene in a Multidrug-Resistant *Escherichia coli* Isolate from an Austrian Patient.	2016	Austria	Europe	Human	Fecal	P. *Escherichia coli*		1			1	1	IncHI2	10	1

15	10.1093/jac/dkw533	Spread of *mcr*-1-carrying *Enterobacteriaceae* in sewage water from Spain	2013	Spain	Europe	Water	Water	P. *Escherichia coli*	195	29			29	29	IncI2	1196	28
		Spread of *mcr*-1-carrying *Enterobacteriaceae* in sewage water from Spain														224	1
		Spread of *mcr*-1-carrying *Enterobacteriaceae* in sewage water from Spain	2013	Spain	Europe	Water	Water	*Klebsiella pneumoniae*		1			1	1	IncI2		
16	10.1016/j.ijantimicag.2016.11.010	Detection of mcr-1-encoding plasmid-mediated colistin-resistant Salmonella isolates from human infection in Denmark.	2008-2015	Denmark	Europe	Human	Blood	*Salmonella enterica* serovar Typhimurum	129	4			4	1	IncI2		
		Detection of mcr-1-encoding plasmid-mediated colistin-resistant Salmonella isolates from human infection in Denmark.												3	IncX4		
17	10.1093/jac/dkw411	Genetic characterization of *mcr*-1-bearing plasmids to depict molecular mechanisms underlying dissemination of the colistin resistance determinant.	2014-2015	China	Asia	Swine	Fecal	P. *Escherichia coli*	97	15			15				
		Genetic characterization of *mcr*-1-bearing plasmids to depict molecular mechanisms underlying dissemination of the colistin resistance determinant												6	IncX4		
		Genetic characterization of *mcr*-1-bearing plasmids to depict molecular mechanisms underlying dissemination of the colistin resistance determinant												7	IncI2		
		Genetic characterization of *mcr*-1-bearing plasmids to depict molecular mechanisms underlying dissemination of the colistin resistance determinant												7	IncHI2		
18	10.1128/AAC.02347-16	High Incidence of *Escherichia coli* Strains Coharboring *mcr*-1 and blaNDM from Chickens	2015	China	Asia	Poultry	Fecal	P. *Escherichia coli*	78	53			53	53	IncI2	2944	1
		High Incidence of *Escherichia coli* Strains Coharboring *mcr*-1 and blaNDM from Chickens														1011	1
		High Incidence of *Escherichia coli* Strains Coharboring *mcr*-1 and blaNDM from Chickens														10	1
		High Incidence of *Escherichia coli* Strains Coharboring *mcr*-1 and blaNDM from Chickens														101	1
		High Incidence of *Escherichia coli* Strains Coharboring *mcr*-1 and blaNDM from Chickens														117	2
		High Incidence of *Escherichia coli* Strains Coharboring *mcr*-1 and blaNDM from Chickens														2973	2

		High Incidence of *Escherichia coli* Strains Coharboring *mcr*-1 and blaNDM from Chickens														2847	2
		High Incidence of *Escherichia coli* Strains Coharboring *mcr*-1 and blaNDM from Chickens														297	5
		High Incidence of *Escherichia coli* Strains Coharboring *mcr*-1 and blaNDM from Chickens														156	5
19	10.1099/jmm.0.000425	Detection and dissemination of the colistin resistance gene, mcr-1, from isolates and faecal samples in China.	1998-2015	China	Asia	Human	Fecal	P. *Escherichia coli*	1161	3			3				
		Detection and dissemination of the colistin resistance gene, mcr-1, from isolates and faecal samples in China.	1998-2015	China	Asia	Poultry	N.A	P. *Escherichia coli*	981	45			45				
		Detection and dissemination of the colistin resistance gene, mcr-1, from isolates and faecal samples in China.	1998-2015	China	Asia	Poultry	Chicken meat	P. *Escherichia coli*	103	4			4				
		Detection and dissemination of the colistin resistance gene, mcr-1, from isolates and faecal samples in China.	1998-2015	China	Asia	Water	Water	P. *Escherichia coli*	9	2			2				
		Detection and dissemination of the colistin resistance gene, mcr-1, from isolates and faecal samples in China.	1998-2015	China	Asia	Human	Fecal	P. *Escherichia coli*	229	8			8				
		Detection and dissemination of the colistin resistance gene, mcr-1, from isolates and faecal samples in China.	1998-2015	China	Asia	Human	Fecal	P. *Escherichia coli*	108	6			6				
20	10.1016/S1473-3099(16)00009-8	Colistin resistance genemcr-1in extended-spectrum β-lactamase-producing andcarbapenemase-producingGram-negative bacteriain Germany	2009	Germany	Europe	Human	N.A	P. *Escherichia coli*	557	1			1	1	IncHI2		
		Colistin resistance genemcr-1in extended-spectrum β-lactamase-producing andcarbapenemase-producingGram-negative bacteriain Germany	2009	Germany	Europe	Swine	N.A	P. *Escherichia coli*		3			3	3	IncX4		
21	10.1128/AAC.02167-16	Various Sequence Types of Escherichia coli Isolates Coharboring blaNDM-5 and mcr-1 Genes from a Commercial Swine Farm in China.	2015	China	Asia	Swine	Fecal	P. *Escherichia coli*	64	16			16	16	IncX4	48	1
		Various Sequence Types of Escherichia coli Isolates Coharboring blaNDM-5 and mcr-1 Genes from a Commercial Swine Farm in China.														2439	1
		Various Sequence Types of Escherichia coli Isolates Coharboring blaNDM-5 and mcr-1 Genes from a Commercial Swine Farm in China.														1437	1
		Various Sequence Types of Escherichia coli Isolates Coharboring blaNDM-5 and mcr-1 Genes from a Commercial Swine Farm in China.														1178	1

		Various Sequence Types of Escherichia coli Isolates Coharboring blaNDM-5 and mcr-1 Genes from a Commercial Swine Farm in China.													165	1
		Various Sequence Types of Escherichia coli Isolates Coharboring blaNDM-5 and mcr-1 Genes from a Commercial Swine Farm in China.													3331	1
		Various Sequence Types of Escherichia coli Isolates Coharboring blaNDM-5 and mcr-1 Genes from a Commercial Swine Farm in China.													4436	1
		Various Sequence Types of Escherichia coli Isolates Coharboring blaNDM-5 and mcr-1 Genes from a Commercial Swine Farm in China.													54	1
		Various Sequence Types of Escherichia coli Isolates Coharboring blaNDM-5 and mcr-1 Genes from a Commercial Swine Farm in China.													156	1
		Various Sequence Types of Escherichia coli Isolates Coharboring blaNDM-5 and mcr-1 Genes from a Commercial Swine Farm in China.													4656	1
		Various Sequence Types of Escherichia coli Isolates Coharboring blaNDM-5 and mcr-1 Genes from a Commercial Swine Farm in China.													4429	1
		Various Sequence Types of Escherichia coli Isolates Coharboring blaNDM-5 and mcr-1 Genes from a Commercial Swine Farm in China.													90	1
		Various Sequence Types of Escherichia coli Isolates Coharboring blaNDM-5 and mcr-1 Genes from a Commercial Swine Farm in China.													167	1
		Various Sequence Types of Escherichia coli Isolates Coharboring blaNDM-5 and mcr-1 Genes from a Commercial Swine Farm in China.													410	1
		Various Sequence Types of Escherichia coli Isolates Coharboring blaNDM-5 and mcr-1 Genes from a Commercial Swine Farm in China.													1114	1
22	10.1016/j.ijantimicag.2016.10.003	Detection of the high-risk clone ST131 of Escherichia coli carrying the colistin resistance genemcr-1 and causing acuteperitonitis	2016	Spain	Europe	Human	Periotneal fluid	P. *Escherichia coli*		1			1	1	IncX	131	1
23	10.1016/j.ijantimicag.2016.10.007	Imported reptiles as a risk factor for theglobal distribution of Escherichia coli harbouring the colistin resistance gene mcr-1	2013-2014	Vietnam	Asia	Reptiles	N.A	P. *Escherichia coli*	142	2			2				
														1	IncHI2	117	1

														1	Chromsomal		1011	
24	10.1128/AAC.02229-16	IncP Plasmid Carrying Colistin Resistance Gene mcr-1 in Klebsiella pneumoniae from Hospital Sewage.	2015	China	Asia	Water	Water	*Klebsiella pneumoniae*		1			1	1	IncP			
25	10.1016/j.diagmicrobio.2016.11.005	Emergence of plasmid-mediated colistin resistance and New Delhi metallo-β-lactamase genes in extensively drug-resistant *Escherichia coli* isolated from a patient in Thailand.	2016	Thailand	Asia	Human	Urine	P. *Escherichia coli*		1			1					
26	10.1016/S1473-3099(16)00061-X	Early emergence of *mcr*-1 in *Escherichia coli* from food-producing animals	1980-2014	China	Asia	Poultry	N.A	P. *Escherichia coli*	1611	104			104					
27	10.1016/S1473-3099(16)00007-4	Co-occurrence of extended spectrum β lactamase and *MCR*-1 encoding genes on plasmids	2005-2014	France	Europe	Bovine	Fecal	P. *Escherichia coli*	517	106			106	106	IncHI2			
28	10.1016/S1473-3099(16)00014-1	Colistin-resistant *Escherichia coli* harbouring *mcr*-1 isolated from food animals in Hanoi, Vietnam	2014-2015	Vietnam	Asia	Swine	Fecal	Non P. Escherichia coli	7	6			6	6	IncI2			
		Colistin-resistant *Escherichia coli* harbouring *mcr*-1 isolated from food animals in Hanoi, Vietnam	2014-2015	Vietnam	Asia	Swine	N.A	Non P. Escherichia coli	4	3			3	3	IncI2			
29	10.2807/1560-7917.ES.2016.21.6.30135	Prevalence of *mcr*-1 in commensal Escherichia coli from French livestock, 2007 to 2014	2011	France	Europe	Swine	Fecal	Non P. Escherichia coli	200	1			1					
		Prevalence of *mcr*-1 in commensal Escherichia coli from French livestock, 2007 to 2014	2013	France	Europe	Swine	N.A	Non P. Escherichia coli	196	1			1					
		Prevalence of *mcr*-1 in commensal Escherichia coli from French livestock, 2007 to 2014	2013	France	Europe	Poultry	N.A	Non P. Escherichia coli	193	3			3					
		Prevalence of *mcr*-1 in commensal Escherichia coli from French livestock, 2007 to 2014	2014	France	Europe	Poultry	N.A	Non P. Escherichia coli	239	14			14					
		Prevalence of *mcr*-1 in commensal Escherichia coli from French livestock, 2007 to 2014	2014	France	Europe	Poultry	N.A	Non P. Escherichia coli	227	4			4					
30	10.1016/S1473-3099(16)00012-8	Colistin resistance gene *mcr*-1 harboured on a multidrug resistant plasmid	2011-2012	Belgium	Europe	Bovine	Fecal	P. *Escherichia coli*	52	6			6	6	IncFII	100	2	
		Colistin resistance gene *mcr*-1 harboured on a multidrug resistant plasmid	2011-2012	Belgium	Europe	Swine	Fecal	P. *Escherichia coli*	53	7			7	7	IncFII	90	2	
		Colistin resistance gene *mcr*-1 harboured on a multidrug resistant plasmid														10	9	
31	10.1093/jac/dkx225	MCR-2-mediated plasmid-borne polymyxin resistance most likely originates from *Moraxella pluranimalium*	2017	spain	Europe	Swine	Nose, Pleura, Peritoneal Cavity fluids	*Moraxella pluranimalium*		1	1	mcr2.2	2	1	Chromsomal			
32	10.1128/AAC.01444-16	Emergence of Colistin Resistance Gene *mcr*-1 in Cronobacter sakazakii	2015	China	Asia	Poultry	Fecal	*Cronobacter sakazakii*		2			2	2	IncI2			

		Producing NDM-9 and in *Escherichia coli* from the Same Animal.															
33	10.1128/AAC.02057-16	Prevalence of Colistin Resistance Gene *mcr*-1 and Absence of *mcr*-2 in *Escherichia coli* Isolated from Healthy Food-Producing Animals in Japan.	2000-2014	Japan	Asia	Bovine	N.A	Non P. Escherichia coli	3134	5			5	5	IncI2		
		Prevalence of Colistin Resistance Gene *mcr*-1 and Absence of *mcr*-2 in *Escherichia coli* Isolated from Healthy Food-Producing Animals in Japan.	2000-2014	Japan	Asia	Swine	N.A	Non P. Escherichia coli	2052	20			20	20	IncI2		
		Prevalence of Colistin Resistance Gene *mcr*-1 and Absence of *mcr*-2 in *Escherichia coli* Isolated from Healthy Food-Producing Animals in Japan.	2000-2014	Japan	Asia	Poultry	N.A	Non P. Escherichia coli	2017	14			14	14	IncI2		
34	10.1128/AAC.02244-16	Prevalence of mcr-1 in the Cecal Contents of Food Animals in the United States.	2016	United States	North America	Swine	Fecal	P. *Escherichia coli*		2			2	2	IncI2	234	1
		Prevalence of mcr-1 in the Cecal Contents of Food Animals in the United States.														132	1
		Prevalence of mcr-1 in the Cecal Contents of Food Animals in the United States.															
		Prevalence of mcr-1 in the Cecal Contents of Food Animals in the United States.															
35	10.1128/AAC.01165-16	*Kluyvera ascorbata* Strain from Hospital Sewage Carrying the *mcr*-1 Colistin Resistance Gene.	2015	China	Asia	Water	Water	*Kluyvera ascorbata*		1			1	1	IncI2		
36	10.1016/j.ijantimicag.2016.09.003	First report of the plasmid-mediated colistin resistance gene *mcr*-1 in a clinical *Escherichia coli* isolate in Algeria	2011	Algeria	Africa	Human	Sperm	P. *Escherichia coli* O29		1			1	1	IncFIB	405	1
37	10.1016/j.ijantimicag.2016.04.004	Emergence of *mcr*-1-mediated colistin resistance in *Escherichia coli* in Malaysia	2009	Malaysia	Asia	Poultry	Chicken liver	P. *Escherichia coli*	15	1			1				
		Emergence of *mcr*-1-mediated colistin resistance in *Escherichia coli* in Malaysia	2009	Malaysia	Asia	Poultry	Chicken liver and heart	P. *Escherichia coli*	16	3			3				
		Emergence of *mcr*-1-mediated colistin resistance in *Escherichia coli* in Malaysia	2009	Malaysia	Asia	Human	Urine	P. *Escherichia coli*	95	1			1				
		Emergence of *mcr*-1-mediated colistin resistance in *Escherichia coli* in Malaysia	2009	Malaysia	Asia	Water	Water	P. *Escherichia coli*	5	2			2				
38	10.15585/mmwr.mm6536e3	Investigation of *Escherichia coli* Harboring the *mcr*-1 Resistance Gene - Connecticut, 2016.	2016	United States	North America	Human	Fecal	P. *Escherichia coli* O157		1			1				
39	10.15585/mmwr.mm6536e2	Investigation of First Identified *mcr*-1 Gene in an Isolate from a U.S. Patient - Pennsylvania, 2016.	2016	United States	North America	Human	Urine	P. *Escherichia coli*		1			1				

40	10.1017/S0950268816001369	Colistin-resistant *Escherichia coli* clinical isolate harbouring the *mcr*-1 gene in ecuador	2016	Ecuador	South America	Human	Sperm	P. *Escherichia coli*		1			1			609	1
41	10.1128/mBio.01191-16	Colistin- and Carbapenem-Resistant *Escherichia coli* Harboring *mcr*-1 and blaNDM-5, Causing a Complicated Urinary Tract Infection in a Patient from the United States.	2014	United States	North America	Human	Urine	P. *Escherichia coli*		1			1	1	IncX4	405	1
42	10.1128/AAC.00443-16	Plasmid with Colistin Resistance Gene *mcr*-1 in Extended-Spectrum-β-Lactamase-Producing *Escherichia coli* Strains Isolated from Pig Slurry in Estonia.	2011-2014	Estonia	Europe	Swine	Fecal	P. *Escherichia coli*	88	3			3	3	IncX4		
43	10.1016/j.ijid.2016.07.007	Plasmid-mediated colistin resistance in *Escherichia coli* from the Arabian Peninsula.	2015	Bahrain	Asia	Human	N.A	P. *Escherichia coli*		1			1	1	IncI2	648	1
		Plasmid-mediated colistin resistance in *Escherichia coli* from the Arabian Peninsula.	2015	Bahrain	Asia	Human	N.A	P. *Escherichia coli*		1			1	1	IncI2	224	1
		Plasmid-mediated colistin resistance in *Escherichia coli* from the Arabian Peninsula.	2012	Saudi Arabia	Asia	Human	N.A	P. *Escherichia coli*		1			1	1	IncHI2	68	1
		Plasmid-mediated colistin resistance in *Escherichia coli* from the Arabian Peninsula.	2013	United Arab Emirates	Asia	Human	N.A	P. *Escherichia coli*		1			1	1	IncI2	131	1
44	10.1093/jac/dkw328	Detection of the plasmid-mediated colistin-resistance gene *mcr*-1 in faecal metagenomes of Dutch travellers.	2010-2012	Netherland	Europe	Human	Fecal	P. *Escherichia coli*	6	6			6			1011	1
		Detection of the plasmid-mediated colistin-resistance gene *mcr*-1 in faecal metagenomes of Dutch travellers.														744	1
		Detection of the plasmid-mediated colistin-resistance gene *mcr*-1 in faecal metagenomes of Dutch travellers.														80	1
45	10.1038/emi.2016.85	Transmissible colistin resistance encoded by *mcr*-1 detected in clinical *Enterobacteriaceae* isolates in Singapore	2016	Singapore	Asia	Human	Urine	P. *Escherichia coli*	166	2			2			460	1
		Transmissible colistin resistance encoded by *mcr*-1 detected in clinical *Enterobacteriaceae* isolates in Singapore														156	1
46	10.1016/S1473-3099(15)00540-X	Dissemination of the *mcr-1* colistin resistance gene (corrospondance 1)	2016	Laos	Asia	Human	Fecal	P. *Escherichia coli*	6	6			6				
		Dissemination of the *mcr-1* colistin resistance gene (corrospondance 1)	2016	Laos	Asia	Swine	Fecal	P. *Escherichia coli*	4	3			3				
		Dissemination of the *mcr-1* colistin resistance gene (corrospondance 1)	2016	Thailand	Asia	Human	Fecal	P. *Escherichia coli*	3	2			2				

		Dissemination of the *mcr-1* colistin resistance gene (corrospondance 1)	2016	Algeria	Africa	Poultry	Fecal	P. *Escherichia coli*	2	1			1				
47	10.1016/j.ijantimicag.2016.06.021	Characterisation of multidrug-resistant Shiga toxin-producing Escherichia coli cultured from pigs in China: co-occurrence of extended-spectrum β-lactamase- and mcr-1-encoding genes on plasmids.	2011-2012	China	Asia	Swine	Fecal	P. *Escherichia coli*	93	10			10				
48	10.1128/AAC.01325-16	First Report of the Globally Disseminated IncX4 Plasmid Carrying the mcr-1 Gene in a Colistin-Resistant Escherichia coli Sequence Type 101 Isolate from a Human Infection in brazil	2016	Brazil	South America	Human	Wound	P. *Escherichia coli*		1			1	1	IncX4	101	1
49	10.1128/AAC.01319-16	Coexistence of mcr-1 and blaNDM-1 in Escherichia coli from Venezuela.	2015	Venezuela	South America	Human	Fecal	P. *Escherichia coli*	16	1			1	1	IncI2	19	1
		Coexistence of mcr-1 and blaNDM-1 in Escherichia coli from Venezuela.	2015	Venezuela	South America	Swine	Fecal	P. *Escherichia coli*	17	1			1	1	IncI2	452	1
50	10.2807/1560-7917.ES.2016.21.26.30267	Letter to the editor: Escherichia coli harbouring mcr-1 gene isolated from poultry not exposed to polymyxins in Brazil	2015	Brazil	South America	Poultry	Fecal	Non P. Escherichia coli	10	10			10				
		Letter to the editor: Escherichia coli harbouring mcr-1 gene isolated from poultry not exposed to polymyxins in Brazil															
51	10.1016/j.ijantimicag.2016.06.001	Plasmid-mediated colistin-resistant Escherichia coli detected from 2014 in Norway.	2006-2015	Norway	Europe	Human	N.A	P. *Escherichia coli*	4951	1			1	1	IncI2		
52	10.1128/mBio.00177-16	Diversified mcr-1-Harbouring Plasmid Reservoirs Confer Resistance to Colistin in Human Gut Microbiota	2015	China	Asia	Human	Fecal	P. *Escherichia coli*	48	3			3	3	IncI2	40	1
		Diversified mcr-1-Harbouring Plasmid Reservoirs Confer Resistance to Colistin in Human Gut Microbiota														642	1
		Diversified mcr-1-Harbouring Plasmid Reservoirs Confer Resistance to Colistin in Human Gut Microbiota														648	1
53	10.1128/AAC.00731-16	Travelers Can Import Colistin-Resistant *Enterobacteriaceae*, Including Those Possessing the Plasmid-Mediated *mcr-1* Gene	2015	Switzerland	Europe	Human	Fecal	P. *Escherichia coli*		3			3	3	IncHI2	10	3
54	10.1093/jac/dkw173	Inducible colistin resistance via a disrupted plasmid-borne mcr-1 gene in a 2008 Vietnamese Shigella sonnei isolate.	2008	Vietnam	Asia	Human	Fecal	*Shigella sonnei*		1			1	1	IncI2		
55	10.1128/AAC.00440-16	Detection of the mcr-1 Colistin Resistance Gene in Carbapenem-Resistant Enterobacteriaceae from Different Hospitals in China.	2014-2015	China	Asia	Human	N.A	P. *Escherichia coli*	36								
		Detection of the mcr-1 Colistin Resistance Gene in Carbapenem-	2014-2015	China	Asia	Human	Urine	P. *Escherichia coli*		1			1	1	IncI2	167	1

		Resistant Enterobacteriaceae from Different Hospitals in China.															
		Detection of the mcr-1 Colistin Resistance Gene in Carbapenem-Resistant Enterobacteriaceae from Different Hospitals in China.	2014-2015	China	Asia	Human	Ascites	P. *Escherichia coli*		1			1	1	IncX4	156	1
		Detection of the mcr-1 Colistin Resistance Gene in Carbapenem-Resistant Enterobacteriaceae from Different Hospitals in China.	2014-2015	China	Asia	Human	Bile	P. *Escherichia coli*		1			1	1	Chromsomal	457	1
56	10.2807/1560-7917.ES.2016.21.17.30214	Silent dissemination of colistin-resistant Escherichia coli in South America could contribute to the global spread of the mcr-1 gene.	2012	Brazil	South America	Swine	Fecal	P. *Escherichia coli*	113	2			2				
		Silent dissemination of colistin-resistant Escherichia coli in South America could contribute to the global spread of the mcr-1 gene.	2013	Brazil	South America	Poultry	Fecal	P. *Escherichia coli*	79	14			14				
57	10.1128/AAC.00444-16	Genetic Features of MCR-1-Producing Colistin-Resistant Escherichia coli Isolates in South Africa.	2014-2015	South Africa	Africa	Human	Blood, Pus, Urine, Wound	P. *Escherichia coli*		7			7	4	IncI2	10	1
		Genetic Features of MCR-1-Producing Colistin-Resistant Escherichia coli Isolates in South Africa.												1	IncHI2	1007	1
		Genetic Features of MCR-1-Producing Colistin-Resistant Escherichia coli Isolates in South Africa.												1	IncX4	624	1
		Genetic Features of MCR-1-Producing Colistin-Resistant Escherichia coli Isolates in South Africa.														57	1
		Genetic Features of MCR-1-Producing Colistin-Resistant Escherichia coli Isolates in South Africa.														101	1
		Genetic Features of MCR-1-Producing Colistin-Resistant Escherichia coli Isolates in South Africa.														624	1
		Genetic Features of MCR-1-Producing Colistin-Resistant Escherichia coli Isolates in South Africa.														226	1
58	10.1093/jac/dkw149	Colistin resistance in Salmonella and Escherichia coli isolates from a pig farm in Great Britain.	2016	United Kingdom	Europe	Swine	Small intestine sample	*Salmonella enterica* serovar Typhimurim variant copenhagen		1			1	1	IncI2		
		Colistin resistance in Salmonella and Escherichia coli isolates from a pig farm in Great Britain.	2016	United Kingdom	Europe	Swine	Small intestine sample	P. *Escherichia coli*		1			1	1	IncI2		
59	10.1093/jac/dkw093	Detection of the plasmid-mediated mcr-1 gene conferring colistin resistance in human and food isolates	2012-2015	United Kingdom	Europe	Human	Fecal	*Salmonella enterica* serovar Typhimurium	17195	2			2	2	IncX4		

		of Salmonella enterica and Escherichia coli in England and Wales.															
		Detection of the plasmid-mediated mcr-1 gene conferring colistin resistance in human and food isolates of Salmonella enterica and Escherichia coli in England and Wales.	2012-2015	United Kingdom	Europe	Human	Fecal	*Salmonella enterica* serovar Paratyphi B var Java		4			4	4	IncI2		
		Detection of the plasmid-mediated mcr-1 gene conferring colistin resistance in human and food isolates of Salmonella enterica and Escherichia coli in England and Wales.	2012-2015	United Kingdom	Europe	Human	Fecal	*Salmonella enterica* serovar Virchow		3			3	3	IncHI2		
		Detection of the plasmid-mediated mcr-1 gene conferring colistin resistance in human and food isolates of Salmonella enterica and Escherichia coli in England and Wales.	2012-2015	United Kingdom	Europe	Poultry	Chicken meat	*Salmonella enterica* serovar Paratyphi B var Java phage type Colindale	489	2			2	2	IncHI2		
		Detection of the plasmid-mediated mcr-1 gene conferring colistin resistance in human and food isolates of Salmonella enterica and Escherichia coli in England and Wales.	2012-2015	United Kingdom	Europe	Human	Fecal	P. *Escherichia coli*	2656	3			3	3	IncI2	457	3
60	10.1016/j.rvsc.2016.02.003	Detection of plasmid mediated colistin resistance (MCR-1) in Escherichia coli and Salmonella enterica isolated from poultry and swine in Spain	2009-2011	spain	Europe	Poultry	Fecal	P. *Escherichia coli*		3			3	3	IncI2		
		Detection of plasmid mediated colistin resistance (MCR-1) in Escherichia coli and Salmonella enterica isolated from poultry and swine in Spain	2009-2011	spain	Europe	Swine	Fecal	P. *Escherichia coli*		2			2	2	IncI2		
		Detection of plasmid mediated colistin resistance (MCR-1) in Escherichia coli and Salmonella enterica isolated from poultry and swine in Spain	2009-2011	spain	Europe	Swine	Fecal	*Salmonella enterica* serovar Typhimurium		1			1	1	IncI2		
		Detection of plasmid mediated colistin resistance (MCR-1) in Escherichia coli and Salmonella enterica isolated from poultry and swine in Spain	2009-2011	spain	Europe	Swine	Fecal	*Salmonella enterica* serovar Typhimurium		2			2	2	IncI2		
		Detection of plasmid mediated colistin resistance (MCR-1) in Escherichia coli and Salmonella enterica isolated from poultry and swine in Spain	2009-2011	spain	Europe	Swine	Fecal	*Salmonella enterica* serovar Rissen		1			1	1	IncI2		
61	10.7196/SAMJ.2016.v106i5.10710	Emergence of plasmid-mediated colistin resistance (MCR-1) among Escherichia coli isolated from South African patients	2014-2016	South Africa	Africa	Human	Blood, Pus, Urine, Wound	P. *Escherichia coli*		9			9				
62	10.2807/1560-7917.ES.2016.21.13.30183	Detection of mcr-1 colistin resistance gene in polyclonal Escherichia coli isolates in Barcelona, Spain, 2012 to 2015.	2012-2015	spain	Europe	Human	Fecal	P. *Escherichia coli*	53	15			15				

63	10.2807/1560-7917.ES.2016.21.8.30144	Impact of food animal trade on the spread of mcr-1-mediated colistin resistance, Tunisia, July 2015.	2015	Tunisia	Africa	Poultry	Fecal	P. *Escherichia coli*	37	37			37	37	IncHI2	4	37
64	10.2807/1560-7917.ES.2016.21.9.30149	Presence of mcr-1-positive Enterobacteriaceae in retail chicken meat but not in humans in the Netherlands since 2009	2009-2014	Netherland	Europe	Poultry	Chicken meat	P. *Escherichia coli*	196	3			3				
65	10.1128/AAC.00066-16. Print 2016 Apr	Occurrence of the Plasmid-Borne mcr-1 Colistin Resistance Gene in Extended-Spectrum-β-Lactamase-Producing Enterobacteriaceae in River Water and Imported Vegetable Samples in Switzerland	2012	Switzerland	Europe	Water	Water	Non P. Escherichia coli	74	1			1			359	1
		Occurrence of the Plasmid-Borne mcr-1 Colistin Resistance Gene in Extended-Spectrum-β-Lactamase-Producing Enterobacteriaceae in River Water and Imported Vegetable Samples in Switzerland	2012	Switzerland	Europe	Vegetables	N.A	Non P. Escherichia coli	60	1			1			167	1
		Occurrence of the Plasmid-Borne mcr-1 Colistin Resistance Gene in Extended-Spectrum-β-Lactamase-Producing Enterobacteriaceae in River Water and Imported Vegetable Samples in Switzerland	2012	Switzerland	Europe	Vegetables	N.A	Non P. Escherichia coli		1			1			4683	1
66	10.1016/j.ijantimicag.2016.02.011	Characterisation of the plasmid-mediated colistin resistance gene mcr-1 in Escherichia coli isolated from animals in Egypt	2016	Egypt	Africa	Bovine	Blood	P. *Escherichia coli*	38	1			1	1	IncHI2	10	1
67	10.1016/S1473-3099(16)00067-0	Dissemination of the *mcr-1* colistin resistance gene (corrospondance 2)	2011	Canada	North America	Human	N.A	P. *Escherichia coli*	1600	1			1	1	IncI2		
		Dissemination of the *mcr-1* colistin resistance gene (corrospondance 2)	2010	Canada	North America	Bovine	Ground beef	P. *Escherichia coli*		2			2	2	IncHI2A		
68	10.1016/s1473-3099(16)00533-2	Dissemination of the *mcr-1* colistin resistance gene (corrospondance 3)	2015	China	Asia	Human	N.A	P. *Escherichia coli*	368	27			27				
69	10.1016/s1473-3099(16)00062-1	Dissemination of the *mcr-1* colistin resistance gene (corrospondance 4)	2015	China	Asia	Human	Fecal	P. *Escherichia coli*	234	5			5				
70	10.1016/S1473-3099(16)00057-8	Carbapenem-resistant and colistin-resistant Escherichia coli co-producing NDM-9 and MCR-1	2014	China	Asia	Poultry	Chicken meat	P. *Escherichia coli*	1	1			1	1	IncI2	167	1
71	10.1016/S1473-3099(16)00056-6	Emergence of the mcr-1 colistin resistance gene in carbapenem-resistant Enterobacteriaceae	2013-2015	China	Asia	Human	Blood	P. *Escherichia coli*	2	2			2				
		Emergence of the mcr-1 colistin resistance gene in carbapenem-resistant Enterobacteriaceae	2013-2015	China	Asia	Human	Surgery wound, and drainage fluid	*Klebsiella pneumoniae*	4	2			2				

72	10.1016/S1473-3099(16)00010-4	Colistin resistance genemcr-1 and pHNSHP45plasmid in humanisolates of Escherichiacoli and Klebsiellapneumoniae	2012	Cambodia	Asia	Human	Fecal	P. *Escherichia coli*	1100	1			1			354	1
73	10.3389/fmicb.2017.02094	Remarkable Diversity of Escherichia coli Carrying mcr-1 from Hospital Sewage with the Identification of Two New mcr-1 Variants	2015	China	Asia	Water	Water	P. *Escherichia coli*	9							10	1
		Remarkable Diversity of Escherichia coli Carrying mcr-1 from Hospital Sewage with the Identification of Two New mcr-1 Variants	2015	China	Asia	Water	Water	P. *Escherichia coli*		2			2	2	Chromsomal	34	1
		Remarkable Diversity of Escherichia coli Carrying mcr-1 from Hospital Sewage with the Identification of Two New mcr-1 Variants	2015	China	Asia	Water	Water	P. *Escherichia coli*		5		mcr1.1	5	2	IncX4	48	1
		Remarkable Diversity of Escherichia coli Carrying mcr-1 from Hospital Sewage with the Identification of Two New mcr-1 Variants	2015	China	Asia	Water	Water	P. *Escherichia coli*		1		mcr1.4	1	1	IncI2	1196	1
		Remarkable Diversity of Escherichia coli Carrying mcr-1 from Hospital Sewage with the Identification of Two New mcr-1 Variants	2015	China	Asia	Water	Water	P. *Escherichia coli*		1		mcr1.7	1	1	IncP	7086	1
		Remarkable Diversity of Escherichia coli Carrying mcr-1 from Hospital Sewage with the Identification of Two New mcr-1 Variants	2015	China	Asia	Water	Water	P. *Escherichia coli*						1	IncHI2	7087	1
74	10.2807/1560-7917.ES.2017.22.31.30586	Co-occurrence of colistin-resistance genes mcr-1 and mcr-3 among multidrug-resistant Escherichia coli isolated from cattle, Spain, September 2015	2015	spain	Europe	Bovine	Fecal	P. *Escherichia coli*	77	5	1	mcr3	6	5	IncHI2	533	1
75	10.1016/j.vetmic.2017.08.024	Complete genetic analysis of a Salmonella enterica serovar Indiana isolate accompanying four plasmids carrying mcr-1, ESBL and other resistance genes in China.	2012	China	Asia	Poultry	N.A	*Salmonella enterica* serovar Indiana	4	1			1	1	IncI2		
76	10.1093/jac/dkx327	Identification of a novel transposon-associated phosphoethanolamine transferase gene, mcr-5, conferring colistin resistance in d-tartrate fermenting Salmonella enterica subsp. enterica serovar Paratyphi B.	2011-2016	Germany	Europe	Poultry	Chicken meat	*Salmonella enterica* serovar Paratyphi B			3	mcr5	3	3	ColE		
		Identification of a novel transposon-associated phosphoethanolamine transferase gene, mcr-5, conferring colistin resistance in d-tartrate fermenting Salmonella enterica subsp. enterica serovar Paratyphi B.	2011-2016	Germany	Europe	Water	Water	*Salmonella enterica* serovar Paratyphi B			4	mcr5	4	4	ColE		
		Identification of a novel transposon-associated phosphoethanolamine transferase gene, mcr-5, conferring colistin resistance in d-tartrate	2011-2016	Germany	Europe	Poultry	N.A	*Salmonella enterica* serovar Paratyphi B			7	mcr5	7	7	ColE		

		fermenting Salmonella enterica subsp. enterica serovar Paratyphi B.															
77	10.1016/j.jgar.2017.10.012	Detection of the colistin resistance gene mcr-1 in avian pathogenic Escherichia coli in Pakistan	2017	Pakistan	Asia	Poultry	Carcass	P. *Escherichia coli*	10	1			1		IncX4	135	
78	10.3201/eid2312.170883	High Rate of MCR-1–Producing Escherichia coli and Klebsiella pneumoniae among Pigs, Portugal	2016	Portugal	Europe	Swine	Fecal	P. *Escherichia coli*	90	90			90	48	IncHI2	10	21
		High Rate of MCR-1–Producing Escherichia coli and Klebsiella pneumoniae among Pigs, Portugal												34	IncP	23	9
		High Rate of MCR-1–Producing Escherichia coli and Klebsiella pneumoniae among Pigs, Portugal												8	IncX4	38	1
		High Rate of MCR-1–Producing Escherichia coli and Klebsiella pneumoniae among Pigs, Portugal	2016	Portugal	Europe	Swine	N.A	*Klebsiella pneumoniae*	17	8			8	4	IncHI2	46	1
		High Rate of MCR-1–Producing Escherichia coli and Klebsiella pneumoniae among Pigs, Portugal														101	4
		High Rate of MCR-1–Producing Escherichia coli and Klebsiella pneumoniae among Pigs, Portugal														156	5
		High Rate of MCR-1–Producing Escherichia coli and Klebsiella pneumoniae among Pigs, Portugal														6453	13
		High Rate of MCR-1–Producing Escherichia coli and Klebsiella pneumoniae among Pigs, Portugal														45	6
		High Rate of MCR-1–Producing Escherichia coli and Klebsiella pneumoniae among Pigs, Portugal														1563	2
79	10.1016/s1473-3099(15)00063-3	Dissemination of the mcr-1 colistin resistance gene (corrospondance 5)		China	Asia	Poultry		*Salmonella enterica*	27								
		Dissemination of the mcr-1 colistin resistance gene (corrospondance 5)	2012	China	Asia	Poultry	Chicken meat	*Salmonella enterica* seorvar Derby		1			1	1	IncP		
		Dissemination of the mcr-1 colistin resistance gene (corrospondance 5)	2012	China	Asia	Poultry	Chicken meat	*Salmonella enterica* serovar Paratyphi B		1			1	1	IncX4		
		Dissemination of the mcr-1 colistin resistance gene (corrospondance 5)	2012	China	Asia	Poultry	Chicken meat	*Salmonella enterica* serovar Paratyphi B		1			1	1	IncX4		
		Dissemination of the mcr-1 colistin resistance gene (corrospondance 5)	2013	China	Asia	Poultry	N.A	*Salmonella enterica* serovar 1,4,[5],12:i:-		1			1	1	IncP		
80	10.1016/s1473-3099(16)00532-0	Dissemination of the mcr-1 colistin resistance gene (corrospondance 6)	2011-2012	Portugal	Europe	Bovine	Meat by product	*Salmonella enterica*	258	1			1	1	IncHI2		

								serovar Typhimurium									
81	10.1128/AAC.00269-16	Emergence of Plasmid-Mediated Colistin Resistance Gene mcr-1 in aClinical Escherichia coli Isolate from Egypt	2016	Egypt	Africa	Human	Sputum	P. *Escherichia coli*	241	1			1			1011	1
82	10.1093/jac/dkw122	Colistin resistance gene mcr-1 in Escherichia coli isolates from humans and retail meats, Taiwan	2010	China	Asia	Human	Fecal	P. *Escherichia coli*	1136	1			1			38	8
		Colistin resistance gene mcr-1 in Escherichia coli isolates from humans and retail meats, Taiwan	2012	China	Asia	Human	N.A	P. *Escherichia coli*	1752	3			3			117	5
		Colistin resistance gene mcr-1 in Escherichia coli isolates from humans and retail meats, Taiwan	2014	China	Asia	Human	N.A	P. *Escherichia coli*	1701	11			11			701	1
		Colistin resistance gene mcr-1 in Escherichia coli isolates from humans and retail meats, Taiwan	2012	China	Asia	Bovine	Beef	P. *Escherichia coli*	89	1			1			7044	1
		Colistin resistance gene mcr-1 in Escherichia coli isolates from humans and retail meats, Taiwan	2013	China	Asia	Poultry	Chicken meat	P. *Escherichia coli*	91	6			6			428	1
		Colistin resistance gene mcr-1 in Escherichia coli isolates from humans and retail meats, Taiwan	2015	China	Asia	Swine	Pork	P. *Escherichia coli*	126	11			11				
83	10.1016/j.ijfoodmicro.2017.10.007	New insights into resistance to colistin and third-generation cephalosporinsofEscherichia coliin poultry, Portugal: NovelblaCTX-M-166andblaESACgenes	2014	Portugal	Europe	Poultry	Fecal	P. *Escherichia coli*	185	2			2				
84	10.1016/j.vetmic.2017.11.014	*mcr*-1-like detection in commensal Escherichia coli and Salmonella spp. fromfood-producing animals at slaughter in Europe	2008-2014	France	Europe	Swine	Fecal	Non P. Escherichia coli		9			9				
		mcr-1-like detection in commensal Escherichia coli and Salmonella spp. fromfood-producing animals at slaughter in Europe	2008-2014	France	Europe	Poultry	Fecal	Non P. Escherichia coli	4	2			2				
		mcr-1-like detection in commensal Escherichia coli and Salmonella spp. fromfood-producing animals at slaughter in Europe	2008-2014	Germany	Europe	Poultry	Fecal	Non P. Escherichia coli	58	38			38				
		mcr-1-like detection in commensal Escherichia coli and Salmonella spp. fromfood-producing animals at slaughter in Europe	2008-2014	Spain	Europe	Swine	Fecal	Non P. Escherichia coli	47	23			23				
		mcr-1-like detection in commensal Escherichia coli and Salmonella spp. fromfood-producing animals at slaughter in Europe	2008-2014	Netherland	Europe	Poultry	Fecal	Non P. Escherichia coli	5	5			5				
85	10.1128/AAC.00841-17	Genomic and Molecular Characterizationof Clinical Isolates of EnterobacteriaceaeHarboring mcr-1 in Colombia, 2002 to2016	2002-2016	Colombia	South America	Human	N.A	P. *Escherichia coli*	86	8			8	2	Chromsomal	37	1

		Genomic and Molecular Characterizationof Clinical Isolates of EnterobacteriaceaeHarboring mcr-1 in Colombia, 2002 to2016	2002-2016	Colombia	South America	Human	N.A	*Salmonella enterica* seorvar Typhimurium	135	3			3	1	IncFIB	101	1
		Genomic and Molecular Characterizationof Clinical Isolates of EnterobacteriaceaeHarboring mcr-1 in Colombia, 2002 to2016	2002-2016	Colombia	South America	Human	N.A	*Klebsiella pneumoniae*	66	1			1			744	1
		Genomic and Molecular Characterizationof Clinical Isolates of EnterobacteriaceaeHarboring mcr-1 in Colombia, 2002 to2016														1263	1
		Genomic and Molecular Characterizationof Clinical Isolates of EnterobacteriaceaeHarboring mcr-1 in Colombia, 2002 to2016														6627	1
		Genomic and Molecular Characterizationof Clinical Isolates of EnterobacteriaceaeHarboring mcr-1 in Colombia, 2002 to2016														3056	1
		Genomic and Molecular Characterizationof Clinical Isolates of EnterobacteriaceaeHarboring mcr-1 in Colombia, 2002 to2016														6627	1
86	10.3389/fmicb.2017.02232	Occurrence of Extended Spectrum β-Lactamases, KPC-Type, and MCR-1.2-Producing Enterobacteriaceae from Wells, River Water, and Wastewater Treatment Plants in Oltrepò Pavese Area, Northern Italy	2014-2015	Italy	Europe	Water	Water	P. *Escherichia coli*	132	1		mcr1.2	1	1	IncX4	10	1
87	10.1128/AAC.01245-17	Heterogeneous Genetic Location of mcr-1in Colistin-Resistant Escherichia coliIsolates from Humans and Retail ChickenMeat in Switzerland: Emergence of mcr-1-Carrying IncK2 Plasmids	2014-2016	Switzerland	Europe	Poultry	Chicken meat	P. *Escherichia coli*		8			8	2	IncI2	58	1
		Heterogeneous Genetic Location of mcr-1in Colistin-Resistant Escherichia coliIsolates from Humans and Retail ChickenMeat in Switzerland: Emergence of mcr-1-Carrying IncK2 Plasmids	2014-2016	Switzerland	Europe	Human	Fecal	P. *Escherichia coli*		2			2	2	IncHI2	1775	1
		Heterogeneous Genetic Location of mcr-1in Colistin-Resistant Escherichia coliIsolates from Humans and Retail ChickenMeat in Switzerland: Emergence of mcr-1-Carrying IncK2 Plasmids	2014-2016	Switzerland	Europe	Human	Fecal	P. *Escherichia coli*		1		mcr1.2	1	2	IncX4	38	1
		Heterogeneous Genetic Location of mcr-1in Colistin-Resistant Escherichia coliIsolates from Humans and Retail ChickenMeat in Switzerland: Emergence of mcr-1-Carrying IncK2 Plasmids												1	IncX4	226	1

		Heterogeneous Genetic Location of mcr-1in Colistin-Resistant Escherichia coliIsolates from Humans and Retail ChickenMeat in Switzerland: Emergence of mcr-1-Carrying IncK2 Plasmids											2	IncK2	10	1
		Heterogeneous Genetic Location of mcr-1in Colistin-Resistant Escherichia coliIsolates from Humans and Retail ChickenMeat in Switzerland: Emergence of mcr-1-Carrying IncK2 Plasmids											2	Chromsomal	5	1
		Heterogeneous Genetic Location of mcr-1in Colistin-Resistant Escherichia coliIsolates from Humans and Retail ChickenMeat in Switzerland: Emergence of mcr-1-Carrying IncK2 Plasmids													38	1
		Heterogeneous Genetic Location of mcr-1in Colistin-Resistant Escherichia coliIsolates from Humans and Retail ChickenMeat in Switzerland: Emergence of mcr-1-Carrying IncK2 Plasmids													1049	1
		Heterogeneous Genetic Location of mcr-1in Colistin-Resistant Escherichia coliIsolates from Humans and Retail ChickenMeat in Switzerland: Emergence of mcr-1-Carrying IncK2 Plasmids													5	1
88	10.1016/j.diagmicrobio.2017.06.020	Detection and genetic features of MCR-1-producing plasmid in humanEscherichia coliinfection in South Korea	2014-2015	South Korea	Asia	Human	Fecal	P. *Escherichia coli*	2082	1			1	1	IncI2	167	1
89	10.3201/eid2307.161638	Locally Acquired mcr-1 in Escherichia coli, Australia, 2011 and 2013	2011-2013	Australia	Australia	Human	N.A	P. *Escherichia coli*	4555	2			2	2	IncI2	93	1
90	10.1016/j.ijantimicag.2017.05.005	Escherichia coli ST167 carrying plasmid mobilisable mcr-1 and blaCTX-M-15 resistance determinants isolated from a human respiratory infection	2016	spain	Europe	Human	N.A	P. *Escherichia coli*	48	1			1			167	1
91	10.1128/AAC.00317-17	Emergence of the Plasmid-Mediated mcr-1 Gene in Clinical KPC-2-Producing Klebsiella pneumoniae Sequence Type 392 in Brazil	2016	Brazil	South America	Human	Urine	*Klebsiella pneumoniae*		1			1	1	IncX4		
92	10.2807/1560-7917.ES.2017.22.31.30589	Novel plasmid-mediated colistin resistance mcr-4 gene in Salmonella and Escherichia coli, Italy 2013, Spain and Belgium, 2015 to 2016	2013	Italy	Europe	Swine	Fecal	*Salmonella enterica* serovar Typhimurium			1	mcr4	1				
		Novel plasmid-mediated colistin resistance mcr-4 gene in Salmonella	2015-2016	spain	Europe	Swine	Fecal	P. *Escherichia coli*	43		9	mcr4	9				

		and Escherichia coli, Italy 2013, Spain and Belgium, 2015 to 2016															
		Novel plasmid-mediated colistin resistance mcr-4 gene in Salmonella and Escherichia coli, Italy 2013, Spain and Belgium, 2015 to 2016	2015-2016	Belgium	Europe	Swine	Fecal	P. *Escherichia coli*	48		2	mcr4	2				
93	10.1128/AAC.02632-16	MCR-1.6, a New MCR Variant Carried by an IncP Plasmid in a Colistin-Resistant Salmonella enterica Serovar Typhimurium Isolate from a Healthy Individual	2014	China	Asia	Human	Fecal	*Salmonella enterica* serovar Typhimurum	1	1		mcr1.6	1	1	IncP		
94	10.1093/jac/dkw261	Mobile MCR-1-associated resistance to colistin in Poland.	2015	Poland	Europe	Human	Urine	P. *Escherichia coli*	37	1			1	1	IncI2	617	1
95	10.1016/S1473-3099(15)00424-7	Emergence of plasmid-mediated colistin resistancemechanism MCR-1 in animals and human beings in China:a microbiological and molecular biological study	2011-2014	China	Asia	Swine	N.A	P. *Escherichia coli*	804	166			166				
		Emergence of plasmid-mediated colistin resistancemechanism MCR-1 in animals and human beings in China:a microbiological and molecular biological study	2011-2014	China	Asia	Poultry	Chicken meat	P. *Escherichia coli*	299	34			34				
		Emergence of plasmid-mediated colistin resistancemechanism MCR-1 in animals and human beings in China:a microbiological and molecular biological study	2011-2014	China	Asia	Swine	Pork	P. *Escherichia coli*	226	43			43				
		Emergence of plasmid-mediated colistin resistancemechanism MCR-1 in animals and human beings in China:a microbiological and molecular biological study	2011-2014	China	Asia	Human	N.A	P. *Escherichia coli*	902	13			13				
		Emergence of plasmid-mediated colistin resistancemechanism MCR-1 in animals and human beings in China:a microbiological and molecular biological study	2011-2014	China	Asia	Human	N.A	*Klebsiella pneumoniae*	420	3			3				
96	10.1016/j.ijid.2017.07.003	Emergence of colistin-resistant *Escherichia coli* clinical isolates harboring *mcr-1* in Vietnam	2014	Vietnam	Asia	Human	N.A	P. *Escherichia coli*	18	2			2	2	Chromsomal	410	1
		Emergence of colistin-resistant *Escherichia coli* clinical isolates harboring *mcr-1* in Vietnam														457	1
97	10.1016/j.ijid.2017.07.023	Emergence of a colistin-resistant *Escherichia coli* clinical isolate harboring *mcr-1* in Japan	2017	Japan	Asia	Human	Fecal	P. *Escherichia coli*	4	1			1	1	IncHI2	5702	1
98	10.3201/eid2207.160234	**Colistin-Resistant *mcr-1*–Positive Pathogenic *Escherichia coli* in Swine, Japan, 2007–2014**	2007-2014	Japan	Asia	Human	Fecal	P. *Escherichia coli*	684	90			90				
99	10.1093/jac/dkx078	***Citrobacter braakii* carrying plasmid-borne *mcr-1* colistin resistance gene**	2013	Bolivia	South America	Ready-to-eat food	N.A	Citrobacter braakii	83	1			1				

		from ready-to-eat food from a market in the Chaco region of Bolivia															
100	10.1016/j.jinf.2017.09.008	**Prevalence of colistin resistance in clinical isolates of Enterobacteriaceae: A four-year cross-sectional study**	2012-2015	Spain	Europe	Human	N.A	P. *Escherichia coli*	53	1			1				
101	10.2807/1560-7917.ES.2017.22.19.30530	Increasing proportion of carbapenemase-producing Enterobacteriaceae and emergence of a MCR-1 producer through a multicentric study among hospital-based and private laboratories in Belgium from September to November 2015.	2015	Belgium	Europe	Human	N.A	P. *Escherichia coli*	3836	1			1				
102	10.1089/mdr.2017.0131	**Plasmid-Mediated Colistin Resistance Gene mcr-1 in an Escherichia coli ST10 Bloodstream Isolate in the Sultanate of Oman**	**2014-2016**	Oman	Asia	Human	Blood	P. *Escherichia coli*	22	1			1				
103	10.1016/j.jgar.2017.08.002	Colistin resistance among blood culture isolates at a tertiary care centre in Hungary.	2010-2011	Hungary	Europe	Human	Blood	P. *Escherichia coli*	146	1			1	1	IncI2	10	1
104	10.1186/s13756-017-0234-8	Plasmid-mediated mcr-1 colistin resistanceinEscherichia coliandKlebsiella spp.clinicalisolates from the Western Cape region of South Africa	2016	South Africa	Africa	Human	Urine	P. *Escherichia coli*		10			10				
105	10.2807/1560-7917.ES.2016.21.27.30280	Identification of a novel plasmid-mediated colistin-resistance gene, mcr-2, in Escherichia coli, Belgium, June 2016.	2016	Belgium	Europe	Swine	Fecal	P. *Escherichia coli*	10								
		Identification of a novel plasmid-mediated colistin-resistance gene, mcr-2, in Escherichia coli, Belgium, June 2016.	2016	Belgium	Europe	Swine	N.A	P. *Escherichia coli*			2	mcr2	2	2	IncX4		
		Identification of a novel plasmid-mediated colistin-resistance gene, mcr-2, in Escherichia coli, Belgium, June 2016.	2016	Belgium	Europe	Bovine	N.A	P. *Escherichia coli*			1	mcr2	1	1	IncX4		
106	10.1089/fpd.2017.2329	Detection of Plasmid-Mediated Colistin Resistance, *mcr-1* and *mcr-2* Genes, in *Salmonella* spp. Isolated from Food at Retail in Belgium from 2012 to 2015	2012-2015	Belgium	Europe	Mixed food sources	N.A	*Salmonella enterica* serovar Typhimurim	105								
		Detection of Plasmid-Mediated Colistin Resistance, *mcr-1* and *mcr-2* Genes, in *Salmonella* spp. Isolated from Food at Retail in Belgium from 2012 to 2015	2012-2015	Belgium	Europe	Swine	Pork	*Salmonella enterica* serovar Typhimurim		1			1	1	IncX4		
		Detection of Plasmid-Mediated Colistin Resistance, *mcr-1* and *mcr-2* Genes, in *Salmonella* spp. Isolated from Food at Retail in Belgium from 2012 to 2015	2012-2015	Belgium	Europe	Swine	Pork	*Salmonella enterica* serovar Derby			1	mcr2	1	1	IncX4		

		Detection of Plasmid-Mediated Colistin Resistance, *mcr-1* and *mcr-2* Genes, in *Salmonella* spp. Isolated from Food at Retail in Belgium from 2012 to 2015	2012-2015	Belgium	Europe	N.A	N.A	*Salmonella enterica* serovar Typhimurim		1			1	1	IncX4		
107	10.3201/eid2209.160091	Colistin-Resistant Enterobacteriaceae Carryingthe mcr-1 Gene among Patients in Hong Kong	2015-2016	China	Asia	Human	N.A	P. *Escherichia coli*	1324	4			4	4	IncI2		
		Colistin-Resistant Enterobacteriaceae Carryingthe mcr-1 Gene among Patients in Hong Kong	2015-2016	China	Asia	Human	N.A	*Acintobacter*	103	1			1	1	IncI2		
108	10.2807/1560-7917.ES.2017.22.39.17-00206	Widespread distribution of mcr-1-bearing bacteria in the ecosystem, 2015 to 2016	2015-2016	China	Asia	Human	N.A	P. *Escherichia coli*		84			84				
		Widespread distribution of mcr-1-bearing bacteria in the ecosystem, 2015 to 2016	2015-2016	China	Asia	Human	N.A	*Enterobacter cloacae*		4			4				
		Widespread distribution of mcr-1-bearing bacteria in the ecosystem, 2015 to 2016	2015-2016	China	Asia	Water	Water	P. *Escherichia coli*		77			77				
		Widespread distribution of mcr-1-bearing bacteria in the ecosystem, 2015 to 2016	2015-2016	China	Asia	Water	Water	*Klebsiella pneumoniae*		4			4				
		Widespread distribution of mcr-1-bearing bacteria in the ecosystem, 2015 to 2016	2015-2016	China	Asia	Water	Water	*Klebsiella variicola*		3			3				
109	10.1128/AAC.01139-17	Emergence of mcr-1 in Raoultella ornithinolytica and Escherichia coli Isolates from Retail Vegetables in China	2015-2016	China	Asia	Vegetables	N.A	P. *Escherichia coli*		4			4				
		Emergence of mcr-1 in Raoultella ornithinolytica and Escherichia coli Isolates from Retail Vegetables in China	2015-2016	China	Asia	Vegetables	N.A	*Raoultella ornithinolytica*		2			2				
110	10.1093/jac/dkw245	Detection of the mcr-1 gene in Escherichia coli prevalent in the migratory bird species Larus argentatus.	2016	lithuania	Asia	Poultry	N.A	P. *Escherichia coli*	117	1			1				
111	10.1093/jac/dkw262	The colistin resistance *mcr*-1 gene is going wild	2012	Argentina	South America	Poultry	N.A	P. *Escherichia coli*		5			5				
112	thesis:YZU2017YananTian	The analysis of antimicrobial resistance and the plasmid mediated resistant genes in Salmonella Typhimurium isolates	2015	China	Asia	Human	Fecal	*Salmonella enterica* serovar Typhimurium	20	2			2				
		The analysis of antimicrobial resistance and the plasmid mediated resistant genes in Salmonella Typhimurium isolates	2012-2015	China	Asia	Poultry	Saliva, Urine	*Salmonella enterica* serovar Typhimurium	66	15			15				
113	10.3760/cma.j.issn.1674-2397.2016.05.013	Analysis of carbapenemases genes and colistin resistance gene mcr-1 in carbapenem-resistant Enterobacteriaceae	2014-2015	China	Asia	Human	N.A	P. *Escherichia coli*	34	1			1	1	IncX4		

		Analysis of carbapenemases genes andcolistin resistance gene mcr-1 in carbapenem-resistant Enterobacteriaceae	2014-2015	China	Asia	Human	N.A	*Klebsiella pneumoniae*	34	1			1	1	IncX4		
114	10.3760/cma.j.issn.1009-9158.2016.08.014	Molecular mechanisms of colistin - resistant Klebsiella pneumoniae and Escherichia coli isolates	2011-2014	China	Asia	Human	Blood, secreta, phlegm, urine	*Klebsiella pneumoniae*	964	4			4				
		Molecular mechanisms of colistin - resistant Klebsiella pneumoniae and Escherichia coli isolates	2011-2014	China	Asia	Human	N.A	P. *Escherichia coli*	1389	23			23				
115	thesis:SCAU2016YiyunLiu	Emergence of Plasmid-Mediated Colistin Resistance Gene mcr-1 in Enterobacteriacea	2012-2014	China	Asia	Swine	Fecal	P. *Escherichia coli*	804	66			66				
116	thesis:SCAU2016DanYao	Molecular Epidemiology of ESBLs- and Carbapenemases-producing Enterobacteriaceae from Retail Meat and Vegetables	2014-2015	China	Asia	Lettuce	N.A	P. *Escherichia coli*	1	1			1			877	1
117	thesis:SCAU2016LinfengYu	Transfer Mechanism of Colistin Resistance Gene mcr-1 among Escherichia coli Isolates from a Livestock Farm of Shanghai	2013	China	Asia	Swine	Fecal	P. *Escherichia coli*	47	27			27				
118	thesis:JZMU2017JiananSun	Study on the Drug resistance of Streptococcus in the Main Links of Pig Industry Chain in Western Liaoning province and It strians mission	2015-2017	China	Asia	Swine	N.A		142	6			6				
		Study on the Drug resistance of Streptococcus in the Main Links of Pig Industry Chain in Western Liaoning province and It strians mission	2015-2017	China	Asia	Swine	Pork		22	5			5				
		Study on the Drug resistance of Streptococcus in the Main Links of Pig Industry Chain in Western Liaoning province and It strians mission	2015-2017	China	Asia	Human	N.A		8	4			4				
119	thesis:CAU2017RongmingZhang	The molecular epidemiology of The NDM and MCR-l positive E. Coli from poultry production chain	2014	China	Asia	Poultry	Fecal	P. *Escherichia coli*	407	131			131	6	Chromsomal	10	46
		The molecular epidemiology of The NDM and MCR-l positive E. Coli from poultry production chain	2014-2015	China	Asia	Poultry	Chicken meat	P. *Escherichia coli*	42	12			12			156	1
		The molecular epidemiology of The NDM and MCR-l positive E. Coli from poultry production chain	2014	China	Asia	Dog	N.A	P. *Escherichia coli*	17	5			5			48	1
		The molecular epidemiology of The NDM and MCR-l positive E. Coli from poultry production chain	2014	China	Asia	Water	Water	P. *Escherichia coli*	5	2			2			162	1
		The molecular epidemiology of The NDM and MCR-l positive E. Coli from poultry production chain	2014	China	Asia	Flies	N.A	P. *Escherichia coli*	93	16			16			167	1
		The molecular epidemiology of The NDM and MCR-l positive E. Coli from poultry production chain														175	1

		The molecular epidemiology of The NDM and MCR-l positive E. Coli from poultry production chain														206	1
		The molecular epidemiology of The NDM and MCR-l positive E. Coli from poultry production chain														114	1
		The molecular epidemiology of The NDM and MCR-l positive E. Coli from poultry production chain														354	1
		The molecular epidemiology of The NDM and MCR-l positive E. Coli from poultry production chain														359	1
		The molecular epidemiology of The NDM and MCR-l positive E. Coli from poultry production chain														602	1
120	thesis:CAU2017MingquanChui	Study on the transmission mechanism of mcr-1 gene in Salmonella and the microarray assay for the detection of foodborne pathogens, their resistance and virulence genes	2012-2014	China	Asia	Human	Fecal	*Salmonella enterica* serovar Typhimurium	2034	28			28	1	IncX4		
		Study on the transmission mechanism of mcr-1 gene in Salmonella and the microarray assay for the detection of foodborne pathogens, their resistance and virulence genes	2012-2014	China	Asia	Human	Fecal	*Salmonella enterica* serovar Typhimurium						1	IncI2		
		Study on the transmission mechanism of mcr-1 gene in Salmonella and the microarray assay for the detection of foodborne pathogens, their resistance and virulence genes	2012-2014	China	Asia	Human	Fecal	*Salmonella enterica* serovar Typhimurium						2	IncHI2		
		Study on the transmission mechanism of mcr-1 gene in Salmonella and the microarray assay for the detection of foodborne pathogens, their resistance and virulence genes	2012-2014	China	Asia	Swine	Fecal	*Salmonella enterica* serovar Typhimurium	743	26			26	5	IncHI2		
121	thesis:JLAU2017YixiaoHan	Virulence and resistance analysis of the Echerichia coli isolated from diarrhea piglets	2015-2016	China	Asia	Swine	Fecal	P. *Escherichia coli*	102	11			11				
		Virulence and resistance analysis of the Echerichia coli isolated from diarrhea piglets						P. *Escherichia coli*									
122	10.1016/j.ebiom.2018.07.027	Spread of MCR-3 Colistin Resistance in China: An Epidemiological, Genomic and Mechanistic Study	2016	China	Asia	Human	Fecal	P. *Escherichia coli*	9		9	mcr3	9	3	IncP		
		Spread of MCR-3 Colistin Resistance in China: An Epidemiological, Genomic and Mechanistic Study	2017	China	Asia	Swine	Fecal	P. *Escherichia coli*	40		40	mcr3	40	1	IncHI2		
123	10.1038/s41426-018-0033-1	Rapid rise of the ESBL and mcr-1 genes in Escherichia coli of chicken origin in China, 2008–2014	2008-2014	China	Asia	Poultry	N.A	P. *Escherichia coli*	341	44			44	28	IncI2	10	3
		Rapid rise of the ESBL and mcr-1 genes in Escherichia coli of chicken origin in China, 2008–2014														29	3

		Rapid rise of the ESBL and mcr-1 genes in Escherichia coli of chicken origin in China, 2008–2014														101	3
		Rapid rise of the ESBL and mcr-1 genes in Escherichia coli of chicken origin in China, 2008–2014														354	3
		Rapid rise of the ESBL and mcr-1 genes in Escherichia coli of chicken origin in China, 2008–2014														1268	4
		Rapid rise of the ESBL and mcr-1 genes in Escherichia coli of chicken origin in China, 2008–2014														46	9
124	10.1093/cid/ciy683	Transmission of Mobile Colistin Resistance (mcr-1) by Duodenoscope	2017	United States	North America	Human	Fecal	*Klebsiella pneumoniae*	14	2			2				
125	10.1080/21505594.2018.1462060	Discovery of a mcr-1-bearing plasmid in commensal colistin-resistant Escherichia coli from healthy broilers in Faisalabad, Pakistan	2016-2017	Pakistan	Asia	Poultry	Fecal	Non P. Escherichia coli		8			8	8	IncI2	10	1
		Discovery of a mcr-1-bearing plasmid in commensal colistin-resistant Escherichia coli from healthy broilers in Faisalabad, Pakistan														155	1
		Discovery of a mcr-1-bearing plasmid in commensal colistin-resistant Escherichia coli from healthy broilers in Faisalabad, Pakistan														2847	1
		Discovery of a mcr-1-bearing plasmid in commensal colistin-resistant Escherichia coli from healthy broilers in Faisalabad, Pakistan														6395	3
		Discovery of a mcr-1-bearing plasmid in commensal colistin-resistant Escherichia coli from healthy broilers in Faisalabad, Pakistan														361	4
126	10.1016/j.ijantimicag.2018.02.019	Multidrug-resistant Shigella sonnei carrying the plasmid-me diate d mcr - 1 gene in China	2010-2012	China	Asia	Human	Fecal	*Shigella sonnei*	1650	6			6	6	IncI2		
127	10.1128/JCM.01562-17	mcr-3 and mcr-4 Variants in Carbapenemase-Producing Clinical Enterobacteriaceae Do Not Confer Phenotypic PolymyxinResistance		Singapore	Asia	Human	N.A	P. *Escherichia coli*	500		1	mcr3	1				
		mcr-3 and mcr-4 Variants in Carbapenemase-Producing Clinical Enterobacteriaceae Do Not Confer Phenotypic PolymyxinResistance		Singapore	Asia	Human	N.A	P. *Escherichia coli*	500		1	mcr4.2	1				
128	10.3760/cma.j.issn.0254-5101.2018.01.007	Detection and epidemiology of mcr-1-positive Escherichia coli strains in Dongyang area of Zhejiang Province	2016	China	Asia	Human	N.A	P. *Escherichia coli*	315	5			5			43	2
		Detection and epidemiology of mcr-1-positive Escherichia coli strains in Dongyang area of Zhejiang Province														69	1

		Detection and epidemiology of mcr-1-positive Escherichia coli strains in Dongyang area of Zhejiang Province														131	1
		Detection and epidemiology of mcr-1-positive Escherichia coli strains in Dongyang area of Zhejiang Province														349	1
		Detection and epidemiology of mcr-1-positive Escherichia coli strains in Dongyang area of Zhejiang Province															
129	10.1093/cid/cix885	High Rates of Human Fecal Carriage of mcr-1-Positive Multidrug-Resistant Enterobacteriaceae Emerge in China in Association With Successful Plasmid Families	2011-2016	China	Asia	Human	Fecal	P. *Escherichia coli*	497	321			321	27	IncI2	156	1
		High Rates of Human Fecal Carriage of mcr-1-Positive Multidrug-Resistant Enterobacteriaceae Emerge in China in Association With Successful Plasmid Families	2011-2016	China	Asia	Human	Fecal	P. *Escherichia coli*		27			27	15	IncX4	131	1
		High Rates of Human Fecal Carriage of mcr-1-Positive Multidrug-Resistant Enterobacteriaceae Emerge in China in Association With Successful Plasmid Families	2011-2016	China	Asia	Human	Fecal	P. *Escherichia coli*		15			15	22	IncHI2	155	1
		High Rates of Human Fecal Carriage of mcr-1-Positive Multidrug-Resistant Enterobacteriaceae Emerge in China in Association With Successful Plasmid Families	2011-2016	China	Asia	Human	Fecal	P. *Escherichia coli*		22			22			405	1
		High Rates of Human Fecal Carriage of mcr-1-Positive Multidrug-Resistant Enterobacteriaceae Emerge in China in Association With Successful Plasmid Families	2011-2016	China	Asia	Human	Fecal	*Klebsiella pneumoniae*		13			13				
		High Rates of Human Fecal Carriage of mcr-1-Positive Multidrug-Resistant Enterobacteriaceae Emerge in China in Association With Successful Plasmid Families	2011-2016	China	Asia	Human	Fecal	*Enterobacter cloacae*		1			1				
130	10.1093/jac/dky111	Novel plasmid-mediated colistin resistance gene mcr-7.1 in Klebsiella pneumoniae	2015	China	Asia	Poultry	N.A	*Klebsiella pneumoniae*	183	7			7				
		Novel plasmid-mediated colistin resistance gene mcr-7.1 in Klebsiella pneumoniae	2015	China	Asia	Poultry	N.A	*Klebsiella pneumoniae*			1	mcr7.1	1	8	IncI2		
131	10.1093/femsle/fny100	The presence of colistin resistance gene mcr-1 and -3 in ESBL producing Escherichia coli isolated from food in Ho Chi Minh City, Vietnam	2012-2014	Vietnam	Asia	N.A	N.A	Non P. Escherichia coli	261								
		The presence of colistin resistance gene mcr-1 and -3 in ESBL producing Escherichia coli isolated from food in Ho Chi Minh City, Vietnam	2012-2014	Vietnam	Asia	N.A	N.A	Non P. Escherichia coli		60			60				

		The presence of colistin resistance gene mcr-1 and -3 in ESBL producing Escherichia coli isolated from food in Ho Chi Minh City, Vietnam	2012-2014	Vietnam	Asia	N.A	N.A	Non P. Escherichia coli			2	mcr3	2				
132	10.3389/fmicb.2018.00745	Evidence for Environmental Dissemination of Antibiotic Resistance Mediated by Wild Birds	2015	China	Asia	Water	Water	Non P. Escherichia coli	5	3			3				
		Evidence for Environmental Dissemination of Antibiotic Resistance Mediated by Wild Birds	2015	China	Asia	Poultry	Fecal	Non P. Escherichia coli	5	1			1				
133	10.1016/j.vetmic.2018.04.002	Emergence of the colistin resistance gene mcr-1 and its variant in several uncommon species of Enterobacteriaceae from commercial poultry farm surrounding environments	2016	China	Asia	Poultry	Fecal	Non P. Escherichia coli	22	2			2	2	IncI2		
		Emergence of the colistin resistance gene mcr-1 and its variant in several uncommon species of Enterobacteriaceae from commercial poultry farm surrounding environments	2016	China	Asia	Poultry	Fecal	Non P. Escherichia coli		20			20				
		Emergence of the colistin resistance gene mcr-1 and its variant in several uncommon species of Enterobacteriaceae from commercial poultry farm surrounding environments	2016	China	Asia	Poultry	Fecal	*Pseudomonas alcalifaciens*		1			1				
		Emergence of the colistin resistance gene mcr-1 and its variant in several uncommon species of Enterobacteriaceae from commercial poultry farm surrounding environments	2016	China	Asia	Poultry	Fecal	*Raoultella planticola*		1		mcr1.3	1	1	IncI2		
		Emergence of the colistin resistance gene mcr-1 and its variant in several uncommon species of Enterobacteriaceae from commercial poultry farm surrounding environments	2016	China	Asia	Poultry	Fecal	*Enterobacter cloacae*		1			1	1	IncX4		
		Emergence of the colistin resistance gene mcr-1 and its variant in several uncommon species of Enterobacteriaceae from commercial poultry farm surrounding environments	2016	China	Asia	Poultry	Fecal	*Salmonella enterica*		5			5				
134	10.1016/j.ijid.2018.08.011	Emergence of IncX4 plasmids encoding mcr-1 in a clinical isolate of Klebsiella pneumoniae in Japan	2017	Japan	Asia	Human	Fecal	*Klebsiella pneumoniae*	5	4			4	2	IncX4		
		Emergence of IncX4 plasmids encoding mcr-1 in a clinical isolate of Klebsiella pneumoniae in Japan												2	IncI2		

		Emergence of IncX4 plasmids encoding mcr-1 in a clinical isolate of Klebsiella pneumoniae in Japan	2017	Japan	Asia	Human	Fecal	*Klebsiella pneumoniae*		1			1	1	IncX4		
135	10.3389/fmed.2018.00099	alkaline Peptone Water-Based enrichment Method for mcr-3 From acute Diarrheic Outpatient gut samples	2017	China	Asia	Human	Fecal	P. *Escherichia coli*		29			29				
		alkaline Peptone Water-Based enrichment Method for mcr-3 From acute Diarrheic Outpatient gut samples	2017	China	Asia	Human	Fecal	*Aeromonas veronii*			8	mcr3	8				
136	10.1089/mdr.2017.0400	Genomic Characterization of Nonclonal *mcr*-1-Positive Multidrug-Resistant *Klebsiella pneumoniae* from Clinical Samples in Thailand	2017	Thailand	Asia	Human	N.A	*Klebsiella pneumoniae*		2			2	2	IncX4		
137	10.1128/AAC.01885-17	Emergence of Chromosome-Borne Colistin Resistance Gene mcr-1 in Clinical Isolates of Klebsiella pneumoniae from India	2016	India	Asia	Human	N.A	*Klebsiella pneumoniae*		4			4				
		Emergence of Chromosome-Borne Colistin Resistance Gene mcr-1 in Clinical Isolates of Klebsiella pneumoniae from India		China	Asia	Swine	Pork	*Aeromonas*			1	mcr3	1				
		Emergence of Chromosome-Borne Colistin Resistance Gene mcr-1 in Clinical Isolates of Klebsiella pneumoniae from India		China	Asia	Poultry	Chicken meat	*Aeromonas*			3	mcr3	3				
		Emergence of Chromosome-Borne Colistin Resistance Gene mcr-1 in Clinical Isolates of Klebsiella pneumoniae from India		China	Asia	Aquatic environment	N.A	*Aeromonas*			4	mcr3	4				
138	10.1111/jam.13907	Longitudinal study on the occurrence in pigs of colistin-resistant Escherichia coli carrying mcr-1 following the cessation of use of colistin	2015	United Kingdom	Europe	Swine	Fecal	P. *Escherichia coli*	9	8			8				
		Longitudinal study on the occurrence in pigs of colistin-resistant Escherichia coli carrying mcr-1 following the cessation of use of colistin	2015	United Kingdom	Europe	Swine	Fecal	*Salmonella enterica*		1			1				
139	10.2147/IDR.S160489	Multicenter prospective study on the prevalence of colistin resistance in Escherichia coli: relevance of mcr-1-positive clinical isolates in lombardy, northern Italy	2016	italy	Europe	Human	N.A	P. *Escherichia coli*	18	10			10				
140	10.1128/AAC.01021-18	Screening and Characterization of Multidrug-Resistant GramNegative Bacteria from a Remote African Area, São Tomé and Príncipe	2016-2017	Portugal	Europe	Human	N.A	P. *Escherichia coli*	30	1			1				
141	10.3201/eid2404.171787	mcr-1 in Carbapenemase-Producing Klebsiella pneumoniae in Hospitalized Patients, Portugal, 2016–2017	2016-2017	Portugal	Europe	Human	N.A	*Klebsiella pneumoniae*	359	24			24	24	IncX4		

142	10.1016/j.ijantimicag.2018.08.008	Mobile Colistin Resistance Genes in Escherichia coli from Pigs Affected by Colibacillosis	2015-2016	Italy	Europe	Swine	N.A	P. *Escherichia coli*	33	17			17				
		Mobile Colistin Resistance Genes in Escherichia coli from Pigs Affected by Colibacillosis	2015-2016	Italy	Europe	Swine	N.A	P. *Escherichia coli*			3	mcr2	3				
		Mobile Colistin Resistance Genes in Escherichia coli from Pigs Affected by Colibacillosis	2015-2016	Italy	Europe	Swine	N.A	P. *Escherichia coli*			10	mcr4	10				
143	10.1016/j.ijfoodmicro.2018.01.017	Emergence of plasmid-mediated colistin-resistance in CMY-2-producing Escherichia coli of lineage ST2197 in a Tunisian poultry farm	2013	Tunisia	Africa	Poultry	Fecal	P. *Escherichia coli*	48	2			2	2	IncF	2197	2
144	10.1093/jac/dky110	Mobile colistin resistance gene mcr-5 in porcine Aeromonas hydrophila	2017	China	Asia	Swine	Fecal	*Aeromonas hydrophila*	8		1	mcr5	1	1	IncFIB		
145	10.1128/AAC.02378-17	Detection of mcr-1 Gene among Escherichia coli Isolates from Farmed Fish and Characterization of mcr-1-Bearing IncP Plasmids	2016-2017	China	Asia	Fish	N.A	Non P. Escherichia coli	192	7			7	2	IncI2	48	1
		Detection of mcr-1 Gene among Escherichia coli Isolates from Farmed Fish and Characterization of mcr-1-Bearing IncP Plasmids														4014	1
		Detection of mcr-1 Gene among Escherichia coli Isolates from Farmed Fish and Characterization of mcr-1-Bearing IncP Plasmids												2	Inck	7508	1
		Detection of mcr-1 Gene among Escherichia coli Isolates from Farmed Fish and Characterization of mcr-1-Bearing IncP Plasmids												1	IncX4	101	1
		Detection of mcr-1 Gene among Escherichia coli Isolates from Farmed Fish and Characterization of mcr-1-Bearing IncP Plasmids												2	Incx	2040	1
		Detection of mcr-1 Gene among Escherichia coli Isolates from Farmed Fish and Characterization of mcr-1-Bearing IncP Plasmids														7030	1
		Detection of mcr-1 Gene among Escherichia coli Isolates from Farmed Fish and Characterization of mcr-1-Bearing IncP Plasmids														156	1
146	10.1093/jac/dkx489	Emergence of blaCTX-M-55 associated with fosA, rmtB and mcr gene variants in Escherichia coli from various animal species in France	2010-2013	France	Europe	N.A	N.A	P. *Escherichia coli*	21	1			10	1	IncP	2930	1
			2010-2013	France	Europe	N.A	N.A	P. *Escherichia coli*			10	mcr3	1	1	IncP	540	1
147	10.1128/JCM.01932-17	Rapid Increase in Prevalence of Carbapenem-Resistant Enterobacteriaceae (CRE) and Emergence of Colistin Resistance	2014-2016	China	Asia	Human	N.A	P. *Escherichia coli*	1311	1			1				

		Gene mcr-1 in CRE in a Hospital in Henan, China															
148	10.1093/jac/dky038	Occurrence of the mobile colistin resistance gene mcr-3 in Escherichia coli from household pigs in rural areas	2015	China	Asia	Swine	Fecal	Non P. Escherichia coli		71			71	2	IncP		
		Occurrence of the mobile colistin resistance gene mcr-3 in Escherichia coli from household pigs in rural areas	2015	China	Asia	Swine	Fecal	Non P. Escherichia coli			5	mcr3	5	2	IncHI2		
149	10.1128/AAC.01304-18	The Colistin Resistance Gene, mcr-1, is Prevalent in Commensal E. coli Isolated from Lebanese Pre-harvest Poultry in Lebanon	2017-2018	Lebanon	Asia	Poultry	Fecal	Non P. Escherichia coli	90	88			88				
150	10.1016/j.ijantimicag.2017.08.007	Investigation of potential risk factors for the occurrence of Escherichia coli isolates from German fattening pig farms harbouring the mcr-1 colistin–resistance gene	2011-2012	Germany	Europe	Swine	Fecal	Non P. Escherichia coli	216	26			26				
151	10.1111/apm.12834	The first human report of mobile colistin resistance gene, mcr-1, in Finland	2016	Finland	Europe	Human	Fecal	P. *Escherichia coli*		1			1	1	IncX4	93	1
152	10.1016/j.ijantimicag.2018.03.022	Co-occurrence of mcr-1, mcr-4 and mcr-5 genes in multidrug-resistant ST10 Enterotoxigenic and Shiga toxin-producing Escherichia coli in Spain (2006-2017)	2006-2017	spain	Europe	Swine	N.A	P. *Escherichia coli*	186	37	102	mcr4	139				
		Co-occurrence of mcr-1, mcr-4 and mcr-5 genes in multidrug-resistant ST10 Enterotoxigenic and Shiga toxin-producing Escherichia coli in Spain (2006-2017)	2006-2017	spain	Europe	Swine	N.A	P. *Escherichia coli*			5	mcr5	5				
153	10.2147/IDR.S171164	Co-production of mCR-1 and nDm-5 in Escherichia coli isolated from a colonization case of inpatient	2016	China	Asia	Human	N.A	P. *Escherichia coli*	88	1			1	1	IncX4	46	1
154	10.1093/jac/dkx538	Identification of novel variants of the colistin resistance gene mcr-3 in Aeromonas spp. from the national resistance monitoring programme GERM-Vet and from diagnostic submissions	2005-2011	Germany	Europe	Fish	N.A	*Aeromonas*	479		4	mcr3	4				
155	10.1016/j.jgar.2018.06.007	Prevalence of colistin resistance gene mcr-1 in colistin-resistant Escherichia coli and Klebsiella pneumoniae isolated from humans in Thailand	2014-2017	Thailand	Europe	Human	N.A	P. *Escherichia coli*	13	11			11				
		Prevalence of colistin resistance gene mcr-1 in colistin-resistant Escherichia coli and Klebsiella pneumoniae isolated from humans in Thailand	2014-2017	Thailand	Europe	Human	N.A	*Klebsiella pneumoniae*	213	4			4				
156	10.1093/jac/dky292	Molecular epidemiology of isolates with multiple mcr plasmids from a pig farm in Great Britain: the effects of colistin withdrawal in the short and long term	2015-2017	United Kingdom	Europe	Swine	Fecal	Non P. Escherichia coli		224			224				

		Molecular epidemiology of isolates with multiple mcr plasmids from a pig farm in Great Britain: the effects of colistin withdrawal in the short and long term	2015-2017	United Kingdom	Europe	Swine	Fecal	Non P. Escherichia coli			7	mcr3	7	7	IncP		
157	10.1016/j.scitotenv.2018.05.387	Emergence of mcr-1 plasmid-mediated colistin-resistant Escherichia coli isolates from seawater	2016	Algeria	Africa	Seawater	Water	Non P. Escherichia coli	246	2			2				
158	10.1016/j.ijid.2018.02.006	Microbiological surveillance of plasmid mediated colistin resistance in human Enterobacteriaceae isolates in Romagna (Northern Italy): August 2016–July 2017	2016-2017	Italy	Europe	Human	N.A	P. *Escherichia coli*	90	26			26			617	1
		Microbiological surveillance of plasmid mediated colistin resistance in human Enterobacteriaceae isolates in Romagna (Northern Italy): August 2016–July 2017														744	1
		Microbiological surveillance of plasmid mediated colistin resistance in human Enterobacteriaceae isolates in Romagna (Northern Italy): August 2016–July 2017														73	1
		Microbiological surveillance of plasmid mediated colistin resistance in human Enterobacteriaceae isolates in Romagna (Northern Italy): August 2016–July 2017														410	1
		Microbiological surveillance of plasmid mediated colistin resistance in human Enterobacteriaceae isolates in Romagna (Northern Italy): August 2016–July 2017														624	1
		Microbiological surveillance of plasmid mediated colistin resistance in human Enterobacteriaceae isolates in Romagna (Northern Italy): August 2016–July 2017														10	1
		Microbiological surveillance of plasmid mediated colistin resistance in human Enterobacteriaceae isolates in Romagna (Northern Italy): August 2016–July 2017														354	1
		Microbiological surveillance of plasmid mediated colistin resistance in human Enterobacteriaceae isolates in Romagna (Northern Italy): August 2016–July 2017														216	1
		Microbiological surveillance of plasmid mediated colistin resistance in human Enterobacteriaceae isolates in Romagna (Northern Italy): August 2016–July 2017														96	1

		Microbiological surveillance of plasmid mediated colistin resistance in human Enterobacteriaceae isolates in Romagna (Northern Italy): August 2016–July 2017														224	1
		Microbiological surveillance of plasmid mediated colistin resistance in human Enterobacteriaceae isolates in Romagna (Northern Italy): August 2016–July 2017														69	1
		Microbiological surveillance of plasmid mediated colistin resistance in human Enterobacteriaceae isolates in Romagna (Northern Italy): August 2016–July 2017														457	1
		Microbiological surveillance of plasmid mediated colistin resistance in human Enterobacteriaceae isolates in Romagna (Northern Italy): August 2016–July 2017														131	1
159	10.1089/mdr.2018.0110	Prevalence of Extended-Spectrum Beta-Lactamase-Producing Gram-Negative Bacilli and Emergence of mcr-1 Colistin Resistance Gene in Lebanese Swine Farms	2017	Lebanon	Asia	Swine	Fecal	Non P. Escherichia coli	111	23			23				
160	10.1186/s12879-018-2987-y	Prospective study on human fecal carriage of Enterobacteriaceae possessing mcr-1 and mcr-2 genes in a regional hospital in Hong Kong	2016	China	Asia	Human	Fecal	P. *Escherichia coli*		14			14	3	IncK	442	1
		Prospective study on human fecal carriage of Enterobacteriaceae possessing mcr-1 and mcr-2 genes in a regional hospital in Hong Kong												3	IncX4	88	1
		Prospective study on human fecal carriage of Enterobacteriaceae possessing mcr-1 and mcr-2 genes in a regional hospital in Hong Kong												1	IncFII	155	1
		Prospective study on human fecal carriage of Enterobacteriaceae possessing mcr-1 and mcr-2 genes in a regional hospital in Hong Kong												2	IncP	10	1
		Prospective study on human fecal carriage of Enterobacteriaceae possessing mcr-1 and mcr-2 genes in a regional hospital in Hong Kong												2	Chromsomal	34	1
		Prospective study on human fecal carriage of Enterobacteriaceae possessing mcr-1 and mcr-2 genes in a regional hospital in Hong Kong												2	Incx	226	1
		Prospective study on human fecal carriage of Enterobacteriaceae possessing mcr-1 and mcr-2 genes in a regional hospital in Hong Kong												1	IncHI2	5995	1

161	10.1016/j.jgar.2017.09.014	Potential transmission opportunity of CTX-M-producing Escherichia coli on a large-scale chicken farm in Vietnam	2013-2014	Vietnam	Asia	Poultry	N.A	P. *Escherichia coli*	33	10			10				
		Potential transmission opportunity of CTX-M-producing Escherichia coli on a large-scale chicken farm in Vietnam	2013-2014	Vietnam	Asia	Human	N.A	P. *Escherichia coli*	20	1			1				
162	10.1016/j.ijid.2018.05.011	Emergence of mcr-1 and mcr-3 variants coding for plasmid-mediated colistin resistance in Escherichia coli isolates from food- producing animals in South Korea	2014-2017	South Korea	Asia	Swine	Fecal	P. *Escherichia coli*	9	3			3				
		Emergence of mcr-1 and mcr-3 variants coding for plasmid-mediated colistin resistance in Escherichia coli isolates from food- producing animals in South Korea	2014-2017	South Korea	Asia	Swine	Fecal	P. *Escherichia coli*			2	mcr3	2				
163	10.3389/fmicb.2018.01217	Molecular Epidemiology of mcr-Encoded Colistin Resistance in Enterobacteriaceae From Food-Producing Animals in Italy Revealed Through the EU Harmonized Antimicrobial Resistance Monitoring	2014-2015	Italy	Europe	Swine	Fecal	Non P. Escherichia coli	678	47			47				
		Molecular Epidemiology of mcr-Encoded Colistin Resistance in Enterobacteriaceae From Food-Producing Animals in Italy Revealed Through the EU Harmonized Antimicrobial Resistance Monitoring	2014-2015	Italy	Europe	Swine	Fecal	Non P. Escherichia coli			1	mcr4	1				
		Molecular Epidemiology of mcr-Encoded Colistin Resistance in Enterobacteriaceae From Food-Producing Animals in Italy Revealed Through the EU Harmonized Antimicrobial Resistance Monitoring	2014-2015	Italy	Europe	N.A	Fecal	Non P. Escherichia coli	861	86			86				
		Molecular Epidemiology of mcr-Encoded Colistin Resistance in Enterobacteriaceae From Food-Producing Animals in Italy Revealed Through the EU Harmonized Antimicrobial Resistance Monitoring	2014-2015	Italy	Europe	Bovine	Fecal	Non P. Escherichia coli			4	mcr3	4				
		Molecular Epidemiology of mcr-Encoded Colistin Resistance in Enterobacteriaceae From Food-Producing Animals in Italy Revealed Through the EU Harmonized Antimicrobial Resistance Monitoring	2014-2015	Italy	Europe	Bovine	Fecal	Non P. Escherichia coli			1	mcr4	1				
		Molecular Epidemiology of mcr-Encoded Colistin Resistance in Enterobacteriaceae From Food-Producing Animals in Italy Revealed Through the EU Harmonized Antimicrobial Resistance Monitoring	2014-2015	Italy	Europe	Turkey	N.A	*Salmonella enterica*	236	3			3				

164	10.1038/s41426-018-0124-z	Emergence of a novel mobile colistin resistance gene, mcr-8,inNDM-producing Klebsiella pneumoniae	2015-2017	China	Asia	Swine	Fecal	*Klebsiella pneumoniae*			1	mcr8	1	1	IncP	42	1
165	10.1016/j.ijantimicag.2018.01.023	The prevalence of colistin resistance in Escherichia coli and Klebsiella pneumoniae isolated from food animals in China: coexistence of mcr-1 and blaNDM with low fitness cost	2016	China	Asia	N.A	N.A	Non P. Escherichia coli	373	100			100	14	IncX		
			2016	China	Asia	N.A	Fecal	*Klebsiella pneumoniae*	54	2			2				
166	10.1016/j.ijantimicag.2017.12.030	Isolation of an IncP-1 plasmid harbouring mcr-1 from a chicken isolate of Citrobacter braakii in China	2015	China	Asia	Poultry	Fecal	*Citrobacter braakii*	12	5			5				
167	10.3389/fmicb.2018.00815	A Novel mcr-1 Variant Carried by an IncI2-Type Plasmid Identified From a Multidrug Resistant Enterotoxigenic Escherichia coli	2014	China	Asia	Human	Fecal	P. *Escherichia coli*	1	5		mcr1.9	5	6	Chromsomal		
168	10.1099/jmm.0.000793	A clinical isolate of Escherichia coli co-harbouring mcr-1 and blaNDM-5 in Japan	2017	Japan	Asia	Human	Fecal	P. *Escherichia coli*		1			1			132	1
169	10.1016/j.ijantimicag.2018.01.007	Co-occurrence of mcr-1 in the chromosome and on an IncHI2 plasmid: persistence of colistin resistance in Escherichia coli	2012	China	Asia	Swine	Fecal	P. *Escherichia coli*		2			2	2	IncHI2	1114	1
																7314	1
170	10.1016/j.diagmicrobio.2017.12.015	Spread of colistin resistance gene mcr-1 in Italy: characterization of the mcr-1.2 allelic variant in a colistin-resistant blood isolate of Escherichia coli	2015-2017	Italy	Europe	Human	Blood	P. *Escherichia coli*		2		mcr1.2	2	2	IncX4	354	
171	10.1128/AAC.00501-18	Colocation of the Polymyxin Resistance Gene mcr-1 and a Variant of mcr-3 on a Plasmid in an Escherichia coli Isolate from a Chicken Farm	2015	China	Asia	Poultry	Fecal	P. *Escherichia coli*		1			1	2	IncK		
		Colocation of the Polymyxin Resistance Gene mcr-1 and a Variant of mcr-3 on a Plasmid in an Escherichia coli Isolate from a Chicken Farm		China	Asia	Poultry	Fecal	P. *Escherichia coli*			1	mcr3.11	1	1	IncF		
172	10.1016/j.ijantimicag.2018.07.007	Co-occurrence of mcr-3 and bla NDM-5 genes in multidrug-resistant Klebsiella pneumoniae ST709 from a commercial chicken farm in China	2016-2017	China	Asia	Poultry	Fecal	*Klebsiella pneumoniae*	30		1	mcr3.11	1				
173	10.1128/AAC.00404-18	Prevalence and Genetic Analysis of mcr-3-Positive Aeromonas Species from Humans, Retail Meat, and Environmental Water Samples	2017	China	Asia	Human	Fecal	*Aeromonas hydrophila*			2	mcr3	2				
		Prevalence and Genetic Analysis of mcr-3-Positive Aeromonas Species from Humans, Retail Meat, and Environmental Water Samples	2017	China	Asia	Swine	Pork	*Aeromonas hydrophila*			1	mcr3	1				
		Prevalence and Genetic Analysis of mcr-3-Positive Aeromonas Species	2017	China	Asia	Poultry	Chicken meat	*Aeromonas veronii*			3	mcr3	3				

		from Humans, Retail Meat, and Environmental Water Samples															
		Prevalence and Genetic Analysis of mcr-3-Positive Aeromonas Species from Humans, Retail Meat, and Environmental Water Samples	2017	China	Asia	Water	Water	*Aeromonas veronii*			4	mcr3	4				
174	10.1186/s13099-018-0266-5	Antimicrobial resistance in Enterobacteriaceae from healthy broilers in Egypt: emergence of colistin-resistant and extended-spectrum β-lactamase-producing Escherichia coli	2016	Egypt	Africa	Poultry	Fecal	P. *Escherichia coli*	63	5			5				
175	10.1089/mdr.2017.0026	First Report of the Plasmid-Mediated Colistin Resistance Gene mcr-1 in Escherichia coli ST405 Isolated from Wildlife in Bejaia, Algeria	2016	Algeria	Africa	Barbary macaques	N.A	P. *Escherichia coli*	1	1			1				
176	10.1093/jac/dky272	mcr-1 and mcr-2 (mcr-6.1) variant genes identified in Moraxella species isolated from pigs in Great Britain from 2014 to 2015	2018	United Kingdom	Europe	Swine	Fecal	*Moraxella pluranimalium*			1	mcr6	1				
177	10.1093/ofid/ofx115	Detection of mcr-1-Carrying Escherichia coli Causing BloodstreamInfection in a New York City Hospital: Avian Origins, Human Concerns? Bloodstream Infection in a New York City Hospital: Avian Origins, Human Concerns?	2015	United States	North America	Human	Fecal	P. *Escherichia coli*	1	1			1	1	IncX4	117	1
178	10.1371/journal.pone.0178598	Prevalence of colistin resistance gene (mcr-1) containing Enterobacteriaceae in feces of patients attending a tertiary care hospital and detection of a mcr-1 containing, colistin susceptible E. coli.	2014	Netherland	Europe	Human	Fecal	P. *Escherichia coli*	2	2			2	2	IncX4	359	2
179	10.1111/apm.12720	First environmental sample containing plasmid-mediated colistin-resistant ESBL-producing Escherichia coli detected in Norway.	2010	Norway	Europe	Water	Water	Non P. Escherichia coli	82	2			2			5340	1
180	10.1111/1348-0421.12549	Detection of the *mcr-1* gene in colistin resistant *Escherichia coli* from retail meat in japan	2015	Japan	Asia	Poultry	Chicken meat	P. *Escherichia coli*	154	7			7	7	IncI2	5430	1
		Detection of the *mcr-1* gene in colistin resistant *Escherichia coli* from retail meat in japan	2015	Brazil	South America	Poultry	Chicken meat	P. *Escherichia coli*		2			2	2	IncX4	297	1
		Detection of the *mcr-1* gene in colistin resistant *Escherichia coli* from retail meat in japan	2015	spain	Europe	Swine	Pork	P. *Escherichia coli*	55	1			1	1	IncX4	10	4
		Detection of the *mcr-1* gene in colistin resistant *Escherichia coli* from retail meat in japan														1011	1
		Detection of the *mcr-1* gene in colistin resistant *Escherichia coli* from retail meat in japan														117	1

		Detection of the *mcr-1* gene in colistin resistant *Escherichia coli* from retail meat in japan														155	1
		Detection of the *mcr-1* gene in colistin resistant *Escherichia coli* from retail meat in japan														48	1
		Detection of the *mcr-1* gene in colistin resistant *Escherichia coli* from retail meat in japan														2690	1
181	10.1371/journal.pone.0180347	Molecular characteristics of mcr-1-carrying plasmids and new mcr-1 variant recovered from polyclonal clinical Escherichia coli from Argentina and Canada	2012-2016	Argentina	South America	Human	Blood, urine, abdomen	P. *Escherichia coli*	87	5			5	5	IncI2	6	1
		Molecular characteristics of mcr-1-carrying plasmids and new mcr-1 variant recovered from polyclonal clinical Escherichia coli from Argentina and Canada	2012-2016	Argentina	South America	Human	Blood, urine, abdomen	P. *Escherichia coli*		3		mcr1.5	3	3	IncI2	49	1
		Molecular characteristics of mcr-1-carrying plasmids and new mcr-1 variant recovered from polyclonal clinical Escherichia coli from Argentina and Canada	2011	Canada	North America	Human	Blood, urine, abdomen	P. *Escherichia coli*	1	1			1	1	IncI2	624	1
		Molecular characteristics of mcr-1-carrying plasmids and new mcr-1 variant recovered from polyclonal clinical Escherichia coli from Argentina and Canada														196	1
		Molecular characteristics of mcr-1-carrying plasmids and new mcr-1 variant recovered from polyclonal clinical Escherichia coli from Argentina and Canada														881	1
		Molecular characteristics of mcr-1-carrying plasmids and new mcr-1 variant recovered from polyclonal clinical Escherichia coli from Argentina and Canada														614	1
		Molecular characteristics of mcr-1-carrying plasmids and new mcr-1 variant recovered from polyclonal clinical Escherichia coli from Argentina and Canada														675	1
		Molecular characteristics of mcr-1-carrying plasmids and new mcr-1 variant recovered from polyclonal clinical Escherichia coli from Argentina and Canada														600	1
																615	1
																410	1
																4110	1

182	10.1128/AAC.00017-17	Occurrence of Plasmid- and Chromosome-Carried mcr-1 in Waterborne Enterobacteriaceae in China.	2016	China	Asia	Water	Water	Non P. Escherichia coli	16	16			16	3	Chromsomal		
		Occurrence of Plasmid- and Chromosome-Carried mcr-1 in Waterborne Enterobacteriaceae in China.	2016	China	Asia	Water	Water	*Citrobacter freundii*		2			2	1	IncI2		
		Occurrence of Plasmid- and Chromosome-Carried mcr-1 in Waterborne Enterobacteriaceae in China.	2016	China	Asia	Water	Water	*Klebsiella oxytoca*		2			2	1	IncX4		
		Occurrence of Plasmid- and Chromosome-Carried mcr-1 in Waterborne Enterobacteriaceae in China.	2016	China	Asia	Water	Water	Citrobacter braakii		2			2	2	IncHI2		
		Occurrence of Plasmid- and Chromosome-Carried mcr-1 in Waterborne Enterobacteriaceae in China.	2016	China	Asia	Water	Water	*Enterobacter cloacae*		1			1	2	IncHI2		
183	10.12007/j.issn.0258-4646.2018.08.010	Screening for the mcr-1 Gene in the Members of the *Enterobacteriaceae* and Its Correlation with Colistin Resistant Phenotype	2013-2015	China	Asia	Human	N.A	P. *Escherichia coli*	1421	20			20	2	IncI2		
			2013-2015	China	Asia	Human	N.A	*Klebsiella pneumoniae*	734	6			6	1	IncHI2		
184	10.13699/j.cnki.1001-6821.2018.14.032	Study of a clinical extensive drug resistant *Escherichia coli* isolate coexistence of mcr-1 and NDM-6	2015	China	Asia	Human	Urine	P. *Escherichia coli*		1			1	1		156	1
185	10.7506/spkx1002-6630-201814022	Drug Resistance Analysis of a Multidrug-Resistant *Proteus mirabilis* Carrying the mcr-1 Gene Isolated from Food-Producing Animals	2015	China	Asia	Human	Urine	*Proteus mirabilis*	361	1			1	1	IncI2		
186	10.3784/j.issn.1003-9961.2017.05.005	Polymyxin resistance and mcr-1 prevalence in non-typhoid *Salmonella* isolates in China	2011-2014	China	Asia	Human	Fecal	*Salmonella enterica* serovar Typhimurium	404	1			1	1			
187	10.13590/j.cjfh.2018.05.002	Resistance Characteristic Analaysis for Foodborne *Salmonella* Isolates from China, 26 Provinence Study	2016	China	Asia		Food	*Salmonella enterica* serovar Typhimurium	755	1			1				
				China	Asia		Food	*Salmonella enterica* serovar Derby		1			1				
188	10.13590/j.cjfh.2017.06.003	Resistance Analysis of 1070 *Salmonella* strains isolated from food sample in mainland China, 2015	2015	China	Asia		Food	*Salmonella enterica* serovar London	1070	1			1				
189	10.16303/j.cnki.1005-4545.2018.03.09	Isolation and identification of *Escherichia coli* with resistance to colistin from swine of different growth stages	2016	China	Asia	Swine	Fecal	Non P. Escherichia coli	69	32			32		IncFIB		

		Isolation and identification of *Escherichia coli* with resistance to colistin from swine of different growth stages	2016	China	Asia	Swine	Fecal	Non P. Escherichia coli		14			14		IncY		
		Isolation and identification of *Escherichia coli* with resistance to colistin from swine of different growth stages	2016	China	Asia	Swine	Fecal	Non P. Escherichia coli		7			7		IncFIA		
		Isolation and identification of *Escherichia coli* with resistance to colistin from swine of different growth stages	2016	China	Asia	Swine	Fecal	Non P. Escherichia coli		4			4		IncH		
		Isolation and identification of *Escherichia coli* with resistance to colistin from swine of different growth stages	2016	China	Asia	Swine	Fecal	Non P. Escherichia coli		3			3		IncFIA		
		Isolation and identification of *Escherichia coli* with resistance to colistin from swine of different growth stages	2016	China	Asia	Swine	Fecal	Non P. Escherichia coli		2			2		IncFIC		
		Isolation and identification of *Escherichia coli* with resistance to colistin from swine of different growth stages	2016	China	Asia	Swine	Fecal	Non P. Escherichia coli		1			1		IncHI1		
		Isolation and identification of *Escherichia coli* with resistance to colistin from swine of different growth stages	2016	China	Asia	Swine	Fecal	Non P. Escherichia coli		1			1		IncL/M		
190	thesis:YZU2017 XiaoweiChen	The analysis of antimicrobial resistance and the plasmid mediated resistant genes in *Salmonella* Typhimurium isolates	2014-2016	China	Asia	Human	Fecal	*Salmonella enterica* serovar Typhimurium,	330	1			1	5		34	1
191	10.1016/j.vetmic.2018.09.018	High carriage rate of mcr-1 and antimicrobial resistance profiles of mcr-1-positive Escherichia coli isolates in swine faecal samples collected from eighteen provinces in China	2016-2017	China	Asia	Swine	Fecal	Non P. Escherichia coli	220	152			152				
192	10.2147/IDR.S166726	Prevalence and molecular characteristics of mcr-1 colistin resistance in Escherichia coli: isolates of clinical infection from a Chinese University Hospital	2015-2016	China	Asia	Human	Urine, pus, sputum	P. *Escherichia coli*	1112	6			6	3	IncX4	156	1
		Prevalence and molecular characteristics of mcr-1 colistin resistance in Escherichia coli: isolates of clinical infection from a Chinese University Hospital														457	1
		Prevalence and molecular characteristics of mcr-1 colistin resistance in Escherichia coli: isolates of clinical infection from a Chinese University Hospital														160	1

		Prevalence and molecular characteristics of mcr-1 colistin resistance in Escherichia coli: isolates of clinical infection from a Chinese University Hospital														6706	1
		Prevalence and molecular characteristics of mcr-1 colistin resistance in Escherichia coli: isolates of clinical infection from a Chinese University Hospital														2847	1
		Prevalence and molecular characteristics of mcr-1 colistin resistance in Escherichia coli: isolates of clinical infection from a Chinese University Hospital														345	1
193	10.1016/j.jgar.2018.09.013	First report of Escherichia coli carrying the mobile colistin resistance gene mcr-1 in Turkey	2018	Turkey	Asia	Poultry	Chicken meat	P. *Escherichia coli*	4	4			4	4	IncX4	1094	1
		First report of Escherichia coli carrying the mobile colistin resistance gene mcr-1 in Turkey														3941	1
194	10.1016/j.jgar.2018.09.005	Detection of chromosomal and plasmid mediated mechanisms conferring colistin resistance in Escherichia coli and Klebsiella pneumoniae from Indian food samples	2017	India	Asia	Poultry	Chicken meat	P. *Escherichia coli*	71	2			2	1	IncHI2/HI2A		
		Detection of chromosomal and plasmid mediated mechanisms conferring colistin resistance in Escherichia coli and Klebsiella pneumoniae from Indian food samples	2017	India	Asia	Ovine	Mutton	P. *Escherichia coli*		1			1	1	IncHI2		
		Detection of chromosomal and plasmid mediated mechanisms conferring colistin resistance in Escherichia coli and Klebsiella pneumoniae from Indian food samples												1	IncX1		
195	10.1089/mdr.2017.0391	Characterization of Highly Prevalent Plasmids Coharboring mcr-1, oqxAB, and blaCTX-M and Plasmids Harboring oqxAB and blaCTX-M in Escherichia coli Isolates from Food-Producing Animals in China	2015-2017	China	Asia	Swine	Fecal	P. *Escherichia coli*	73	23			23	9	IncHI2	3	10
		Characterization of Highly Prevalent Plasmids Coharboring mcr-1, oqxAB, and blaCTX-M and Plasmids Harboring oqxAB and blaCTX-M in Escherichia coli Isolates from Food-Producing Animals in China	2015-2017	China	Asia	Poultry	Fecal	P. *Escherichia coli*	420	117			117				
196	10.3389/fmicb.2018.02395	Colistin Resistance Mediated by mcr-1 in ESBL-Producing, Multidrug	2016-2017	Italy	Europe	Poultry	N.A	*Salmonella enterica*	320	3			3	4	IncX4		

		Resistant Salmonella Infantis in Broiler Chicken Industry, Italy (2016-2017)						serovar Infantis									
		Colistin Resistance Mediated by mcr-1 in ESBL-Producing, Multidrug Resistant Salmonella Infantis in Broiler Chicken Industry, Italy (2016-2017)	2016-2017	Italy	Europe	Poultry	Chicken meat	*Salmonella enterica* serovar Infantis		1			1				
197	10.1016/j.ijantimicag.2018.08.015	Clinical characteristics of patients with bacteraemia due to the emergence of mcr-1-harbouring Enterobacteriaceae in humans and pigs in Taiwan	2017	China	Asia	Human	Blood	P. *Escherichia coli*	686	6			6				
		Clinical characteristics of patients with bacteraemia due to the emergence of mcr-1-harbouring Enterobacteriaceae in humans and pigs in Taiwan	2017	China	Asia	Human	blood	*Klebsiella pneumoniae*	673	3			3				
		Clinical characteristics of patients with bacteraemia due to the emergence of mcr-1-harbouring Enterobacteriaceae in humans and pigs in Taiwan	2017	China	Asia	Human	Blood, Fecal	*Salmonella*	221	1			1				
		Clinical characteristics of patients with bacteraemia due to the emergence of mcr-1-harbouring Enterobacteriaceae in humans and pigs in Taiwan	2017	China	Asia	Swine	N.A	P. *Escherichia coli*	16	12			12				
198	10.3201/eid2409.171386	Spread of mcr-1-Driven Colistin Resistance on Hospital Surfaces, Italy	2016-2017	Italy	Europe	Human	N.A	*Acinetobacter lwoffii*	300	4			4				
		Spread of mcr-1-Driven Colistin Resistance on Hospital Surfaces, Italy	2016-2017	Italy	Europe	Human	N.A	*Enterobacter agglomerans*		4			4				
		Spread of mcr-1-Driven Colistin Resistance on Hospital Surfaces, Italy	2016-2017	Italy	Europe	Human	N.A	*Klebsiella pneumoniae*		6			6				
		Spread of mcr-1-Driven Colistin Resistance on Hospital Surfaces, Italy	2016-2017	Italy	Europe	Human	N.A	*Pseudomonas aeruginosa*		1			1				
		Spread of mcr-1-Driven Colistin Resistance on Hospital Surfaces, Italy	2016-2017	Italy	Europe	Human	N.A	*Enterobacter cloacae*		3			3				
		Spread of mcr-1-Driven Colistin Resistance on Hospital Surfaces, Italy	2016-2017	Italy	Europe	Human	N.A	*Citrobacter freundii*		1			1				
		Spread of mcr-1-Driven Colistin Resistance on Hospital Surfaces, Italy	2016-2017	Italy	Europe	Human	N.A	P. *Escherichia coli*									
		Spread of mcr-1-Driven Colistin Resistance on Hospital Surfaces, Italy	2016-2017	Italy	Europe	Human	N.A	*Pseudomonas putida*		1			1				
		Spread of mcr-1-Driven Colistin Resistance on Hospital Surfaces, Italy	2016-2017	Italy	Europe	Human	N.A	*Klebsiella oxytoca*		2			2				
199	10.3389/fmicb.2018.01679	Simultaneous Carriage of mcr-1 and Other Antimicrobial Resistance Determinants in Escherichia coli From Poultry	2017	Argentina	South America	Poultry	Fecal	Non P. Escherichia coli	304	41			41				
200	10.1038/s41564-018-0205-8	Anthropogenic and environmental factors associated with high incidence of mcr-1 carriage in humans across China	2016	China	Asia	Human	Fecal	Non P. Escherichia coli	774	774			774				
201	10.3343/alm.2018.38.6.555	Detection of mcr-1 Plasmids in Enterobacteriaceae Isolates From Human Specimens: Comparison With Those in Escherichia coli Isolates From Livestock in Korea	2010-2015	South Korea	Asia	Human	N.A	P. *Escherichia coli*	565	2			2	2	IncI2		

			2010-2015	South Korea	Asia	Human	N.A	*Enterobacter aerogenes*	887	1			1				
202	10.1128/AAC.02623-17	Prevalence and Molecular Characterization of Escherichia coli Clinical Isolates Carrying mcr-1 in a Chinese Teaching Hospital from 2002 to 2016	2002-2016	China	Asia	Human	Blood, urine, sputum, wound, blood drainage	P. *Escherichia coli*	3434	12			12			1	1
		Prevalence and Molecular Characterization of Escherichia coli Clinical Isolates Carrying mcr-1 in a Chinese Teaching Hospital from 2002 to 2016														2	1
		Prevalence and Molecular Characterization of Escherichia coli Clinical Isolates Carrying mcr-1 in a Chinese Teaching Hospital from 2002 to 2016														45	1
		Prevalence and Molecular Characterization of Escherichia coli Clinical Isolates Carrying mcr-1 in a Chinese Teaching Hospital from 2002 to 2016														46	1
		Prevalence and Molecular Characterization of Escherichia coli Clinical Isolates Carrying mcr-1 in a Chinese Teaching Hospital from 2002 to 2016														48	1
		Prevalence and Molecular Characterization of Escherichia coli Clinical Isolates Carrying mcr-1 in a Chinese Teaching Hospital from 2002 to 2016														730	1
		Prevalence and Molecular Characterization of Escherichia coli Clinical Isolates Carrying mcr-1 in a Chinese Teaching Hospital from 2002 to 2016														31	1
		Prevalence and Molecular Characterization of Escherichia coli Clinical Isolates Carrying mcr-1 in a Chinese Teaching Hospital from 2002 to 2016														632	1
		Prevalence and Molecular Characterization of Escherichia coli Clinical Isolates Carrying mcr-1 in a Chinese Teaching Hospital from 2002 to 2016														53	1
		Prevalence and Molecular Characterization of Escherichia coli Clinical Isolates Carrying mcr-1 in a Chinese Teaching Hospital from 2002 to 2016														506	1
									110155	**4917**	**274**		**5191**				

N.B: The empty cells refer to the detailed extracted data in each study.

Supplemental table 3. Frequency of bacteria harboring the different *mcr* types

Isolates	*mcr*-1	*mcr*-2	*mcr*-3	*mcr*-4	*mcr*-5	*mcr*- 6	*mcr*-7	*mcr*-8	Total
Enterobacter									
E. aerogenes	2								2
E. cloacae	11								11
E. agglomerans	4								4
Acinetobacter									
A. Iwoffii	4								4
N.A	1								1
Aeromonas									
A. hydrophila			3		1				4
A. veronii			17						17
N.A			12						**12**
Citrobacter									
C. freundii	4								4
C. braakii	3								3
Cronobacter	**2**								**2**
C. sakazakii	2								2
Klebsiellae									
K. oxytoca	4								4
K. pneumoniae	126		1				1	1	129
K. variicola	3								**3**
Kluyvera									
K. ascorbata	1								1
Moraxella									
M. pluranimalium	1	1				1			3
Non virulent Escherichia coli									
N.A	**1978**		18	2					1998
P. Escherichia coli									
O157	1								1
O29	1								**1**
ONT:H32	1								**1**
ONT:H55	3								**3**
O9:H4									**0**
O54:H32									**0**
ONT:H9	1								1
N.A	2615	6	65	124	5				2815
Proteus									
P. mirabilis	1								1
Pseudomonas									
P. putida	1								1
P. aeruginosa	1								1
P. alcalifaciens	1								**1**
Raoultella									
R. ornithinolytica	2								**2**
R. planticola	1								1
Salmonella enterica									
serovar 1,4,[5],12:i:-	1								**1**
seorvar Derby	2	1							**3**
seorvar Typhimurium	93			1					94
serovar Indiana	1								1
serovar Infantis	4								**4**
serovar Paratyphi B	2				14				16
serovar Paratyphi B var Java	4								4
serovar Paratyphi B var Java phage type Colindale	2								2
serovar Rissen	1								1
serovar Virchow	3								3
serovar London	1								1
N.A	8								8
Shigellae									
Shigella sonnei	7								7
Total	**4917**	**8**	**116**	**127**	**20**	**1**	**1**	**1**	**5191**

Supplemental table 4. Numbers of articles mentioned *mcr* -carrying strains isolation methods.

Methods of isolation	**Number of articles**
Targeted PCR	98
Culture on selective media	36

Supplemental table 4. Country- level frequency of bacteria harboring *mcr* genes

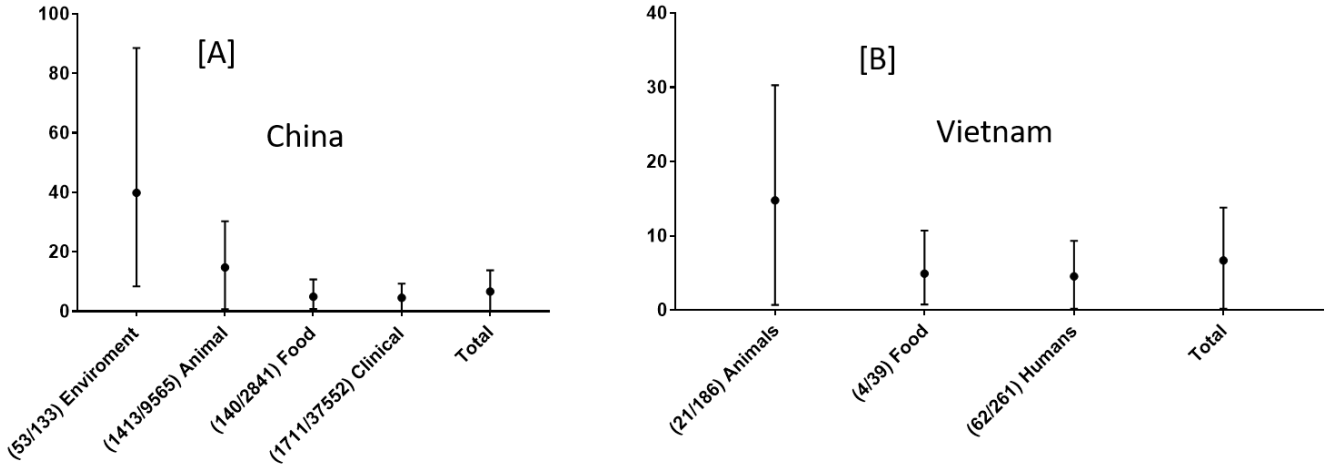
	CHI	LBN	JPN	VIE	THI	LAO	PAK	KOR	MAS	IND	TUR	SGP	BRN	CAM	KSA	OMA	UAE	ITA	UK	ESP	FRA	POR	GER	BEL	SUI	NED	DEN	NOR	EST	AUT	FIN	LTU	HUN	POL	TUN	RSA	EGY	ALG	BRA	ARG	COL	VEN	BOL	ECU	US	CAN	AUS
P. *E. coli*																																															
O157																																													1		
O29																																					1										
ONT:H32																																							**1**								
ONT:H5, O9:H4, O54:H32																																							**3**								
ONT:H9																																							**1**								
N.A	**1937**		**99**	**15**	**14**	**9**	**1**	**8**	**7**	**3**	**4**	**4**	**2**	**1**	**1**		**1**	**1**	**69**	**12**	**212**		**117**	**94**	**4**	**19**	**17**	**11**		**1**	**3**	**1**	**1**	**1**	**1**	**1**	**39**	**26**	**11**	**2**	**19**	**13**	**8**	**2**		**1**	**6**	**4**	**2**
Salmonella enterica																																															
serovar 1,4,[5],12:i:-	**1**																																														
serovar Paratyphi B	**2**																							**14**																							
seorvar Derby	**1**																																														
seorvar Typhimurium	**77**																	**1**	**2**	**3**			**1**		**2**																		**3**					
serovar Indiana	**1**																																														
serovar Infantis																		**4**																													
Serovar Paratyphi B var Java																			**4**																												
serovar Paratyphi B var Java phage type Colindale																			**2**																												
serovar Rissen																				**1**																												
serovar Typh.variant copenhagen																			**1**																												
serovar London	**1**																																														
serovar Virchow																			**3**																												
N.A	**5**																	**3**	**1**					**1**																							
Citrobacter																																															
C. freundii	**3**																	**1**																												
C. braakii	**7**																																													**1**		
Enterobacter																																															
E. aerogenes	**1**							1																																							
E. cloacae	**8**																	**3**																												
E. agglomerans																		**4**																												

Acinetobacter					
A. Iwoffii	**4**				
N.A **1**					
Aeromonas					
A. hydrophila **4**					
A. veronii **17**					
N.A **8**	**4**				
Cronobacter					
C. sakazakii **2**					
Klebsiellae					
K. oxytoca **2**					
K. *pneumoniae* **63 5 6 4**	**2 1 1 32**		**1 1**	**2**	
K. *variicola* **3**	**8**				
Kluyvera ascorbata 1					
Moraxella pluranimalium	**1 2**				
Non p. *E.* coli 1215 111 39 71 8	**139 231 23 34 64 3 5 2**	**2**	**10 41**		
Proteus mirabilis 1					
Pseudomonas					
P. aeruginosa	**1**				
P. alcalifaciens 1					
P.putida	**1**				
Raoultella					
R Ornithinolytica **2**					
R. planticola 1					
Shigella sonnei **6 1**					

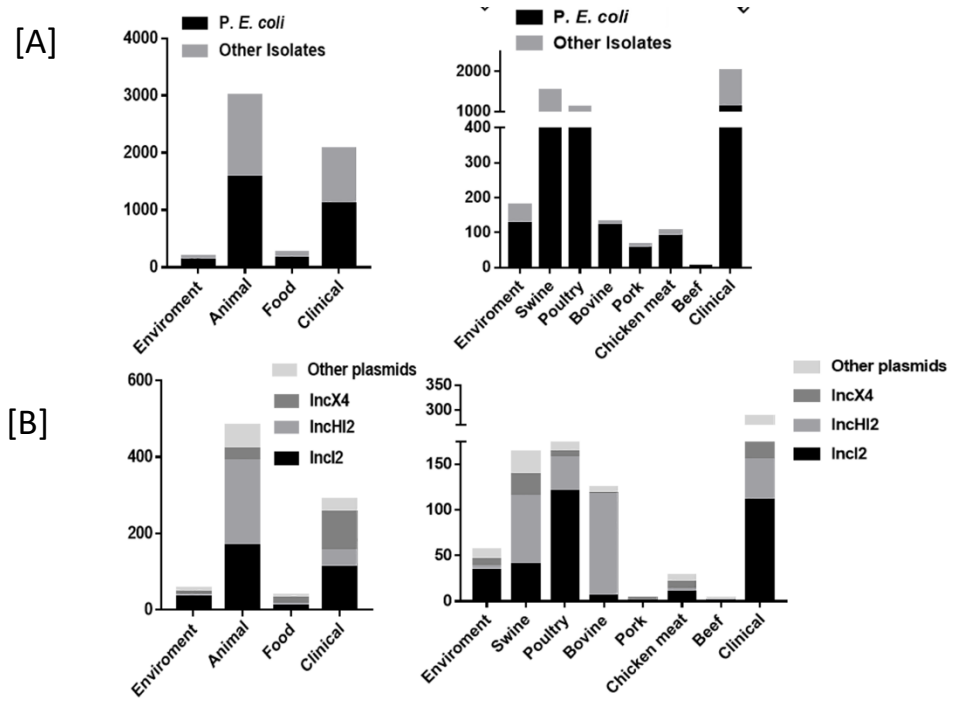
Countries: (CHI) China, (JPN) Japan, (LBN) Lebanon, (VIE) Vietnam, (THA) Thailand, (LAO) Laos, (PAK) Pakistan, (MAS) Malaysia, (KOR) South Korea, (IND) India, (TUR) Turkey, (SGP) Singapore, (BRN) Bahrain, (CAM) Cambodia, (KSA) Kingdom of Saudi Arabia, (OMA) Oman, (UAE) United Arab of Emirates, (UK) United Kingdom, (ESP) Spain, (ITA) Italy, (FRA) France, (POR) Portugal, (GER) Germany, (BEL) Belgium, (SUI) Switzerland, (NED) Netherland, (DEN) Denmark, (NOR) Norway, (EST) Estonia, (AUT) Austria, (FIN) Finland, (POL) Poland, (LTU) Lithuania, (HUN) Hungary, (TUN) Tunisia, (RSA) South Africa, (EGY) Egypt, (ALG) Algeria, (BRA) Brazil, (ARG) Argentina, (COL) Colombia, (VEN) Venezuela, (BOL) Bolivia, (ECU) Ecuador, (U.S) United States, (CAN) Canada, (AUS) Australia

Supplemental table 5. **Estimated clinical *mcr* -carrying isolates**

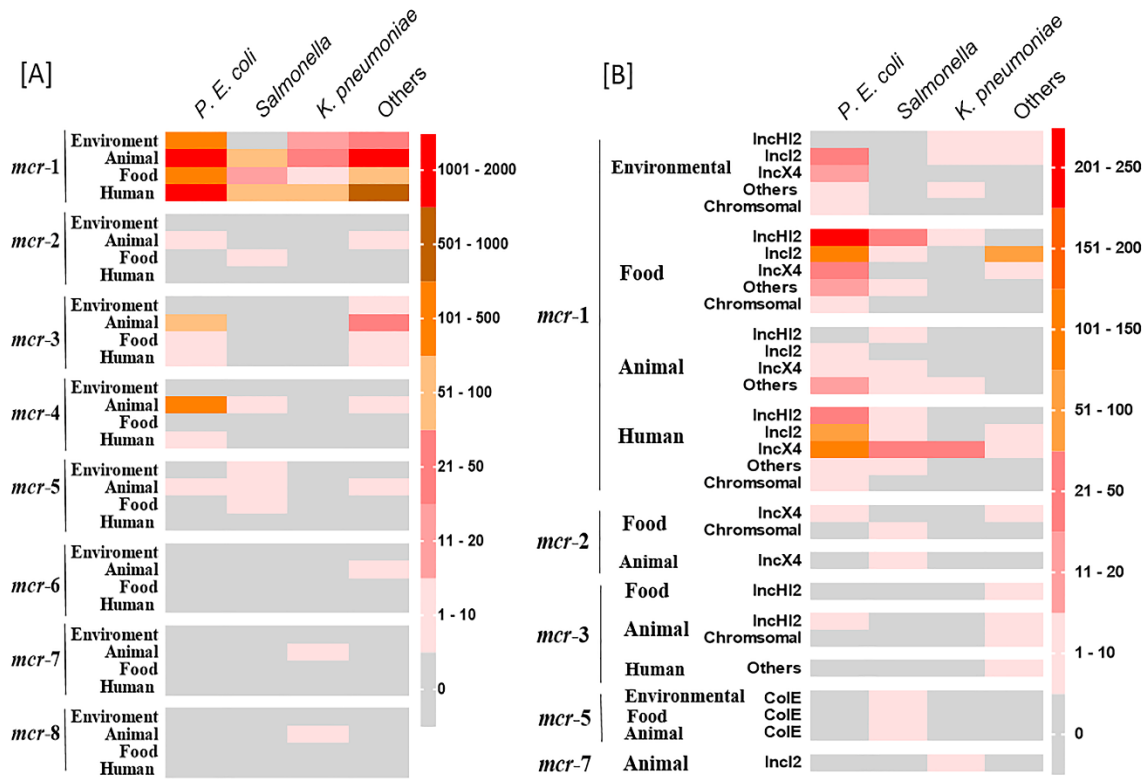
Continents	Countries	Fecal	Blood	Urine	Others	Total	Diseased	Asymptomatic
Asia	China	1438	32	7	234	1711	966	781
	Japan	97				97	97	
	Thailand	2		1	17	20	20	
	Laos	6				6	6	
	South Korea	1			3	4	4	
	India				4	4	4	
	Singapore			2	2	4	4	
	Vietnam	1			2	3	3	
	Bahrain				2	2	2	
	Cambodia	1				1	1	
	KSA				1	1	1	
	Malaysia	1		1		1	1	
	Oman		1			1	1	
	UAE				1	1	1	
Europe	Italy	2	2		58	62	62	
	Portugal		1		25	26	26	
	Spain	15			3	18	18	
	UK	12				12	12	
	Switzerland	9				9	9	
	Netherland	8				8	8	
	Denmark	4				4	4	
	France	1				1	1	
	Belgium				1	1	1	
	Norway				1	1	1	
	Austria	1				1	1	
	Finland	1				1	1	
	Poland			1		1	1	
	Hungary		1			1	1	
Africa	South Africa		4	14	8	26	26	
	Egypt				1	1	1	
	Algeria				1	1	1	
South America	Colombia				12	12	12	
	Argentina				8	8	8	
	Brazil				3	3	3	
	Venezuela	1				1	1	
	Ecuador				1	1	1	
North America	U. S	4	1	2		7	7	
	Canada				2	2	2	
Oceania	Australia				2	2	2	
Total		1605 (77%)	42(2%)	28(1.3%)	392(19.7%)	2067	1286(62%)	781(38%)



Supplemental figure 1. Prevalence of *mcr* genes sources in China and Vietnam



Supplemental figure 2. harboring bacteria and carrying plasmids of *mcr* genes.



Supplemental figure 3. The frequency and distribution of various types of mcr genes.

N.B: Grey cells are blank.

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