

Table S1. Methicillin-resistant *Staphylococcus aureus* isolates among pediatric patients come from various provinces in northern and southern Vietnam.

Northern provinces	No. of isolates	Southern provinces	No. of isolates
Bac Giang	3	An Giang	1
Bac Ninh	3	Ba Ria Vung Tau	5
Ha Giang	1	Binh Duong	12
Ha Nam	1	Binh Phuoc	8
Ha Noi	18	Binh Thuan	2
Ha Tinh	1	Buon Ma Thuat	1
Hai Duong	3	Can Tho	2
Hoa Binh	2	Dak Lak	4
Hung Yen	2	Dac Nong	1
Lang Son	1	Dong Nai	8
Nam Dinh	4	Dong Thap	2
Nghe An	2	Gia Lai	2
Ninh Binh	1	Hau Giang	1
Phu Tho	6	Ho Chi Minh	41
Quang Ninh	3	Lam Dong	7
Son La	2	Long An	1
Thai Binh	3	Nha Trang	1
Thai Nguyen	1	Phan Thiet	1
Thanh Hoa	5	Quang Ngai	1
Yen Bai	1	Tay Ninh	2
		Tien Giang	2

Table S2. Distribution of *SCCmec* types of methicillin-resistant *Staphylococcus aureus* isolates in the two pediatric hospitals, Vietnam.

SCCmec types	Northern hospital			<i>p</i> -value*	Southern hospital			<i>p</i> -value*
	Total	HA-MRSA	CA-MRSA		Total	HA-MRSA	CA-MRSA	
	(N=63)	(N=48)	(N=15)		(N=105)	(N=82)	(N=23)	
SCCmecII	26 (41.3)	21 (43.8)	5 (33.3)		3 (2.9)	0 (0)	3 (13.0)	
SCCmecIII	21 (33.3)	15 (31.2)	6 (40.0)	0.578	43(41.0)	32 (39.0)	11 (47.8)	0.014
SCCmecIV	14 (22.2)	11 (22.9)	3 (20.0)		52 (49.5)	44 (53.7)	8 (34.8)	
Others	2 (3.2)	1 (2.1)	1 (6.7)		7 (6.7)	6 (7.3)	1 (4.3)	

* Fisher's exact test.

Table S3. Minimum inhibitory concentration values by *SCCmec* types of methicillin-resistant *Staphylococcus aureus* isolates from children in the two pediatric hospitals, Vietnam.

Antimicrobials	SCC <i>mec</i> II N=29	SCC <i>mec</i> III N=64	SCC <i>mec</i> IV N=66	Others N=9	Total N=168
Gentamicin					
Range	2- >128	0.06- >128	0.06- >128	1- >128	0.06- >128
MIC50	>128	1	2	8	2
MIC90	>128	128	>128	>128	>128
Rifampicin					
Range	0.06- 1	0.06- 1	0.06- 2	0.06- 1	0.06- 2
MIC50	0.06	0.06	0.06	0.06	0.06
MIC90	0.06	0.06	0.06	0.06	0.06
Ciprofloxacin					
Range	0.12- >128	0.06- >128	0.06- >128	0.12- >128	0.06->128
MIC50	16	0.25	0.25	0.25	0.25
MIC90	64	16	32	64	32
Vancomycin					
Range	0.5-2	0.5-2	0.5-2	0.5-2	0.5-2
MIC50	2	1	1	1	1
MIC90	2	2	2	2	2
Erythromycin					
Range	0.25- >128	0.06- >128	0.06- >128	128- >128	0.06->128
MIC50	>128	>128	128	>128	>128
MIC90	>128	>128	>128	>128	>128
Chloramphenicol					
Range	4- 64	2- >128	2- 128	2- 128	2- >128
MIC50	8	48	8	32	8
MIC90	64	128	32	64	128
Tetracycline					
Range	0.25- 128	0.06- 128	0.06- 128	0.12- 16	0.06- 128

MIC50	32	16	0.5	0.25	4
MIC90	64	64	32	16	32
Doxycycline					
Range	0.06- 32	0.06-16	0.06-8	0.06-32	0.06- 32
MIC50	8	1	0.06	0.5	0.5
MIC90	16	8	2	16	8
Meropenem					
Range	0.25- 64	0.06- 128	0.12- 16	0.25- 128	0.06- 128
MIC50	32	1.0	2	2	2
MIC90	64	32	4	64	32
Cefuroxime					
Range	4- >128	1- >128	1- >128	2- >128	1- >128
MIC50	>128	8	32	64	32
MIC90	>128	>128	>128	>128	>128
Cefotaxime					
Range	4- >128	1- >128	1- >128	4- >128	1- >128
MIC50	>128	8	8	16	8
MIC90	>128	128	32	32	>128
Cefepime					
Range	4- >128	0.06- >128	2- 128	8- 128	0.06- >128
MIC50	>128	8	16	8	16
MIC90	>128	>128	64	128	>128

MIC50: the minimum inhibitory concentration ($\mu\text{g/mL}$) at which 50% of isolates were inhibited by antimicrobial agent; MIC90: the the minimum inhibitory concentration ($\mu\text{g/mL}$) at which 90% of isolates were inhibited by antimicrobial agent; Others: Non typeable *SCCmec* and *SCCmecI*.