

S1 Table. <i>S. pneumoniae</i> strains utilized for pangenome analysis. Bold: PMEN1 strains.				
Strain ID	Species	GenBank Accession No.	Analyses performed	
SK1076	<i>Streptococcus infantis</i>	AFNN00000000	Distribution within <i>Streptococcus</i> sp.	
SK970	<i>Streptococcus infantis</i>	AFUT00000000	Distribution within <i>Streptococcus</i> sp.	
ATCC 6249	<i>Streptococcus mitis</i>	AEEN00000000	Distribution within <i>Streptococcus</i> sp.	
B6	<i>Streptococcus mitis</i>	FN568063	Distribution within <i>Streptococcus</i> sp.	
bv. 2 str. F0392	<i>Streptococcus mitis</i>	AFUO00000000	Distribution within <i>Streptococcus</i> sp.	
bv. 2 str. SK95	<i>Streptococcus mitis</i>	AFUB00000000	Distribution within <i>Streptococcus</i> sp.	
NCTC 12261	<i>Streptococcus mitis</i>	AEDX00000000	Distribution within <i>Streptococcus</i> sp.	
SK1073	<i>Streptococcus mitis</i>	AFQT00000000	Distribution within <i>Streptococcus</i> sp.	
SK1080	<i>Streptococcus mitis</i>	AFQV00000000	Distribution within <i>Streptococcus</i> sp.	
SK321	<i>Streptococcus mitis</i>	AEDT00000000	Distribution within <i>Streptococcus</i> sp.	
SK564	<i>Streptococcus mitis</i>	AEDU00000000	Distribution within <i>Streptococcus</i> sp.	
SK569	<i>Streptococcus mitis</i>	AFUF00000000	Distribution within <i>Streptococcus</i> sp.	
SK575	<i>Streptococcus mitis</i>	AICU01000001	Distribution within <i>Streptococcus</i> sp.	
SK597	<i>Streptococcus mitis</i>	AEDV00000000	Distribution within <i>Streptococcus</i> sp.	
Uo5	<i>Streptococcus oralis</i>	FR720602	Distribution within <i>Streptococcus</i> sp.	
PN4595-T23	<i>Streptococcus pneumoniae</i>	ABXO00000000	Distribution within <i>Streptococcus</i> sp.	To establish PMEN1 enrichment
70585	<i>Streptococcus pneumoniae</i>	CP000918	Distribution within <i>Streptococcus</i> sp.	To establish PMEN1 enrichment
ATCC 700669	<i>Streptococcus pneumoniae</i>	FM211187	Distribution within <i>Streptococcus</i> sp.	To establish PMEN1 enrichment
CDC0288_04	<i>Streptococcus pneumoniae</i>	ABGF00000000	Distribution within <i>Streptococcus</i> sp.	To establish PMEN1 enrichment
CDC1087-00	<i>Streptococcus pneumoniae</i>	ABFT00000000	Distribution within <i>Streptococcus</i> sp.	To establish PMEN1 enrichment
CDC1873-00	<i>Streptococcus pneumoniae</i>	ABFS00000000	Distribution within <i>Streptococcus</i> sp.	To establish PMEN1 enrichment
CDC3059-06	<i>Streptococcus pneumoniae</i>	ABGG00000000	Distribution within <i>Streptococcus</i> sp.	To establish PMEN1 enrichment
CGSP14	<i>Streptococcus pneumoniae</i>	CP001033	Distribution within <i>Streptococcus</i> sp.	To establish PMEN1 enrichment
D39	<i>Streptococcus pneumoniae</i>	CP000410	Distribution within <i>Streptococcus</i> sp.	To establish PMEN1 enrichment
G54	<i>Streptococcus pneumoniae</i>	CP001015	Distribution within <i>Streptococcus</i> sp.	To establish PMEN1 enrichment
GA13494	<i>Streptococcus pneumoniae</i>	AGOZ01000001	Distribution within <i>Streptococcus</i> sp.	To establish PMEN1 enrichment
Hungary19A-6	<i>Streptococcus pneumoniae</i>	CP000936	Distribution within <i>Streptococcus</i> sp.	To establish PMEN1 enrichment
ICE44	<i>Streptococcus pneumoniae</i>	AUYF00000000	Distribution within <i>Streptococcus</i> sp.	To establish PMEN1 enrichment
INV104	<i>Streptococcus pneumoniae</i>	FQ312030	Distribution within <i>Streptococcus</i> sp.	To establish PMEN1 enrichment
JJA	<i>Streptococcus pneumoniae</i>	CP000919	Distribution within <i>Streptococcus</i> sp.	To establish PMEN1 enrichment
MNZ14	<i>Streptococcus pneumoniae</i>	ASJO00000000	Distribution within <i>Streptococcus</i> sp.	
MNZ85	<i>Streptococcus pneumoniae</i>	ASJF00000000	Distribution within <i>Streptococcus</i> sp.	
SP11-BS70	<i>Streptococcus pneumoniae</i>	ABAC00000000	Distribution within <i>Streptococcus</i> sp.	To establish PMEN1 enrichment
SP14-BS69	<i>Streptococcus pneumoniae</i>	ABAD00000000	Distribution within <i>Streptococcus</i> sp.	To establish PMEN1 enrichment
SP18-BS74	<i>Streptococcus pneumoniae</i>	ABAE00000000	Distribution within <i>Streptococcus</i> sp.	To establish PMEN1 enrichment
SP19-BS75	<i>Streptococcus pneumoniae</i>	ABAF00000000	Distribution within <i>Streptococcus</i> sp.	To establish PMEN1 enrichment

SP23-BS72	<i>Streptococcus pneumoniae</i>	ABAG00000000	Distribution within Streptococcus sp.	To establish PMEN1 enrichment
SP3-BS71	<i>Streptococcus pneumoniae</i>	AAZZ00000000	Distribution within Streptococcus sp.	To establish PMEN1 enrichment
SP6-BS73	<i>Streptococcus pneumoniae</i>	ABAA00000000	Distribution within Streptococcus sp.	To establish PMEN1 enrichment
SP9-BS68	<i>Streptococcus pneumoniae</i>	ABAB00000000	Distribution within Streptococcus sp.	To establish PMEN1 enrichment
SPN1041	<i>Streptococcus pneumoniae</i>	CACE00000000	Distribution within Streptococcus sp.	
SPNA45	<i>Streptococcus pneumoniae</i>	CACG00000000	Distribution within Streptococcus sp.	To establish PMEN1 enrichment
SV35-T23	<i>Streptococcus pneumoniae</i>	ADNN00000000	Distribution within Streptococcus sp.	To establish PMEN1 enrichment
SV36-T3	<i>Streptococcus pneumoniae</i>	ADNO00000000	Distribution within Streptococcus sp.	To establish PMEN1 enrichment
Taiwan19F-14	<i>Streptococcus pneumoniae</i>	CP000921	Distribution within Streptococcus sp.	To establish PMEN1 enrichment
TIGR4	<i>Streptococcus pneumoniae</i>	AE005672	Distribution within Streptococcus sp.	To establish PMEN1 enrichment
WL400	<i>Streptococcus pneumoniae</i>	AVFA00000000	Distribution within Streptococcus sp.	
WL677	<i>Streptococcus pneumoniae</i>	AUWZ00000000	Distribution within Streptococcus sp.	
ATCC BAA-960	<i>Streptococcus pseudopneumoniae</i>	AICS00000000	Distribution within Streptococcus sp.	
IS7493	<i>Streptococcus pseudopneumoniae</i>	CP002925	Distribution within Streptococcus sp.	
SK674	<i>Streptococcus pseudopneumoniae</i>	AJKE00000000	Distribution within Streptococcus sp.	
2426	<i>Streptococcus tigurinus</i>	ASXA00000000	Distribution within Streptococcus sp.	
AZ_3a	<i>Streptococcus tigurinus</i>	AORU00000000	Distribution within Streptococcus sp.	
INV200	<i>Streptococcus pneumoniae</i>	FQ312029	Distribution within pneumococcus	To establish PMEN1 enrichment
ST13v1	<i>Streptococcus pneumoniae</i>	NZ_ABWQ00000000	Distribution within pneumococcus	To establish PMEN1 enrichment
ST13v12	<i>Streptococcus pneumoniae</i>	NZ_ABWU00000000	Distribution within pneumococcus	To establish PMEN1 enrichment
ST13v6	<i>Streptococcus pneumoniae</i>	NZ_ABWB01000000	Distribution within pneumococcus	To establish PMEN1 enrichment
AP200	<i>Streptococcus pneumoniae</i>	CP002121	Distribution within pneumococcus	To establish PMEN1 enrichment
MLV016	<i>Streptococcus pneumoniae</i>	ABGH00000000	Distribution within pneumococcus	To establish PMEN1 enrichment
ICE59	<i>Streptococcus pneumoniae</i>	AUYE00000000	Distribution within pneumococcus	To establish PMEN1 enrichment
Sp647	<i>Streptococcus pneumoniae</i>	AUYL00000000	Distribution within pneumococcus	To establish PMEN1 enrichment
Sp6706B	<i>Streptococcus pneumoniae</i>	CP002176	Distribution within pneumococcus	To establish PMEN1 enrichment
SPAIN6B	<i>Streptococcus pneumoniae</i>	AUYK00000000	Distribution within pneumococcus	To establish PMEN1 enrichment
CCRI_1974M2	<i>Streptococcus pneumoniae</i>	ABZT00000000	Distribution within pneumococcus	To establish PMEN1 enrichment
CCRI_1974	<i>Streptococcus pneumoniae</i>	ABZC00000000	Distribution within pneumococcus	To establish PMEN1 enrichment
SP195	<i>Streptococcus pneumoniae</i>	ABGE00000000	Distribution within pneumococcus	To establish PMEN1 enrichment
Spain1417	<i>Streptococcus pneumoniae</i>	AUYH00000000	Distribution within pneumococcus	To establish PMEN1 enrichment
Sp88-1	<i>Streptococcus pneumoniae</i>	AUYI00000000	Distribution within pneumococcus	To establish PMEN1 enrichment
Sp439-1	<i>Streptococcus pneumoniae</i>	AUYJ00000000	Distribution within pneumococcus	To establish PMEN1 enrichment
SPAIN9V	<i>Streptococcus pneumoniae</i>	AUYG00000000	Distribution within pneumococcus	To establish PMEN1 enrichment
N034156	<i>Streptococcus pneumoniae</i>	FQ312045	Distribution within pneumococcus	To establish PMEN1 enrichment
N034183	<i>Streptococcus pneumoniae</i>	FQ312043	Distribution within pneumococcus	To establish PMEN1 enrichment
N994038	<i>Streptococcus pneumoniae</i>	FQ312041	Distribution within pneumococcus	To establish PMEN1 enrichment
N994039	<i>Streptococcus pneumoniae</i>	FQ312044	Distribution within pneumococcus	To establish PMEN1 enrichment

OXC141	<i>Streptococcus pneumoniae</i>	FQ312027	Distribution within pneumococcus	To establish PMEN1 enrichment
SPN021198	<i>Streptococcus pneumoniae</i>	CACH01000000	Distribution within pneumococcus	To establish PMEN1 enrichment
SPN072838	<i>Streptococcus pneumoniae</i>	CACI01000000	Distribution within pneumococcus	To establish PMEN1 enrichment
SPN1041	<i>Streptococcus pneumoniae</i>	CACE01000000	Distribution within pneumococcus	To establish PMEN1 enrichment
P1031	<i>Streptococcus pneumoniae</i>	CP000920	Distribution within pneumococcus	To establish PMEN1 enrichment
N032672	<i>Streptococcus pneumoniae</i>	FQ312039	Distribution within pneumococcus	To establish PMEN1 enrichment
N033038	<i>Streptococcus pneumoniae</i>	FQ312042	Distribution within pneumococcus	To establish PMEN1 enrichment
SPN061370	<i>Streptococcus pneumoniae</i>	CACJ01000000	Distribution within pneumococcus	To establish PMEN1 enrichment
R6	<i>Streptococcus pneumoniae</i>	AE007317	Distribution within pneumococcus	To establish PMEN1 enrichment
N7465	<i>Streptococcus pneumoniae</i>	CACF01000000	Distribution within pneumococcus	To establish PMEN1 enrichment
ST2011v4	<i>Streptococcus pneumoniae</i>	NZ_ADHN01000000	Distribution within pneumococcus	To establish PMEN1 enrichment