

**Table S1. Potential recombinant events (PRE) identified with RDP3 from the alignment of *spa* from 38 *S. aureus* strains.** The minimum number of independent recombination events (IREs) within each identified PRE was inferred by a minimum of three methods.

PRE	Breakpoints	IREs	<i>p</i> -Val	Recombination detection tests					
				RDP	GENECONV	MaxChi	Chimaera	SiScan	Bootscan
1	665-1211 357-884	11	2.15x10 <sup>-18</sup>	11	11	11	11	6	11
2	733-884	3	1.07x10 <sup>-3</sup>	3	3	3	3	3	3
3	98-1115	3	2.14x10 <sup>-18</sup>	3	3	3	3	3	3
4	888-1018	1	2.61x10 <sup>-7</sup>	1	-	1	-	-	1
5	1065-349	1	7.72x10 <sup>-5</sup>	-	-	1	-	1	1