

Table S1 - Wildtype clinical isolates from which non-typeable Janus mutants were constructed

Strain	Origin	Diagnosis	Serotype	RFLP*	Capsule size (bp)	MLST
103.57	nasopharynx	otitis media	23F	11	22330	507
106.66	nasopharynx	otitis media	6B	3	17506	2244
208.41	nasopharynx	otitis media	7F	8	24127	191
307.14	nasopharynx	otitis media	18C	14	21819	113
B101.38	blood	pneumonia	5	28	19969	289
B103.66	blood		14	1	19918	¶
B109.15	blood	pneumonia	7F	8	24127	191
B110.04	blood		7F	8	24127	191
B201.61	blood		18C	16	21819	1233
B201.73	blood		19F	40	19798	43

*RFLP data was obtained as described in Hathaway LJ, Brugger S, Martynova A, Aebi S, Mühlemann K (2007) Use of the Agilent 2100 bioanalyzer for rapid and reproducible molecular typing of *Streptococcus pneumoniae*. J Clin Microbiol. 45: 803-9.

¶ Novel MLST: *aroE* allele 7, *gdh* allele 121, *gki* allele 10, *recP* allele 4, *spi* allele 6, *xpt* allele 58, *ddl* new allele with 99% match to allele 286.