

Table 2. Select Differentially Abundant Species in Urine Pellet Samples

Species/OTUs	Mean	No. Pos. (%)**	Mean	No. Pos. (%)	Std Errors		Negative Binomial Test (DESeq)						
More Abundant in Cancer	Benign (n=63)		Cancer (n=61)		Benign	Cancer	P-value	FDR adj. P-value					
Propionimicrobium lymphophilum	0.00096	8 (12.7%)	0.01437	16 (26.2%)	0.00058	0.00935	0.00686	0.02809					
Anaerococcus murdochii	0	0	0.00526	6 (9.8%)	0	0.00472	0	0					
Auritidibacter ignavus/Corynebacterium coyleae	0.00037	8 (12.7%)	0.00373	21 (34.4%)	0.00018	0.00143	0.00189	0.00913					
Ureaplasma urealyticum	0	0	0.00005	1 (1.6%)	0	0.00005	0.00059	0.00310					
Ureaplasma parvum:urealyticum	0	0	0.00004	2 (3.3%)	0	0.00004	0.00161	0.00793					
More Abundant in Benign	Benign (n=63)		Cancer (n=61)		Benign	Cancer	P-value	FDR adj. P-value					
unassigned Enterobacteriaceae	0.02233	13 (20.6%)	0.00257	13 (21.3%)	0.01202	0.00126	0.00574	0.02379					
Corynebacterium genitalium:jeikeium:riegelii	0.01270	19 (30.2%)	0.00144	15 (24.6%)	0.00554	0.00064	0.00161	0.00793					
Haemophilus haemolyticus:parainfluenzaes	0.00603	4 (6.3%)	0	0	0.00601	0	0	0					
More Abundant in Higher Grade	Low grade (n=39)		High grade (n=22)		Low Grade	High Grade	P-value	FDR adj. P-value					
Unassigned Streptococcus	0.00652	23 (59.0%)	0.05065	15 (68.2%)	0.00313	0.03661	0.01190	0.04398					
Unassigned Streptococcus	0.00158	11 (28.2%)	0.03047	10 (45.5%)	0.00092	0.02185	0.00295	0.01308					
Alloscardovia omnicoles	0.00153	4 (10.3%)	0.02244	4 (18.2%)	0.00094	0.01657	0.00916	0.03618					
Ureaplasma urealyticum	0	0	0.00013	1 (4.5%)	0	0.00013	0.00005	0.00030					
Ureaplasma parvum:urealyticum	0	0	0.00011	2 (9.1%)	0	0.00010	0.00017	0.00098					
More Abundant when Acute Inflammation (AI) Present*	AI Absent (n=39)		AI Present (n=19)		Absent	Present	P-value	FDR adj. P-value					
Corynebacterium minutissimum	0.00659	19 (48.7%)	0.05092	12 (63.2%)	0.00214	0.02348	0.00018	0.00079					
Corynebacterium urealyticum	5.13E-06	1 (2.6%)	0.02782	3 (15.8%)	5.13E-06	0.01944	0	0					
Actinobaculum schaalii	0.00145	5 (12.8%)	0.02073	1 (5.3%)	0.00079	0.02073	0.00646	0.02146					
	Mean	No. Pos. (%)	Mean	No. Pos. (%)	Mean	No. Pos. (%)	Standard Errors		Negative Binomial Test (DESeq)				
More Abundant with Higher Degree of Chronic Inflammation*	Low CI (n=15)		Medium CI (n=20)		High CI (n=23)		Low	Medium	High	Low vs Medium P-value	Low vs Medium FDR adj. P-value	Low vs High P-value	Low vs High adj. P-value
Corynebacterium minutissimum	0.00747	9 (60.0%)	0.00154	7 (35.0%)	0.04703	15 (65.2%)	0.00367	0.00074	0.01946	0.03106	0.08054	0.01275	0.03924
Unassigned Enterobacteriaceae	0.00061	2 (13.3%)	0.04043	5 (25.0%)	0.02557	5 (21.7%)	0.00060	0.03150	0.01838	0.02406	0.06278	0.03893	0.100328
Unassigned Gammaproteobacteria	0	0	0.00042	3 (15.0%)	0.01771	8 (34.8%)	0	0.00027	0.01172	1.16E-08	6.66E-08	0	0
Anaerococcus lactolyticus	0.00200	2 (13.3%)	4.00E-05	1 (5.0%)	0.00804	5 (21.7%)	0.00167	2.34E-05	0.00548	1.58E-08	8.99E-08	0.29632	0.46661
Gardnerella vaginalis	0	0	0.03159	4 (20.0%)	4.00E-04	1 (4.3%)	0	0.03082	4.00E-04	0	0	1.35E-08	8.48E-08

*Inflammation analyses were limited to the benign samples.

**Number of patients the species/OTU was identified in (% frequency).