Table S1. Strains represented by the 297 sequences used in the present study

Species	Strain	Status	Accession number Genebank
S. pneumoniae	D39	Complete genome	CP000410
	R6	Complete genome	AE007317
	SP6-BS73	Draft genome	ABAA00000000
	Spn033038	Draft genome	FQ312042
	70585	Complete genome	CP000918
	Spn032672	Draft genome	FQ312039
	INV104	Complete genome	FQ312030
	Spn061370	Draft genome	CACJ01000000
	SP18-BS74	Draft genome	ABAE00000000
	670-6B	Complete genome	CP002176
	SP23-BS72	Draft genome	ABAG00000000
	Taiwan19F-14	Complete genome	CP000921
	TIGR4	Complete genome	AE005672
	CCRI1974	Draft genome	ABZC00000000
	CCRI1974/M2	Draft genome	ABZT00000000
	PK81	Single gene sequence	X94909
	SP19-BS75	Draft genome	ABAF00000000
	0XC141	Complete genome	FQ312027
	Spn034156	Draft genome	FQ312045
	Spn072838	Draft genome	CACI01000000
	Spn994038	Draft genome	FQ312041
	Spn994039	Draft genome	FQ312044
	Hungary19A-6	Complete genome	CP000936
	SP11-BS70	Draft genome	ABAC00000000
	AP200	Draft genome	CP002121
	P1031	Complete genome	CP000920
	JJA	Complete genome	CP000919
	P1041	Draft genome	CACE01000000
	CDC0288-04	Draft genome	ABGF00000000
	SPN7465	Draft genome	CACF01000000
	ATCC 700669	Complete genome	FM211187
	CDC3059_06	Draft genome	ABGG00000000
	CGSP14	Complete genome	CP001033
	INV200	Complete genome	FQ312029
	CDC1087-00	Draft genome	ABFT00000000
	SP195	Draft genome	ABGE00000000
	G54	Complete genome	CP001015
	MLV-016	Draft genome	ABGH00000000
	CDC1873-00	Draft genome	ABFS00000000
	SP9-BS68	Draft genome	ABAB00000000
	SP14-BS69	Draft genome	ABAD00000000
	SP-BS293	Draft genome	ABWU00000000
	BS458	Draft genome	ABWA00000000
	BS457	Draft genome	ABWB00000000

	BS397	Draft genome	ABWC00000000
	SP14-BS292	Draft genome	ABWQ00000000
	BS455	Draft genome	ADHN00000000
	Canada MDR_19A	Draft genome	ACNU00000000
	Canada MDR_19F	Draft genome	ACNV00000000
	SP3-BS71	Draft genome	AAZZ00000000
	Spn021198	Draft genome	CACH01000000
	SPNA45	Draft genome	CACG01000000
	Spn034183	Draft genome	FQ312043
	TCH8431/19A	Complete genome	CP001993
	GA04375	Draft genome	AFAX00000000
	GA47901	Draft genome	AFGR00000000
	GA41301	Draft genome	AFGD00000000
	GA17545	Draft genome	AFGA00000000
	GA17570	Draft genome	AFGB00000000
	GA47368	Draft genome	AFGS00000000
	GA41317	Draft genome	AFGT00000000
	BT20	Single gene sequence	BAG70974
	ND	Single gene sequence	BAG70972
	ND	Single gene sequence	BAG70973
	NUTH-p3	Single gene sequence	BAF46263
	NUTH-p28	Single gene sequence	BAF46262
	ND	Single gene sequence	BAF46261
S. pesudopneumoniae	IS7493	Complete genome	NC_015875
S. mitis	SK597	Draft genome	AEDV00000000
	SK609	Single gene sequence	DQ004562
	SK564	Draft genome	AEDU00000000
	SK137	Unpublished	
	SK321	Draft genome	AEDT00000000
	SK142 (NCTC 12261^{T})	Draft genome	AEDX00000000
	B6	Complete genome	FN568063
	SK569	Draft genome	AFUF00000000
	SK1080	Draft genome	AFQV00000000
	M334	Draft genome	ACRL00000000
	SK1073	Draft genome	AFQT00000000
bv. 2	F0392	Draft genome	AFUO00000000
	M143	Draft genome	ACRK00000000
	SK95	Draft genome	AFUB00000000
S. infantis	SK1302	Draft genome	AEDY00000000
	ATCC 700779	Draft genome	AEVD00000000
	SK970	Draft genome	AFUT00000000
S. oralis	SK23 (NCTC 11427^{T}/ATCC 35037)	Draft genome	AEDW00000000
	SK2	Single gene sequence	Y10286
	Uo5	Complete genome	NC_015291
	C300	Draft genome	ACRJ00000000
	SK141	Single gene sequence	Y10285
	ATCC 6249	Draft genome	AEEN00000000

	ATCC 49296	Draft genome	AEPO00000000
S. oligofermentans	73H25AP	Draft genome	NZ_AEEP00000000
S. sanguinis	SK36	Complete genome	CP000387
	SK161	Single gene sequence	Y13457
	SK162	Single gene sequence	Y13458
	SK49	Single gene sequence	Y13460
	SK112	Single gene sequence	Y13455
	SK85	Single gene sequence	Y13461
	SK115	Draft genome	AEXW00000000
	SK4	Single gene sequence	Y13459
	ATCC 10556	Single gene sequence	L29504
	SK330	Draft genome	AFBD00000000
	SK1059	Draft genome	AFFM00000000
	ATCC 29667	Draft genome	AFQA00000000
	SK340	Draft genome	AFQB00000000
	SK408	Draft genome	AFBE00000000
	SK1057	Draft genome	AFBA00000000
	SK353	Draft genome	AEWY00000000
	SK72	Draft genome	AEXV00000000
	SK1058	Draft genome	AFBF00000000
	SK1	Draft genome	AFAZ00000000
	SK405	Draft genome	AEWZ00000000
	SK1087	Draft genome	AFDP00000000
	SK678	Draft genome	AEXA00000000
	SK160	Draft genome	AEXZ00000000
	SK150	Draft genome	AEXY00000000
	SK1056	Draft genome	AFFL00000000
	SK355	Draft genome	AFFN00000000
	VMC66	Draft genome	AEVH00000000
S. gordonii	NCTC 7868	Complete genome	CP000725
	2_1_36FAA	Draft genome	ACOI00000000
S. salivarius	SK126	Draft genome	ACLO00000000
	M18	Draft genome	AGBV00000000
	CCHSS3	Draft genome	ACLO00000000
S. parasanguinis	ATCC 15912	Draft genome	ADVN00000000
	F0405	Draft genome	AEKM00000000
	ATCC 903	Draft genome	AEVE00000000
	SK236	Draft genome	AFUC00000000
S. vestibularis	ATCC 49124	Draft genome	AEVI00000000
	F0396	Draft genome	AEKO00000000
S. australis	ATCC 700641	Draft genome	AFUD00000000
S. cristatus	ATCC 51100	Draft genome	AFUE00000000
Streptococcus sp.	C150	Draft genome	ACRI00000000
	F0418	Draft genome	NZ_AFQU00000000
S. suis	89/1591	Draft genome	AAFA00000000
	05ZYH33	Complete genome	CP000407
	98HAH33	Complete genome	CP000408

	BM407	Complete genome	FM252032
	P1/7	Complete genome	AM946016
	SC84	Complete genome	FM252031
	GZ1	Complete genome	CP000837
Gemella haemolysans	ATCC10379	Draft genome	ACDZ00000000
	CCUG 4815	Single gene sequence	AY395568
	M341	Draft genome	ACRO00000000
Gemella sanguinis	M325	Draft genome	NZ_ACRY00000000
Gemella moribillorum	M424	Draft genome	NZ_ACRX00000000
Granulicatella adiacens	ATCC 49175	Draft genome	ACKZ00000000
Granulicatella elegans	ATCC 700633	Draft genome	ACRF00000000