Supplementary Materials: Methicillin-Resistant *Staphylococcus aureus* ST80 clone: a systematic review

Assia Mairi, Abdelaziz Touati and Jean-Philippe Lavigne *

Table S1. Characteristics of MRSA-ST80 isolates published and studied in this review.

Country	Period of sampling	Number of *S. aureus* isolates	Number of MRSA isolates	Number of MRSA-ST80 isolates	Number of MRSA-ST80 PVL+ isolates	Type of samples	Clinical details	Other toxins associated with MRSA-ST80	*spa*-typing	Antimicrobial resistance	Comments	Reference
Multicenter studies												
17 countries in the Americas, Australia-Asia and Europe	2009–2010	ND	3236 PVL-positive MRSA	ND (MRSA-ST80 were reported in Europe and were not reported from other regions)	ND	Patients	ND	ND	ND	-	Retrospective laboratory-based survey	[1]
16 European countries (Spain, France, Poland,	2000–2010	568 (67 HA-*S. aureus* and 145 CA-*S.*	127 (43 HA-MRSA and 84	51	48	Patients	Clinical samples	ND	t044, t067, t131, t376	-	Multicenter study (health-care centers and hospitals)	[2]

Bulgaria, Czech Republic, Netherlands, Greece, Denmark, Finland, Slovakia, Italy, Hungary, Sweden, United Kingdom, Romania, and Portugal)		*aureus* were analyzed)	CA-MRSA)									
North Africa												
Algeria	2004–2007	843	23	15	15	Inpatient (10), outpatient (5)	Infections	ND	t044	ND	Hospital	[3]
	2006–2007	221	99 (34 CA-MRSA and 65 HA-MRSA)	35.7%	-	Patients	SSTIs	*etD, edin*	t044	ND	Hospital	[4]
	2010–2011	129	25 (15 CA-MRSA and 10	24	22	CA-MRSA (9), HA-MRSA (15)	Infections	ND	ND	TE (19), CIP (6), ERY (7), CHL (8), DA (3)	Neonates and children	[5]

		HA-MRSA)									
2011–2012	85	73	10	10	Patients	Diabetic foot infections	*etD*, *edinB*	ND	ND	Diabetic patients	[6]
2010	177	92	19	19	7 CA-MRSA and 12 HA-MRSA	SSTIs (7)	ND	t044	KAN (19), ERY (2), LIN (2), TE (2)	Hospital	[7]
2010–2012	159	9	4	3	Surgery (2) and nephrology (2)	Nasal carriage	ND	ND	TOB (2), GEN (2), TE (1), ERY (1)	General hospital and hemodialysis ward	[8]
2015–2016	118	6	6	6	Camels (2) and sheep (4)	Nasal carriage	*etD*, *edinB*, *hla*, *hld*, *hlgA*, *hlg*, *clfA*, *clfB*, *fnbA*, *fnbB*, *cap8*, *sak*, *scn*	ND	KAN [*aphA3*]	Livestock	[9]
2018	312	20	20	20	Different ecological niches	Nasal and fecal swabs	*lukD*, *lukE* (19), *lukX* (7),*lukY* (15), *etD*, *edinB*, *hla* (10), *hlb* (15), *hld*, *hlgA*, *hlg*, *ebpS*, *bbp*,	ND	FOS (1), KAN, RIF, ERY (3) [*blaZ* (2), *ermC* (3), *aphA3*, *sat*, *fos* (1)]	Humans (3), pets (2), livestock (8), wild animals (4), and food (3)	[10]

							fib, clfA, clfB, fnbA, fnbB, sak, scn (17), cap8				
Tunisia	2008–2009	55	1	1	1	Veterinarian	Nasal swabs	ND	t203	TE, SMN, KAN [*tetK, ant(6)-Ia, aph(3')-IIIa*]	Humans in contact with animals/no contact with animals	[11]
	2003–2005	ND	64	64	64	Outpatients	Infections	*etD, edinB, hlb*	t044	AK (64), KAN (63), ERY (30), TE (3), FUS (2)	-	[12]
	2013	ND	8	8	8	Children	Infections	ND	ND	KAN (8), ERY (2)	Hospitalized children	[13]
Libya	2008–2014	ND	95	17	17	Patients	Clinical samples	ND	t044	ND	Admitted and hospitalized patients (Medical center)	[14]
Egypt	2007	ND	21	2	2	Patients	Pathological samples	*hla, hld, hlg, hlgv, set, lukE, lukD, etD, eno, fnbA, clfA, clfB, fib, ebpS, icaA, icaD*	t044, t042	KAN (2), STM (2), DA (1)	Private clinic	[15]

Middle East											
Jordan	2008	103	41	4	4	Patients	Nose and stools	ND	t044	ND	Hospital	[16]
	2009	ND	37	2	2	Volunteer	Nasal and skin swabs	*hla*, *tst-1*, *seb*	t044	ND	Students and employees	[17]
	2009–2010	60	41	14	14	Patients	Infections	ND	t044	ND	Hospital	[18]
Saudi Arabia	2010–2011	ND	106	37	33	Patients	Carrier (19) and infections (18)	*tst-1* (2)	ND	ND	Hospital	[19]
	2010–2011	ND	58	21	19	Patients	Nasal swabs (2) and infections (19)	*lukD*/*E* (21), *seb*/*sek*/*seq*, (1), *edinB* (21), *etD* (21), *sak*/*scn*/*chp* (20), *cap8* (21)	ND	ERY (4), DA (4) [*ermC* (6/21), *aphA3*/*sat* (17/21), *far1* (18/21), *tetK* (2/21)]	Hospital	[20]
Saudi Arabia and Egypt	2011	104	59	3	3	Outpatients	Nasal swabs	ND	t044	ND	Community	[21]
Qatar	2009–2010	ND	61	8	8	Patients	Nasal swab (1) and infections (7)	ND	t044	ND	Hospital	[22]
Kuwait	2001–2003	ND	26 (7 outpatients and 19	10	10	Patients	Infections	*cap*8	ND	KAN (7), TE (8), FUS (10), DA (9)	Hospital	[23]

		inpatients)									
2005–2006	ND	889 (135 CA-MRSA)	69	58	Patients	Infections and colonization	*sei* (54), *seg* (25), *sed* (19), *tst-1* (1), *cap*8 (69)	ND	KAN (23), TE (23), FUS (23), CIP (18), GEN (5), ERY (11), CHL (2), TMP (3), MUP (1)	Hospital	[24]
2007	ND	4	4	4	Diabetic patient	Clinical samples	*cap8*	ND	KAN, TE, FUS, MUP, SMN [*tetK, far1, mupA*]	Hospital (4 MRSA in the same patient)	[25]
1992–2010	ND	400	30	28	Patients	Clinicals amples	*etD* (30), *seb* (1), *sek* (1), *seq* (1)	t044 (24), t376 (1), t8154 (1), t1154 (1), tt018 (1), t042 (1), t852 (1)	KAN (30), TE (30), FUS (30), ERY (2), DA (2/30) [*aphA3* (30), *far1* (30), *sat* (30), *ermC*(2), *tetK* (2)]	13 public hospitals	[26]
2005–2007	ND	25 (acquired in the ICU)	3	3	Patients	Infections and nasal sample	ND	t044 (2), t5393 (1)	KAN (3), FUS (2), SMN (2)	Hospital	[27]
2006–2011	ND	103 (72 MRSA in neonates, 18 MRSA in adult	8	7	3 MRSA in neonates, 3 MRSA in adult	Infections	ND	t044 (7), t376 (1)	KAN (4), SMN (6), TE (4), FUS (4), TMP (3),	Maternity Hospital	[28]

			patients and 13 MRSA in healthcare workers)			patients and 2 MRSA in healthcare workers				ERY (2), DA (2)		
Lebanon	2006–2007	130	93	41	40	Patients	Skin sources	ND	t044 (40), t131 (1)	ND	Hospital	[29]
	2011	132	39	10	9	Patients		ND	t044 (5), t021 (1), t131 (3), t6476 (1)	ND	Hospital	[30]
Lebanon and Jordan	2000–2011	478	94	23	17	Patients	Clinical samples	*etA* (1), *etD* (21), *tst-1* (6)	t044 (13), t131 (3), t4222 (1), t5849 (2), t5802 (1), t6438 (1), t021 (1), t9135 (1)	KAN (21), TE (6), FUS (21), ERY (8), SMN (22), DA (2)	Hospital	[31]
Iran	-	38	17	1	1	Healthcare workers	Nasal swab	ND	t416	TE, GEN, SXT, CIP, RIF	Hospital	[32]
	2015–2017	240	70 (13 CA-MRSA and 57 HA-MRSA)	5 (1 CA-MRSA and 4 HA-MRSA)	5	Patients	Clinical samples	*clfB* (5), *clfA* (1), *fnbB* (3), *fnbA* (4), *ebp* (1), *bbp* (3), *cna* (2)	t044	AK (4), TMN (3), GEN (1), TE (2), CIP (4), ERY (5), RIF (4), DA (1) [*ermC* (2), *tetM* (2), *ant(4')-Ia* (2),	Four Hospitals	[33]

										aac(6')-Ie/aph(2") (1), *aph(3')-IIIa* (2)]		
United Arab Emirates	2003 and 2008	ND	52	10	10	Patients	Clinical samples	*seb* (1)	t044	KAN (5), FUS (7), TE (4), ERY (1), DA (3), SMN (9), CIP (1)	Hospital	[34]
Turkey	2007–2012	ND	102	3	3	Patients	Infections	ND	ND	KAN, FUS	Hospital	[35]
Oman	2011	ND	79	3	3	Patients	Infections	ND	t044	KAN (3), GEN (1), SMN (3), TE (3), FUS (3), DA (1)	Hospital	[36]
Palestine	2008–2012	215	121	37	2	Patients	Infections	*tst-1* (1)	t044 (36), t458 (1)	ND	Hospital	[37]
Asia												
Singapore	2011–2013	227	5	3	0	Retail foods	Samples (onion, fritters and egg)	*etD*, *seb*, *sek*	t1198	-	-	[38]
Bangladesh	2015–2016	430	132	5	0	Patients	Skin and soft tissue infections	*lukDE* (5), *tst -1* (1), *etD* (5), *edinB* (5), *fnbB* (5), *sea* (4), *sed* (1), *sec* (1), *she* (5), *sei* (1), *sej* (1), *sek*	t044 (1), t8154 (1), t8731 (1), t1193 (2)	ERY	Hospital	[39]

							(5), *sel* (1), *sen* (1), *seo* (1), *seq* (5), *selx* (1), *sely* (4)				
	2010–2013	35	9	3	2	Retail foods	Samples (meatball, burger and sweets)	*seb*	t8731 (1), t1198 (2)	ERY	-	[40]
Malaysia	2003–2008	ND	154	1	ND	Dialysis patient	Nasal swab	ND	t044	ND	Hospital	[41]
						Europe						
Greece	1993 and 1998–2000	ND	118	11	11	Inpatients	Infections	ND	ND	ERY (1), FUS (10)	Hospital	[42]
	2004	ND	20 (CA-MRSA)	18	18	Patients	SSTI	ND	ND	TE, KAN, FUS	Pediatric hospital	[43]
	2004–2005	770	694 (382 CA-MRSA and 312 HA-MRSA)	428	428	Patients	Infections	ND	ND	FUS (418), KAN (428), ERY (6), DA (6)	Hospital	[44]
	2006–2007	88	27	27	27	Patients	Skin and soft tissue infections	ND	t044 (26), t131 (1)	TE, KAN, FUS	Hospital	[45]
	2003–2009	309	180 (CA-MRSA)	61	54/56 MRSA-ST80 tested	Children	Infections	ND	ND	FUS (58), TE (48), ERY (11), DA (16)	Outpatient clinics and hospital	[46]

2009	ND	51	7	7	Patients	Nasal swabs	ND	t044 (6), t131 (1)	CIP (1), ERY (2), DA (2), FUS (7), TE (7)	Hospital	[47]
2010	1	1	1	1	A 28-day-old boy	Orbital cellulitis (culture of pus)	ND	ND	TE, FUS	Hospital	[48]
2001–2012	ND	4614	2838 (2520 CA-MRSA and 318 HA-MRSA)	2825	Patients	SSTI and other infections	*egc* (222)	ND	-	Six hospitals	[49]
2007–2014	41	31 (20 MRSA were selected)	19	19	Children	Pneumonia	*fnbA*	ND	-	Hospital	[50]
2012–2013	60 (53 from pets and seven from veterinary personnel)	16	5	5	Pets and veterinary personnel	Nasal swabs	ND	ND	TE (4), FUS (4), KAN (4)	Companion animal clinics	[51]
2010–2011	143	57 (35 CA-MRSA and 22	45 (33 CA-MRSA and 12	45	Patients and healthcare workers	Infections and colonization	ND	ND	-	Hospital	[52]

			HA-MRSA)	HA-MRSA)								
	2000–2015	ND	398	19	19	Patients	Bloodstream infections	ND	t044	TE (11), FUS (11)	Hospital	[53]
Sweden	2000–2005	ND	367 (104 CA-MRSA)	35 (CA-MRSA)	35	Patients	Infections	ND	ND	ND	Hospital (4 MRSA-ST80 family-transmitted)	[54]
	2000–2004	ND	216	36	36	Patients	Clinical samples	ND	t042 (1), t044 (31), t131 (4)	ND	Hospital	[55]
Denmark	1997–2003	ND	118	118	118	Patients	Clinical samples	ND	ND	TE, KAN, FUS	Hospitals	[56]
	2001	ND	81 (36 HA-MRSA and 45 CA-MRSA)	38 (33 CA-MRSA and 5 HA-MRSA)	38	Patients	Infections	ND	ND	KMN	National Reference Centre for *Staphylococci*	[57]
	2003–2004	ND	143 (42 HA-MRSA and 101 CA-MRSA)	19 (18 CA-MRSA and 1 HA-MRSA)	19	Patients	Colonization	ND	t044 (16), t376 (2), t455 (1)	-	Five hospitals	[58]
	1999–2006	ND	2692 (studied only 526 CA-MRSA	206	65/65 (tested only 65 MRSA-ST80)	Patients	Infections	ND	t042, t044, t131, t376, t455, t1109	TE (175), FUS (191), RIF (1), STM (175), KAN (187),	14 regional laboratories processing all microbiologi	[59]

		isolated from infections)							ERY (11), DA (9)	cal specimens from hospitals, outpatient clinics, and general practitioners	
2003–2005	ND	1639 (291 MRSA FUS-resistant were studied)	178 (only 6 isolates were studied)	ND	Patients	ND	ND	ND	[*fusB* (5)]	Hospital	[60]
2010–2013	ND	341	13	13	Patients	Infections and colonization	ND	ND	t044 (7), t131 (1), t376 (3), t1028 (2)	Hospitals	[61]
1993–2015	217 CC80 *S. aureus* (13 MSSA and 204 MRSA)	204	201	185	Patients	SSTI, other infections and carriage	ND	t044 (138), t131 (8), t376 (6), t934 (4), t1200 (10), t1028 (19), t1198 (1), t1247 (4), t4152 (1), t5088 (2), t5627 (1), t5849 (1), t5941 (1),	[*fusB* (159), *tetK* (146), *aadK*/*aphA* (133)]	Hospitals	[62]

								t6467 (2), t8731 (3)			
Denmark, Egypt, Lebanon	1997–2003	ND	ND	6	6	Patients	Infections	ND	t044	KAN (4), TE (5), FUS (6), STM (3), DA (1)	Hospital	[63]
Norway	1995–2003	ND	143 (67 MRSA were studied)	13	13	Inpatients and outpatients	Nasal swab (2) and infections (11)	ND	ND	KAN, STM	11 hospitals	[64]
	1991–2003	ND	110	27	ND	Patients	Infections	ND	t044	ND	Hospitals	[65]
	2011	ND	179 PVL-positive MRSA	34	34	Patients	Infections	*etD*, *edinB*	t044	(*aphA3*, *sat*, *tetK*, *far1*)	Hospital	[66]
France	2006–2007	ND	105	4	4	Patients	Invasive sampling of blood	*etD*, *edin*	t044	KAN (4), FUS (4), ERY (1)	23 hospitals	[67]
	2003	ND	238 (166 HA-MRSA, 39 CA-MRSA, 14 Nursing-associated-MRSA), and 64	1 (HA-MRSA)	1	Outpatients	Skin and soft tissue	ND	ND	-	45 private-sector community-based-medical laboratories	[68]

			unknown)									
	1999–2009	ND	20	20	20	Patients	Skin infections	*etD*, *edin*	t044	TE, KAN, FUS	Hospital	[69]
	2008	34970	7253 (333 MRSA were analyzed)	91 (CA-MRSA)	89	Patients	Clinical samples	*edin*(89), *etD* (89)	t044	TE (18), ERY (64), RIF (91)	104 laboratories	[70]
	2006	235	34 (CA-MRSA)	1	1	Patients	SSTI	ND	ND	KAN, FUS	71 non-teaching hospitals	[71]
	2008–2013	1283	77	15	12	Pediatric inpatients	Infections	ND	ND	TE (6), KAN (12), ERY (1)	Three hospitals	[72]
Germany	2003–2004	ND	8	8	8	8 patients	Infections and nasal swabs	*lukF/S/D/E*, *hlgA*, *hla*, *hlb*, *hld*, *etD*, *edinB*	t044 (7), t131 (1)	TE (7), FUS (7), STM (8), NMN (8) [*aphA3* (8), *sat* (8), *far1* (7), *tetK* (7)]	Hospitals	[73]
	2004–2006	100 (30 *S. aureus*-PVL+)	3	2	2	Patients	SSTI	*etD*, *edinB*	ND	ND	Hospital	[74]
	2005	ND	2125 (74 low-level oxacillin-resistant isolates were of particula	33 (CA-MRSA)	ND	Patients	Nasal colonization and various types of infections	ND	ND	ND	National Reference Centre for *Staphylococci*	[75]

			r interest)								
	2005–2006	ND	4815 (117 MRSA PVL+ were analyzed)	80 (CA-MRSA)	80	Patients	SSTI (73), pneumonia (1), septicemia (1), nasal colonization (5)	ND	t044	ND	German National Reference Laboratory for typing	[76]
	2000–2007	ND	80	8	8	Patients	Clinical samples	*etD*, *edinB*, *lukD/E/F/S*, *hl*, *hla*, *hlgA*, *hlb*, *hld*, *sak*, *scn*, *cap8*, *clfA*, *clfB*, *ebh*, *ebpS*, *eno*, *fib*	t044 or t131 (Microarray-based genotyping)	[*aphA3*, *sat*, *far1*, *tetK*]	Healthcare facilities, including a university hospital, a long-term rehabilitation facility and four hospitals.	[77]
	2004–2005 and 2010–2011	ND	3207	10	10	Patients	Infections	ND	t044	ND	36 microbiological laboratories throughout Germany	[78]
	2012–2016	ND	94	6	6	Patients	SSTI	ND	t044	ND	Hospital	[79]
United Kingdom	2002	515	15	12	12	Patients	Infections	*etD*	ND	TE (8), ERY (2), CHL (2), FUS (9), CIP (1)	Hospital	[80]

United Kingdom	2000–2006	ND	450 (CIP-S)	12 (3 HA-MRSA and 9 CA-MRSA)	12	Inpatient (4) and outpatient (8)	SSTI	ND	t044	ERY (6), FUS (6), TE (5)	Hospital	[81]
Belgium	2002–2004	ND	41 (16 MRSA PVL+ were analyzed)	9	9	Patients	Clinical samples	ND	t044 (8), t131 (1)	KAN (7), TE (6), FUS (8)	Reference laboratory for *Staphylococci*	[82]
	2005–2009	ND	410 (159 CA-MRSA PVL+ were studied)	76	76	Ambulatory patients	Clinical samples	*etD* (73), *seg* (1), *sen* (1)	t044	KAN (74), TE (69), ERY (15), FUS (65), CIP (1) [*aphA3* (74), *ant4* (1), *tetK* (69), *ermC* (15), *far1* (65)]	Reference laboratory for *Staphylococci* (74 Belgian microbiology laboratories)	[83]
	2013	ND	215	2	2	Pig farms	Nasal swabs	*fnbB, edinB, sasG, sak, scn, hla, hld, hIII, lukF/S/E/D, seg, sei, selm, selo, selu, etD, cap8*	t044	-	328 Farms	[84]
Spain	2004–2007	ND	53 (13 MRSA PVL+)	1	1	Patient	Infections	ND	ND	TE, FUS	Hospital	[85]

	2004–2012	ND	8326 (246 CA-MRSA were analyzed)	5	5	Patients	Infections	ND	t044 (4), t131(1)	-	Spain Reference laboratory for *Staphylococci*	[86]
Italy	2005–2009	ND	18 (CA-MRSA)	4	4	Patients	Necrotising pneumonia (2), SSTI (2)	*lukS/F/E/D/X/Y*, *hlgA*, *hla*, *hld*, *hlb*, *sak*, *scn*, *etD*, *edinB*, *bbp*, *clfA*, *clfB*, *ebh*, *ebpS*, *eno*, *fib*, *fnbA*, *fnbB*, *map*, *cap8*	t044 (3), t2453 (1)	[*ermC* (1), *aphA3*, *sat*, *far1*, *tetK*]	Hospitals	[87]
	2010–2011	ND	10 MRSA PVL+	1	1	Outpatient	Furunculosis	*etD*, *seh*	t044	CIP	Hospital	[88]
Ireland	2003	ND	1389 (25 MRSA PVL+)	2 (1 CA-MRSA and 1 HA-MRSA)	2	Patients	Colonization (1) and blood stream infection (1)	*etD*	t044	FUS (2), KAN (2), NMN (2), STM (2), TE (2), CHL (1)	23 Irish hospitals	[89]
	2002–2011	7103 (229 *S. aureus* PVL+ were analyzed)	190	27	27	Patients	Infections	*etD*, *edin*	t044 (21), t376 (5), t131 (1)	KAN (21), NEO (21), TE (21), FUS (20), CIP (1), ERY (11), DA (23), CHL (1), TMP (1)	Irish National MRSA Reference Laboratory	[90]

										[*tetK* (19), *aphA3* (29), *sat* (29), *fusB* (29), *ermC* (11)]		
Netherlands	1987–1995 and 2000–2002	ND	413 MRSA (20 MRSA PVL+ were studied)	12	12	Patients	SSTI	*etD*, *edin*	ND	ND	Hospital	[91]
	2005–2006	ND	12 (CA-MRSA)	12	12	Dutch soccer team	SSTI	ND	t044	TE, FUS, KAN	-	[92]
	1998–2005	ND	54 MRSA PVL+ were studied	43	43	Community (32), hospitals (4) and nursing homes (7)	SSTI (28), colonization (9), others (6)	ND	ND	ND	-	[93]
	2002–2006	ND	175	2	2	Patients	Clinical samples	ND	t044, t131	ND	Hospital	[94]
	2003–2010	ND	117	3 (CA-MRSA)	3	Patients	Infections	ND	t044	ND	Four hospitals	[95]
Austria	2001–2006	ND	1150 (94 MRSA PVL+ were analyzed)	14	14	Patients	Infections	ND	ND	ND	50 medical facilities (hospitals, medical doctors, private laboratories)	[96]

	2005–2010	ND	650 (31 MRSA PVL+ were studied)	3	3	Patients	SSTI	ND	t044, t455, t1201	FUS (2), ERY (1)	Hospitals	[97]
Switzerland	2000–2005	ND	200	7	3	Patients	Clinical samples	*etD* (3/7)	t044	ND	Hospital	[98]
Croatia	2004	1815	248	8	3	Patients	Clinical samples	ND	t044, t1605, t2608	ND	24 hospitals	[99]
Malta	2008–2009	ND	45	1	1	Hospital employee	Wound swab	*lukF/S/D/E, etD, hlgA, hl, hla, hlb, hld, edinB, ebh, bbp, clfA, clfB, eno, fib, fnbA, fnbB*	ND	STM, NEO, FUS, TE, KAN [*aphA3, sat, far1, tetK*]	Hospital	[100]
Portugal	2005–2006	38	3	1	1	Children	SSTI	*lukDE, hlg, etD, sel*	t044	ND	Hospital	[101]
Slovenia	2006–2013	ND	385 (CA-MRSA)	2	2	Patients	SSTI (1), sepsis and meningitis (1)	*etD*	t044	TE, FUS, KAN,	Hospital	[102]
North America												
USA	2006	ND	ND	1	1	Patient	Urinary tract infection			GEN, TOB, DA, ERY, CIP, TE, FUS	Hospital	[103]

AK: amikacin, CHL: chloramphenicol, CIP: ciprofloxacin, DA: clindamycin, ERY: erythromycin, FUS: fusidic acid, GEN: gentamicin, KAN: kanamycin, MUP: mupirocin, NEO: neomycin, NMN: netilmicin, RIF: rifampicin, SSTI: skin and soft tissue infections, STM: streptomycin, TE: tetracycline, TOB: tobramycin, TMP: trimethoprim, ND:

not determined, MRSA: Methicillin resistant S. aureus, CA-MRSA: Community-acquired MRSA, HA-MRSA: Hospital-acquired MRSA, PVL: Panton Valentine Leukocidin, ICU, intensive care unit.

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