

**Supplementary Table 2. Bacterial species that increased in numbers and prevalence comparing healthy subjects to those with LAP.**

<b>Taxon(a) targeted by HOMIM probe</b>	<b>Average HOMIM Score health</b>	<b>Average HOMIM score LAP</b>	<b>Average HOMIM score change</b>	<b>Prevalence health</b>	<b>Prevalence LAP</b>	<b>Prevalence change</b>
<i>Actinomyces massiliensis</i> -A.sp. HOT-177-852 probe-X45	1.0 ± 0.5	0.2 ± 0.4	-0.813	88%	20%	-67%
<i>Granulicatella elegans</i> HOT-596 probe-AB28	1.1 ± 1.0	0.0 ± 0.0	-1.138	66%	0%	-66%
<i>Megasphaera</i> sp. HOT-123 probe-AD11	1.0 ± 0.6	0.2 ± 0.4	-0.853	83%	18%	-65%
<i>Granulicatella elegans</i> HOT-596 probe-AB29	2.4 ± 1.1	0.4 ± 0.7	-2.045	93%	30%	-64%
<i>Rothia dentocariosa</i> -R. <i>mucilaginoso</i> HOT-587-681 probe-E52	0.9 ± 0.8	0.1 ± 0.3	-0.806	66%	9%	-56%
<i>Actinomyces</i> Cluster I: HOT-170-171-176-178-179-180-617-618-645-671-688-701-708-849-850-852-877 probe-AB35	0.9 ± 0.7	0.2 ± 0.4	-0.720	71%	16%	-55%
<i>Prevotella</i> Cluster II: <i>P. denticola</i> - <i>P. fusca</i> - <i>P. multiformis</i> - <i>P. scopos</i> HOT-291-685-782-885 probe-X13	0.9 ± 0.8	0.1 ± 0.3	-0.766	64%	11%	-52%
<i>Capnocytophaga sputigena</i> HOT-775 probe-AC15	1.8 ± 1.4	0.4 ± 0.7	-1.424	78%	27%	-50%
<i>Streptococcus australis</i> - <i>S. oligofermentans</i> - <i>S. sp.</i> HOT-065-073-886 probe-AB83	0.5 ± 0.5	0.5 ± 0.9	-1.190	74%	30%	-45%
<i>Streptococcus sanguinis</i> - <i>S. sp.</i> HOT-058-758 probe-AB78	0.9 ± 0.5	1.2 ± 1.7	-1.451	86%	43%	-43%
<i>Haemophilus</i> sp. HOT-035 probe-P07	1.7 ± 1.2	0.5 ± 0.7	-1.414	79%	36%	-43%
<i>Streptococcus sanguinis</i> - <i>S. sp.</i> HOT-058-758 probe-AB75	2.7 ± 1.5	1.3 ± 1.7	-1.400	90%	48%	-42%
<i>Gemella morbillorum</i> HOT-046 probe-K64	1.4 ± 0.9	0.6 ± 0.8	-0.726	83%	41%	-42%
<i>Capnocytophaga sputigena</i> HOT-775 probe-W40	0.8 ± 1.0	0.1 ± 0.3	-0.777	48%	7%	-41%
<i>Prevotella loescheii</i> - <i>P. sp.</i> HOT-472-658 probe-Y64	1.3 ± 1.0	0.4 ± 0.7	-0.879	72%	32%	-41%
<i>Actinomyces gerencseriae</i> HOT-618 probe-E46	1.6 ± 1.1	0.7 ± 0.9	0.893	76%	39%	-37%
<i>Prevotella loescheii</i> - <i>P. spp.</i> HOT-317-472-658 probe-Y65	1.0 ± 0.9	0.3 ± 0.5	-0.710	60%	25%	-35%
<i>Prevotella</i> Cluster IV: HOT-288-311-313-314-396-443-469-556-572-583-600-643-658-693-714-782-885 probe AA44	1.1 ± 1.0	0.3 ± 0.6	-0.751	57%	25%	-32%
<i>Kingella oralis</i> HOT-706 probe-AA77	1.6 ± 1.2	0.7 ± 0.9	-0.922	74%	43%	-31%
<i>Streptococcus</i> sp. HOT-067 probe-E34	1.3 ± 1.4	0.3 ± 0.6	-0.940	53%	25%	-28%
<i>Streptococcus mitis</i> bv 2 HOT-398 probe-Q64	2.1 ± 1.2	1.0 ± 1.1	-1.098	90%	61%	-28%
<i>Gemella haemolysans</i> HOT-626 probe-K63	3.2 ± 1.2	1.5 ± 1.3	-1.719	100%	73%	-27%
<i>Veillonella dispar</i> - <i>V. parvula</i> HOT-160-161 probe-AC37	2.9 ± 1.3	1.7 ± 1.3	-1.272	97%	70%	-26%
<i>Streptococcus parasanguinis</i> I- <i>S. parasanguinis</i> II- <i>S. spp.</i> HOT-055-057-411-721 probe-AB05	1.7 ± 1.0	0.9 ± 0.9	-0.741	90%	64%	-26%
<i>Kingella oralis</i> HOT-706 probe-O86	1.9 ± 1.2	1.0 ± 1.0	-0.926	84%	59%	-25%
<i>Prevotella nigrescens</i> HOT-693 probe-W40	1.6 ± 1.5	0.6 ± 0.8	-0.961	66%	41%	-25%
<i>Veillonella parvula</i> HOT-161 probe-M04	2.0 ± 0.9	1.3 ± 1.0	-0.710	91%	68%	-23%
<i>Veillonella atypica</i> HOT-524 probe-W88	1.2 ± 1.4	2.7 ± 1.5	-1.393	100%	77%	-23%
<i>Veillonella dispar</i> HOT-160 probe-AD63	3.5 ± 1.0	2.5 ± 1.7	-1.011	100%	77%	-23%
Leptotrichiaceae-Leptotrichia-Sneathia Cluster HOT-210-212-213-214-215-217-218-219-220-221-222-223-224-225-392-462-463-498-563-837-844-847-879 probe-AA45	3.0 ± 0.9	1.7 ± 1.1	-1.358	100%	80%	-20%