

S2 Table: OTUs whose frequencies in the dental plaque of children correlated significantly (P<0.05) with different caries outcomes. * Bonferroni P<0.05.

Species	r	Probability
Longitudinal correlation by overall caries experience (dmfs)		
<i>Streptococcus peroris</i>	-0.7907	<0.0001*
<i>Neisseria flavescens</i>	0.6903	0.0008
<i>Leptotrichia hofstadii</i>	0.7286	0.0014
<i>Actinomyces massiliensis</i>	-0.5011	0.0025
<i>Sneathia amnionii</i> [NV]	-0.7078	0.0046
<i>GN02[G-1] sp. oral taxon 871</i>	0.4876	0.0046
<i>Aggregatibacter aphrophilus</i>	-0.5411	0.0063
<i>Capnocytophaga leadbetteri</i>	-0.6626	0.0071
<i>Fusobacterium nucleatum subsp. Nucleatum</i>	-0.7849	0.0072
<i>Veillonella dispar</i>	0.6082	0.0074
<i>Actinomyces massiliensis</i>	-0.4907	0.0080
<i>Propionibacterium propionicum</i>	-0.3037	0.0090
<i>Actinomyces sp. oral taxon 897</i>	0.5400	0.0095
<i>Leptotrichia sp. oral taxon 879</i>	-0.6608	0.0101
<i>Prevotella sp. oral taxon 472</i>	0.6048	0.0131
<i>Haemophilus haemolyticus</i>	-0.7445	0.0135
<i>Capnocytophaga leadbetteri</i>	-0.2861	0.0141
<i>Veillonella dispar</i>	-0.7337	0.0157
<i>Selenomonas sp. oral taxon 442</i>	-0.2889	0.0161
<i>Capnocytophaga sp. oral taxon 326</i>	-0.2859	0.0164
<i>Leptotrichia sp. oral taxon 225</i>	0.4053	0.0174
<i>Oribacterium sp. oral taxon 372</i>	-0.3340	0.0178
<i>Eikenella corrodens</i>	-0.7198	0.0189
<i>Capnocytophaga leadbetteri</i>	-0.6537	0.0211
<i>Alloprevotella sp. oral taxon 914</i>	-0.3626	0.0215
<i>GN02[G-2] sp. oral taxon 873</i>	0.5676	0.0218
<i>Porphyromonas sp. oral taxon 279</i>	0.2630	0.0246
<i>Veillonella dispar</i>	-0.3788	0.0248
<i>Fusobacterium periodonticum</i>	-0.6907	0.0270

<i>Capnocytophaga sp. oral taxon 903</i>	0.6888	0.0276
<i>Veillonella atypica</i>	-0.2844	0.0276
<i>Campylobacter rectus</i>	0.3299	0.0288
<i>Porphyromonas sp. oral taxon 279</i>	-0.6834	0.0294
<i>Capnocytophaga gingivalis</i>	0.4853	0.0301
<i>Leptotrichia wadei</i>	0.6230	0.0305
<i>Leptotrichia sp. oral taxon 909</i>	0.5963	0.0315
<i>Neisseria flavescens</i>	-0.4579	0.0321
<i>Veillonella parvula</i>	0.3784	0.0327
<i>Veillonella dispar</i>	-0.6720	0.0333
<i>Neisseria elongata</i>	-0.4335	0.0343
<i>Corynebacterium matruchotii</i>	0.6677	0.0349
<i>Neisseria flavescens</i>	0.6592	0.0381
<i>Porphyromonas sp. oral taxon 279</i>	-0.4430	0.0389
<i>Selenomonas sp. oral taxon 442</i>	-0.5991	0.0395
<i>Leptotrichia sp. oral taxon 909</i>	-0.5991	0.0395
<i>Neisseria pharyngis</i>	-0.5380	0.0472
<i>Capnocytophaga granulosa</i>	-0.5370	0.0477
<i>Granulicatella adiacens</i>	-0.2311	0.0492
Longitudinal correlation enamel caries		
<i>Actinomyces massiliensis</i>	-0.5482	0.0008
<i>Corynebacterium matruchotii</i>	-0.7296	0.0020
<i>Actinomyces dentalis</i>	-0.3648	0.0033
<i>Kingella oralis</i>	-0.3281	0.0046
<i>Prevotella melaninogenica</i>	-0.3216	0.0055
<i>Aggregatibacter sp. oral taxon 898</i>	-0.5492	0.0066
<i>Fusobacterium periodonticum</i>	0.5607	0.0066
<i>Granulicatella adiacens</i>	-0.3778	0.0096
<i>Streptococcus peroris</i>	-0.7629	0.0103
<i>Porphyromonas sp. oral taxon 279</i>	0.2867	0.0139
<i>Prevotella salivae</i>	-0.6382	0.0141
<i>Prevotella sp. oral taxon 472</i>	-0.6076	0.0163
<i>Gemella morbillorum</i>	-0.4908	0.0174

<i>Kingella oralis</i>	-0.3256	0.0185
<i>Veillonella dispar</i>	-0.3933	0.0194
<i>Eikenella corrodens</i>	0.6174	0.0246
<i>Leptotrichia sp. oral taxon 219</i>	-0.5880	0.0270
<i>Leptotrichia hongkongensis</i>	-0.6301	0.0281
<i>Veillonella sp. oral taxon 780</i>	-0.5367	0.0321
<i>Actinomyces massiliensis</i>	-0.4047	0.0327
<i>Actinomyces sp. oral taxon 180</i>	-0.2499	0.0330
<i>Selenomonas sp. oral taxon 442</i>	-0.2541	0.0351
<i>Streptococcus peroris</i>	-0.5226	0.0378
<i>Veillonella dispar</i>	-0.5922	0.0425
<i>Streptococcus sanguinis</i>	0.5109	0.0432
<i>Selenomonas sp. oral taxon 442</i>	-0.5901	0.0434
<i>Cardiobacterium valvarum</i>	0.3328	0.0442
<i>Capnocytophaga gingivalis</i>	0.5387	0.0469
<i>Prevotella maculosa</i>	-0.2594	0.0472
Longitudinal correlation by dentine caries		
<i>Veillonella dispar</i>	-0.8529	0.0017
<i>Porphyromonas sp. oral taxon 279</i>	0.3472	0.0026
<i>Leptotrichia sp. oral taxon 217</i>	0.7430	0.0056
<i>Neisseria elongata</i>	0.6553	0.0059
<i>Veillonella dispar</i>	0.6188	0.0062
<i>Capnocytophaga sp. oral taxon 336</i>	0.4459	0.0093
<i>Porphyromonas sp. oral taxon 284</i>	-0.4007	0.0104
<i>Veillonella dispar</i>	-0.4269	0.0105
<i>Porphyromonas sp. oral taxon 279</i>	-0.5327	0.0107
<i>Corynebacterium matruchotii</i>	0.7478	0.0129
<i>Capnocytophaga leadbetteri</i>	-0.6125	0.0152
<i>Neisseria oralis</i>	-0.6718	0.0167
<i>Actinomyces massiliensis</i>	-0.4067	0.0170
<i>Actinomyces massiliensis</i>	-0.4451	0.0176
<i>Capnocytophaga sp. oral taxon 326</i>	-0.2815	0.0182
<i>Neisseria elongata</i>	0.5362	0.0218

<i>Capnocytophaga leadbetteri</i>	-0.2646	0.0237
<i>Eikenella sp. oral taxon 011</i>	-0.5250	0.0253
<i>Veillonella parvula</i>	0.3911	0.0269
<i>Capnocytophaga leadbetteri</i>	-0.6238	0.0302
<i>Streptococcus peroris</i>	-0.5279	0.0356
<i>Veillonella atypica</i>	-0.2686	0.0380
<i>Kingella oralis</i>	-0.6558	0.0395
<i>Leptotrichia sp. oral taxon 909</i>	0.5727	0.0408
<i>Fusobacterium sp. oral taxon 203</i>	0.5157	0.0409
<i>Capnocytophaga leadbetteri</i>	-0.5507	0.0413
<i>Lautropia mirabilis</i>	0.3738	0.0418
<i>Capnocytophaga gingivalis</i>	0.4565	0.0431
<i>Veillonella dispar</i>	-0.6433	0.0448
<i>Neisseria flavescens</i>	0.4505	0.0462
<i>Tannerella sp. oral taxon 286</i>	0.3666	0.0463
<i>GN02[G-1] sp. oral taxon 871</i>	0.3525	0.0478
<i>Fusobacterium sp. oral taxon 370</i>	0.2586	0.0480
<i>Leptotrichia hongkogenesis</i>	0.3180	0.0485