

Differences in the Stool Microbiome Before and After Colorectal Cancer Treatment

Marc A Sze, Nielson T Baxter, Mack T Ruffin IV, Mary AM Rogers, and Patrick D Schloss

Supplemental

Table S1: P-values of Differences between Initial and Follow Up Samples for Richness, Shannon Diversity, and Evenness.

Comparison	Alpha Metric	P-value	BH Adjusted P-value
all	sobs	0.2542809	0.3536011
all	shannon	0.3536011	0.3536011
all	evenness	0.3251909	0.3536011
adn	sobs	0.7195598	0.7195598
adn	shannon	0.6168494	0.7195598
adn	evenness	0.4485818	0.7195598
crc	sobs	0.1573652	0.1573652
crc	shannon	0.0407472	0.0611208
crc	evenness	0.0236109	0.0611208

Table S2: Summary of Most Important Variables For the Model

Variable	Lowest Taxonomic ID	Total Model Appearances
FIT	NA	100
Age	NA	100
Otu000013	Lachnospiraceae	100
Otu000018	Escherichia/Shigella	100
Otu000020	Ruminococcaceae	100
BMI	NA	100
Otu000017	Ruminococcus	99
Otu000153	Porphyromonas	99
Otu000012	Blautia	99
Otu000010	Blautia	98
Otu000007	Bacteroides	98
Otu000003	Roseburia	97
Gender	NA	92
Otu000006	Clostridiales	92
Otu000045	Lachnospiraceae	90
Otu000114	Clostridium_XIVa	88
Otu000015	Parabacteroides	88
Otu000008	Faecalibacterium	86
Otu000016	Bacteroides	86
Otu000046	Bacteroides	85
Otu000061	Clostridiales	83
Otu000032	Bacteroides	81
Otu000089	Ruminococcus	80
Otu000231	Alistipes	69
Otu000002	Anaerostipes	67
Otu000088	Lachnospiraceae	65
Otu000005	Bacteroides	65
Otu000124	Clostridiales	61
Otu000034	Clostridium_XIVa	57
Otu000220	Clostridium_IV	55
Otu000036	Phascolarctobacterium	54
Otu000049	Barnesiella	52

Table S3: Summary of Probability Assignment of Follow Up Individuals

Initial Positive Probability	Follow Up Positive Probability	Disease Free on Follow Up	Initial Diagnosis
0.9590	0.9020	No	cancer
0.9530	0.7355	Yes	cancer
0.9290	0.8410	Unknown	cancer
0.9795	0.8720	Yes	cancer
0.9790	0.7710	Unknown	cancer
0.9320	0.3475	Unknown	cancer
0.8290	0.4710	Yes	cancer
0.9380	0.3910	Unknown	cancer
0.9810	0.7345	Yes	cancer
0.8360	0.6790	Yes	cancer
0.9240	0.7975	Yes	cancer
0.9680	0.7265	Yes	cancer
0.9615	0.7845	Yes	cancer
0.9345	0.5850	Yes	cancer
0.9685	0.3405	Yes	cancer
0.9190	0.8740	Yes	cancer
0.8095	0.3195	Yes	cancer
0.9520	0.8585	Yes	cancer
0.7555	0.2340	Yes	cancer
0.8960	0.3470	Yes	cancer
0.9205	0.9020	Yes	cancer
0.9090	0.3215	Unknown	cancer
0.9695	0.3940	Yes	cancer
0.9300	0.7365	Yes	cancer
0.9645	0.8540	Yes	cancer
0.9775	0.3870	Yes	cancer
0.9475	0.5935	Yes	adv_adenoma
0.5505	0.4135	Yes	adenoma
0.7485	0.4765	Yes	adenoma
0.8095	0.4795	Yes	adv_adenoma
0.7275	0.4325	Yes	adenoma
0.4100	0.4970	Yes	adenoma
0.9420	0.8270	Yes	adenoma
0.8835	0.3900	Yes	adenoma
0.7785	0.8900	Yes	adenoma
0.9115	0.8105	Yes	adenoma
0.8830	0.8190	Yes	adenoma
0.9665	0.8325	Yes	adenoma
0.9310	0.7185	Yes	adv_adenoma
0.9600	0.9175	Yes	adenoma

Initial Positive Probability	Follow Up Positive Probability	Disease Free on Follow Up	Initial Diagnosis
0.8370	0.6330	Yes	adv_adenoma
0.8055	0.9200	Yes	adv_adenoma
0.7245	0.3600	Yes	adenoma
0.8860	0.8390	Yes	adv_adenoma
0.9590	0.9070	Yes	adenoma
0.9580	0.5975	Yes	adv_adenoma
0.8340	0.2530	Yes	adenoma
0.8335	0.6755	Yes	adv_adenoma
0.7915	0.4010	Yes	adv_adenoma
0.9635	0.4910	Yes	adenoma
0.9670	0.9425	Yes	adv_adenoma
0.9335	0.5765	Yes	adv_adenoma
0.8590	0.7790	Yes	adv_adenoma
0.9445	0.9265	Yes	adv_adenoma
0.9195	0.4165	Yes	adenoma
0.7515	0.5305	Yes	adv_adenoma
0.9315	0.7935	Yes	adv_adenoma
0.7675	0.3820	Yes	adenoma
0.9250	0.8100	Yes	adenoma
0.7895	0.3825	Yes	adenoma
0.9360	0.3440	Yes	adv_adenoma
0.9410	0.4550	Yes	adenoma
0.8055	0.8195	Yes	adv_adenoma
0.8870	0.8695	Yes	adenoma
0.9850	0.9300	Yes	adenoma
0.7465	0.3875	Yes	adv_adenoma

Table S4: Summary of OTUs in both Lesion and Initial/Follow Up Models

OTU	Lowest Taxonomic ID	P-value	BH Corrected P-value
Otu000012	Blautia	0.0037523	0.0300185
Otu000005	Bacteroides	0.2330135	0.2663011
Otu000008	Faecalibacterium	0.1647056	0.2196075
Otu000018	Escherichia/Shigella	0.0431082	0.1149553
Otu000002	Anaerostipes	0.2694179	0.2694179
Otu000114	Clostridium_XIVa	0.0425792	0.1149553
Otu000124	Clostridiales	0.1006246	0.2012493
Otu000020	Ruminococcaceae	0.1390492	0.2196075