

Multi-Drug Resistant isolates										
					CRISPR present / number of spacers					
Isolate	Date	Location	Phylogroup	ST	CRISPR 1	CRISPR 2	CRISPR 3	CRISPR 4	Type I-F Genes	Resistances
R1	2010	ALX Uni Egypt	A							AMP, CIP, CRO, FEP, SMX, TET
R2	2015	RFH London	A		+	+				SMX, TET, TMP
R3	2015	RFH London	A		+	+				SMX, TET, TMP
R4	2015	RFH London	A		+	+				AMP, SMX, TMP
R5	2015	RFH London	A		+	+				AMP, SMX, TMP
R6	2014	RFH London	A		+	+				CIP, CHL, GEN, SMX, TET, TMP
R7	2014	RFH London	A		+	+				CIP, GEN, SMX, TET, TMP
R8	2009	ALX Uni Egypt	A		+	+				AMP, CIP, CHL, CRO, FEP, GEN, SMX, TET
R9	2009	ALX Uni Egypt	A		+	+				AMP, CHL, CIP, CRO, GEN, TET
R10	2010	ALX Uni Egypt	A		+	+				AMP, CIP, CRO, SMX, TET
R11	2014	RFH London	B1		+	+				CIP, CHL, GEN, SMX, TET, TMP
R12	2015	RFH London	B1		+	+				AMP, SMX, TMP
R13	2009	ALX Uni Egypt	B1		+	+				AMP, CHL, CIP, CRO, GEN, TET
R14	2014	RFH London	B2							GEN, SMX, TET, TMP
R15	2015	RFH London	B2							AMP, CHL, SMX, TET, TMP
R16	2015	RFH London	B2							AMP, SMX, TET, TMP
R17	2015	RFH London	B2							AMP, GEN, TET, TMP, SMX, CIP
R18	2015	RFH London	B2							AMP, GEN, SMX, TET
R19	2015	RFH London	B2							AMP, CHL, GEN, SMX, TET
R20	2015	RFH London	B2							AMP, CHL, SMX, TET, TMP
R21	2015	RFH London	B2							AMP, SMX, TET, TMP
R22	2015	RFH London	B2							AMP, GEN, TET, TMP, SMX
R23	2015	RFH London	B2							AMP, CHL, CIP, GEN, SMX, TET, TMP

R24	2015	RFH London	B2						AMP, CIP, SMX, TET, TMP
R25	2015	RFH London	B2						AMP, SMX, TET, TMP
R26	2015	RFH London	B2						AMP, CIP, SMX, TET, TMP
R27	2015	RFH London	B2						AMP, CHL, TET, TMP
R28	2015	RFH London	B2						AMP, TET, TMP, SMX
R29	2015	RFH London	B2						AMP, SMX, TET
R30	2015	RFH London	B2						AMP, SMX, TMP
R31	2011	ALX Uni Egypt	B2						AMP, CIP, CRO, FEP, SMX, TET
R32	2011	ALX Uni Egypt	B2						AMP, CIP, CRO, FEP, SMX, TET
R33	2011	ALX Uni Egypt	B2						AMP, CIP, CRO, FEP, GEN, SMX, TET
R34	2011	ALX Uni Egypt	B2						AMP, CHL, CRO, FEP, GEN, TET
R35	2010	ALX Uni Egypt	B2						AMP, CHL, CRO, IPM, SMX, TET
R36	2010	ALX Uni Egypt	B2						AMP, CHL, CIP, CRO, FEP, GEN, IPM, SMX, TET
R37	2009	ALX Uni Egypt	B2						AMP, CHL, CIP, CRO, SMX, TET
R38	2009	ALX Uni Egypt	B2						AMP, CHL, CRO, GEN, SMX, TET
R39	2009	ALX Uni Egypt	B2						AMP, CRO, FEP, SMX, TET
R40	2011	Jaro. Hosp. Egypt	B2						AMP, CRO, FEP, GEN, SMX, TET
R41	2015	RFH London	B2	ST95	7	6	Yes		AMP, CRO, SMX, TET, TMP
R42	2015	RFH London	B2	ST141	10	11	Yes		AMP, SMX, TMP
R43	2014	RFH London	B2	ST131					CIP, GEN, SMX, TET, TMP
R44	2014	RFH London	B2	ST131					CIP, GEN, SMX, TET, TMP
R45	2014	RFH London	B2	ST131					CIP, GEN, TET, SMX
R46	2014	RFH London	B2	ST131					CIP, SMX, TET, TMP
R47	2014	RFH London	B2	ST131					CIP, SMX, TET, TMP
R48	2015	RFH London	B2	ST131					AMP, CIP, CRO, FEP, SMX, TET, TMP
R49	2015	RFH London	B2	ST131					AMP, CIP, GEN, SMX, TET, TMP
R50	2015	RFH London	B2	ST131					AMP, CIP, CRO, FEP, GEN, SMX, TET, TMP

R51	2015	RFH London	B2	ST131			AMP, CIP, CRO, FEP, GEN, SMX, TET, TMP
R52	2015	RFH London	B2	ST131			AMP, CIP, CRO, FEP, GEN, SMX, TET, TMP
R53	2010	ALX Uni Egypt	B2	ST131			AMP, CIP, CRO, FEP, SMX, TET
R54	2011	ALX Uni Egypt	B2	ST131			AMP, CIP, CRO, GEN, SMX, TET
R55	2011	ALX Uni Egypt	B2	ST131			AMP, CIP, CRO, FEP, SMX, TET
R56	2010	ALX Uni Egypt	B2	ST131			AMP, CIP, CRO, SMX, TET
R57	2009	ALX Uni Egypt	B2	ST131			AMP, CIP, CRO, FEP, GEN, TET
R58	2009	ALX Uni Egypt	B2	ST131			AMP, CHL, CIP, CRO, FEP, GEN SMX, TET
R59	2009	ALX Uni Egypt	B2	ST131			AMP, CIP, CRO, FEP, GEN, SMX, TET
R60	2011	Jaro. Hosp. Egypt	B2	ST131			AMP, CIP, CRO, FEP
R61	2014	RFH London	C		+	+	CIP, GEN, SMX, TET, TMP
R62	2014	RFH London	C		+	+	CIP, CHL, SMX, TMP
R63	2014	RFH London	C		+	+	CIP, CHL, GEN, SMX, TET, TMP
R64	2015	RFH London	C		+	+	AMP, CIP, SMX, TMP
R65	2009	ALX Uni Egypt	D				AMP, CIP, CRO, SMX, TET
R66	2009	ALX Uni Egypt	D				AMP, CIP, CRO, FEP, GEN, SMX, TET
R67	2009	ALX Uni Egypt	D				AMP, CIP, CRO, FEP, GEN, IPM, SMX, TET
R68	2015	RFH London	D			+	AMP, SMX, TET
R69	2009	ALX Uni Egypt	D			+	AMP, CHL, CIP, CRO, FEP, GEN SMX, TET
R70	2011	ALX Uni Egypt	D		+		AMP, CIP, CRO, FEP, GEN, SMX, TET
R71	2010	ALX Uni Egypt	D		+	+	AMP, CRO, FEP, SMX, TET
R72	2010	ALX Uni Egypt	D		+	+	AMP, CIP, CRO, FEP, TET
R73	2009	ALX Uni Egypt	D		+	+	AMP, CRO, GEN, SMX, TET
R74	2009	ALX Uni Egypt	D		+	+	AMP, CIP, CRO, FEP, GEN, SMX, TET
R75	2009	ALX Uni Egypt	D		+	+	AMP, CIP, CRO, GEN, SMX, TET
R76	2009	ALX Uni Egypt	D		+	+	AMP, CIP, CHL, CRO, FEP, GEN, SMX, TET
R77	2014	RFH London	D		+	+	GEN, TET, TET, TMP
R78	2014	RFH London	D		+	+	CHL, SMX, TET, TMP

R79	2015	RFH London	D	+	+	CHL, TET, TMP
R80	2015	RFH London	D	+	+	AMP, SMX, TMP
R81	2015	RFH London	D	+	+	AMP, SMX, TET, TMP
R82	2015	RFH London	D	+	+	AMP, SMX, TET
R83	2015	RFH London	D	+	+	AMP, CHL, TET, TMP
R84	2015	RFH London	D	+	+	AMP, SMX, TET
R85	2011	Jaro. Hosp. Egypt	D	+	+	AMP, CIP, CRO, FEP, SMX, TET
R86	2015	RFH London	F			SMX, TET, TMP
R87	2014	RFH London	F	+		CIP, CHL, GEN, SMX, TET, TMP
R88	2015	RFH London	F	+	+	AMP, CIP, SMX, TET, TMP
R89	2015	RFH London	F	+	+	AMP, CIP, SMX, TET, TMP
R90	2015	RFH London	F	+	+	CIP, GEN, SMX,
R91	2009	ALX Uni Egypt	F	+	+	AMP, CIP, CRO, FEP, GEN, SMX, TET
R92	2009	ALX Uni Egypt	F	+	+	AMP, CHL, CIP, CRO, FEP, GEN, IPM, SMX, TET
R93	2011	Jaro. Hosp. Egypt	F	+	+	AMP, CIP, CRO, SMX, TET
R94	2015	RFH London	<i>E. coli</i> clade	+	+	AMP, CHL, SMX, TET
R95	2010	ALX Uni Egypt	<i>E. coli</i> clade	+		AMP, CIP, CRO, SMX, TET
R96	2015	RFH London	Unclassified	+	+	AMP, SMX, TMP

Susceptible isolates										
					CRISPR present / number of spacers					
Isolate	Date	Location	Phylogroup	ST	CRISPR1	CRISPR2	CRISPR3	CRISPR4	Type I-F Genes	Resistances
S1	2006	SW England	A			+				
S2	2015	RFH London	A			+				
S3	2006	SW England	A		+	+				
S4	2015	RFH London	A		+	+	5			
S5	2015	RFH London	A	ST10		+				
S6	2006	SW England	A	ST10	+	+				
S7	2006	SW England	A	ST399	+	+				
S8	2006	SW England	A	ST399	+	+				
S9	2006	SW England	A	ST5167	+	+				
S10	2006	SW England	B1			+				
S11	2006	SW England	B1		+					
S12	2006	SW England	B1		+	+				
S13	2006	SW England	B1		+	+				
S14	2006	SW England	B1		+	+				
S15	2006	SW England	B1		+	+				
S16	2015	RFH London	B1		+	+				
S17	2006	SW England	B2							
S18	2006	SW England	B2							
S19	2006	SW England	B2							
S20	2006	SW England	B2							
S21	2006	SW England	B2							
S22	2006	SW England	B2							
S23	2006	SW England	B2							
S24	2006	SW England	B2							
S25	2006	SW England	B2							

S26	2006	SW England	B2				
S27	2006	SW England	B2				No
S28	2006	SW England	B2				No
S29	2006	SW England	B2				No
S30	2006	SW England	B2				
S31	2006	SW England	B2				
S32	2006	SW England	B2				
S33	2006	SW England	B2				
S34	2015	RFH London	B2				
S35	2015	RFH London	B2				
S36	2015	RFH London	B2				
S37	2015	RFH London	B2				
S38	2015	RFH London	B2				
S39	2015	RFH London	B2				
S40	2015	RFH London	B2		10		No
S41	2015	RFH London	B2		10		
S42	2006	SW England	B2	ST73	5		
S43	2015	RFH London	B2	ST73			
S44	2006	SW England	B2	ST73			
S45	2015	RFH London	B2	ST131			
S46	2015	RFH London	B2	ST131			
S47	2015	RFH London	B2	ST131			
S48	2015	RFH London	B2	ST357			
S49	2015	RFH London	B2	ST372			
S50	2015	RFH London	B2	ST141	10	12	Yes
S51	2015	RFH London	B2	ST141	10	15	Yes
S52	2006	SW England	B2	ST420	13	7	Yes
S53	2006	SW England	B2	ST421	4	4	Yes

S54	2006	SW England	B2	ST95			3	6	Yes
S55	2006	SW England	B2	ST95			8	5	Yes
S56	2006	SW England	B2	ST95			8	6	Yes
S57	2015	RFH London	B2	ST95			8	6	Yes
S58	2015	RFH London	B2	ST95			8	5	Yes
S59	2015	RFH London	B2	ST95			5	6	Yes
S60	2006	SW England	B2	ST5168			8	5	Yes
S61	2006	SW England	B2	ST5351			3	2	Yes
S62	2006	SW England	B2	ST80			3	2	Yes
S63	2006	SW England	B2	ST2015			14	2	Yes
S64	2006	SW England	B2	ST2582			13	4	Yes
S65	2006	SW England	B2	ST4075			5	5	Yes
S66	2015	RFH London	B2	ST4075			12	5	Yes
S67	2015	RFH London	B2	Unclas- sified			3	2	Yes
S68	2015	RFH London	D		+	+			
S69	2015	RFH London	D		+	+			
S70	2015	RFH London	D		+	+			
S71	2006	SW England	D		+	+			
S72	2006	SW England	D	ST38	+	+	3		No
S73	2006	SW England	E	ST5169		+	8		No
S74	2006	SW England	F						
S75	2006	SW England	F		+	+			
S76	2015	RFH London	F		+	+			
S77	2015	RFH London	F		+	+			
S78	2015	RFH London	F		+	+			
S79	2015	RFH London	F	ST62			8		No
S80	2006	SW England	<i>E. coli</i> clade						

S81	2015	RFH London	<i>E. coli</i> clade		+	+			
S82	2006	SW England	Unclassified	ST3727			8		

Table S1

Full list of strains by antimicrobial susceptibility group (MDR and susceptible)

Samples are from the Royal Free Hospital (RFH) London, South West (SW) of England, Alexandria University (ALX Uni) and Jardoen Hospital (Jaro. Hosp.) Egypt. ST types are shown where determined.