

## SUPPLEMENTAL MATERIAL

**TABLE S1** MLST alleles and spa type repeats succession of the different isolates.

Isolate	LZD MIC* (mg/L)	ST	arcc	aroε	glpf	gmk_	pta_	tpi_	yqil	spa type	spa type repeats succession
LimS	0,75	72	1	4	1	8	4	4	3	t148	07-23-12-21-12-17-20-17-12-12-17
LimR1	>256	72	1	4	1	8	4	4	3	t148	07-23-12-21-12-17-20-17-12-12-17
LimR2	16	72	1	4	1	8	4	4	3	t148	07-23-12-21-12-17-20-17-12-12-17
LimR3	8	72	1	4	1	8	4	4	3	t148	07-23-12-21-12-17-20-17-12-12-17
LimR4	24	72	1	4	1	8	4	4	3	t148	07-23-12-21-12-17-20-17-12-12-17
LimR5	8	72	1	4	1	8	4	4	3	t148	07-23-12-21-12-17-20-17-12-12-17
LimR6	8	4898	1	4	1	370	33	4	3	t148	07-23-12-21-12-17-20-17-12-12-17
LimR7	64	72	1	4	1	8	4	4	3	t148	07-23-12-21-12-17-20-17-12-12-17
LimR8	32	72	1	4	1	8	4	4	3	NA	07-23-12-21-12-17-20-17-12-12-77
LimR9	24	72	1	4	1	8	4	4	3	t148	07-23-12-21-12-17-20-17-12-12-17
LimR10	64	72	1	4	1	8	4	4	3	t148	07-23-12-21-12-17-20-17-12-12-17
LimR11	24	72	1	4	1	8	4	4	3	NA	07-23-12-21-12-17-20-17-12-12-17
LimR12	16	72	1	4	1	8	4	4	3	t148	07-23-12-21-12-17-20-17-12-12-17

\*: LZD resistance is defined by an MIC > 4 mg/L by EUCAST and CLSI for *S. aureus*; NA:

not assigned (the *spa* type has no number yet)

**TABLE S2** Virulome of Lim isolates comparing with reference strains used in the study

virulence factor	protein function	LIM	2148	FORC_012	N315	USA300
<b>Exoenzyme</b>						
<i>aur</i>	aureolysin	+	+	+	+	+
<i>splB</i>	serine protease B	+	+	+	+	+
<i>splA</i>	serine protease A	+	+	+	+	+
<i>splE</i>	serine protease E		+			+
<b>Hostimm</b>						
<i>sak</i>	staphylokinase	+	+	+	+	+
<i>scn</i>	staphylococcal complement inhibitor	+	+	+	+	+
<i>ACME</i>	Arginine catabolic mobile element					+
<b>Toxin</b>						
<i>hlb</i>	beta-hemolysin	+	+	+	+	+
<i>hlgA</i>	gamma-hemolysin chain II precursor	+	+	+	+	+
<i>hlgB</i>	gamma-hemolysin component B precursor	+	+	+	+	+
<i>hlgC</i>	gamma-hemolysin component C	+	+	+	+	+
<i>lukD</i>	leukocidin D component	+	+	+	+	+
<i>lukE</i>	leukocidin E component	+	+	+	+	+
<i>seg</i>	enterotoxin G	+	+	+		
<i>sei</i>	enterotoxin I	+	+	+		
<i>sem</i>	enterotoxin M	+	+	+		
<i>sen</i>	enterotoxin N	+	+	+		
<i>seo</i>	enterotoxin O	+	+	+		
<i>seu</i>	enterotoxin U	+	+	+		
<i>sea/sep</i>						+
<i>sel</i>	enterotoxin L					+
<i>sec</i>	enterotoxin C					+
<i>sek</i>	enterotoxin K					+
<i>seq</i>	enterotoxin Q					+
<i>tst</i>	Toxic shock syndrome toxin-1					+
<i>lukF-PV</i>	Panton Valentine leukocidin F component					+
<i>lukS-PV</i>	Panton Valentine leukocidin S component					+