

Supplementary Table 1. Details of strains and genomes analysed in this study

Cluster	Strain ID	Genome size (Mb)	GC (Mol%)	Host	Year	Country	Clinical information	Accession Numbers	Reference or genome release date
1	BR-AD 2649	2.54	53.3	Canine	2015	Brazil	asymptomatic	MPST00000000	This study
1	BR-AD 22	2.61	53.4	Canine	2010	Brazil	asymptomatic	NC_015683.1	(Trost et al., 2011)
1	0102	2.58	53.4	Human	2001	Japan	diphtheria-like illness	NC_018101.1	(Sekizuka et al., 2012)
1	04-3911	2.49	53.3	Human	2004	France		LG SX00000000.1	(Guimaraes et al., 2016a)
1	131001	2.48	53.3	Human				NZ_CP010818.1	14/09/2015
1	210931	2.51	53.3	Human				NZ_CP009583.1	22/10/2014
1	210932	2.48	53.3	Human				NZ_CP009500.1	(Viana et al., 2014)
1	2590	2.50	53.3	Human	2014	Brazil	pharyngitis	MPSS00000000	This study
1	4940	2.42	53.3	Human	2009	Belarus	asymptomatic	LSWN00000000	This study
1	809	2.50	53.3	Human	2000	Brazil	fatal pulmonary infection	NC_017317.1	(Trost et al., 2011)
1	FRC58	2.54	53.3	Human		France	bronchitis	NZ_CP011913.1	(Silva Ado et al., 2014)
1	KZN-2016-48390	2.54	53.4	Human		South Africa	throat swab	MIOS00000000.1	10/11/2016
1	05146	2.47	53.3					NZ_CP009716.1	28/10/2014
2	04-7514	2.50	53.5	Canine	2004	France		LJVH00000000.1	(Guimaraes et al., 2016b)
2	131002	2.43	53.4	Human				NZ_CP011095.1	03/04/2015
2	FRC11	2.44	53.4	Human		France	leg ulcer	NZ_CP009622	(Benevides Lde et al., 2015)
2	LSPQ-04227	2.43	53.4	Human	2004	Canada		JZUS00000000.1	(Domingo et al., 2015)
2	LSPQ-04228	2.44	53.4	Human	2013	Canada	skin wound	JZUT00000000.1	(Domingo et al., 2015)
2	NCTC 12077	2.62	53.4	Human			throat swab	AYUJ00000000.1	25/11/2013

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