

Table S3. Pearson's correlations of the *P. acnes* strain composition in each sample between different methods.

Healthy	H01	H02	H03	H04	H05	H06	H07	H08	H09	H10	H11	H12	H13
Comparison to 16S Clone Library													
16S	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Aarhus	0.983	0.985	0.994	0.993	0.992	0.791	0.666	0.483	0.292	-0.069	-0.278	-0.312	-0.510
Belfast	0.982	0.998	0.999	0.997	0.996	0.667	0.926	0.734	0.666	-0.077	-0.281	-0.294	0.592
Aarhus-Belfast	0.992	0.988	0.997	0.997	0.998	0.608	0.950	0.974	0.989	0.999	0.999	0.999	0.410
454	0.996	-	-	-	-	-	0.573	-	-	-	-	-	-
Comparison to MG-MLST (Aarhus)													
16S	0.983	0.985	0.994	0.993	0.992	0.791	0.666	0.483	0.292	-0.069	-0.278	-0.312	-0.510
Aarhus	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Belfast	0.997	0.975	0.996	0.995	0.989	0.937	0.813	0.530	0.146	0.008	-0.234	-0.263	0.246
Aarhus-Belfast	0.998	0.961	1.000	0.998	0.997	0.931	0.775	0.543	0.410	-0.029	-0.242	-0.276	0.406
454	0.995	-	-	-	-	-	0.986	-	-	-	-	-	-
Comparison to MG-MLST (Belfast)													
16S	0.982	0.998	0.999	0.997	0.996	0.667	0.926	0.734	0.666	-0.077	-0.281	-0.294	0.592
Aarhus	0.997	0.975	0.996	0.995	0.989	0.937	0.813	0.530	0.146	0.008	-0.234	-0.263	0.246
Belfast	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Aarhus-Belfast	0.998	0.986	0.998	0.999	0.993	0.995	0.995	0.760	0.678	-0.075	-0.305	-0.322	0.978
454	0.991	-	-	-	-	-	0.758	-	-	-	-	-	-
Comparison to MG-MLST (Aarhus-Belfast)													
16S	0.992	0.988	0.997	0.997	0.998	0.608	0.950	0.974	0.989	0.999	0.999	0.999	0.410
Aarhus	0.998	0.961	1.000	0.998	0.997	0.931	0.775	0.543	0.410	-0.029	-0.242	-0.276	0.406
Belfast	0.998	0.986	0.998	0.999	0.993	0.995	0.995	0.760	0.678	-0.075	-0.305	-0.322	0.978
Aarhus-Belfast	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
454	0.998	-	-	-	-	-	0.717	-	-	-	-	-	-
Acne													
Acne	A01	A02	A03	A04	A05	A06	A07	A08	A09	A10	A11	A12	A13
Comparison to 16S Clone Library													
16S	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Aarhus	0.999	0.999	0.997	0.999	0.986	0.979	0.964	0.961	0.937	0.745	0.740	0.055	-0.185
Belfast	0.998	0.998	0.993	0.994	0.984	0.990	0.999	0.958	0.901	0.962	0.592	0.265	-0.253
Aarhus-Belfast	1.000	0.999	0.997	1.000	0.998	0.998	0.991	0.962	0.920	0.962	0.713	0.240	0.706
454	1.000	-	0.999	-	-	-	-	-	-	0.895	-	-	-0.106
Comparison to MG-MLST (Aarhus)													
16S	0.999	0.999	0.997	0.999	0.986	0.979	0.964	0.961	0.937	0.745	0.740	0.055	-0.185
Aarhus	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Belfast	0.994	1.000	0.988	0.989	0.981	0.975	0.973	0.975	0.780	0.555	0.920	0.937	-0.293
Aarhus-Belfast	0.998	1.000	0.995	0.999	0.974	0.990	0.991	0.992	0.801	0.657	0.975	0.970	0.501
454	0.999	-	0.999	-	-	-	-	-	-	0.897	-	-	0.826
Comparison to MG-MLST (Belfast)													
16S	0.998	0.998	0.993	0.994	0.984	0.990	0.999	0.958	0.901	0.962	0.592	0.265	-0.253
Aarhus	0.994	1.000	0.988	0.989	0.981	0.975	0.973	0.975	0.780	0.555	0.920	0.937	-0.293
Belfast	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Aarhus-Belfast	0.999	1.000	0.998	0.993	0.979	0.991	0.995	0.995	0.999	0.943	0.981	0.991	-0.163
454	0.998	-	0.994	-	-	-	-	-	-	0.802	-	-	-0.139
Comparison to MG-MLST (Aarhus-Belfast)													
16S	1.000	0.999	0.997	1.000	0.998	0.998	0.991	0.962	0.920	0.962	0.713	0.240	0.706
Aarhus	0.998	1.000	0.995	0.999	0.974	0.990	0.991	0.992	0.801	0.657	0.975	0.970	0.501
Belfast	0.999	1.000	0.998	0.993	0.979	0.991	0.995	0.995	0.999	0.943	0.981	0.991	-0.163
Aarhus-Belfast	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
454	1.000	-	0.997	-	-	-	-	-	-	0.877	-	-	0.410