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Microbial network disturbances in relapsing refractory Crohn's disease

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Suppl. Table 1. Clinical characteristics of Cohort 1 patients included in the microbiome analysis

Cohort 1	CD	UC	Overall
Number (%)	187 (54%)	159 (46%)	346 (100 %)
Number of patient sampled more than once (min-max sampling year)	14 (1 - 8 years)	8 (1 - 9 years)	22
Gender (% female)	56%	60%	58%
Mean age at enrolment (years +/-SD)	37 (+/-14)	41 (+/-16)	39 (+/-15)
Mean age at diagnosis (years +/- SD)	26 (+/-12)	31 (+/-13)	29 (+/-13)
Mean BMI (%)			
Normal (<25 Kg/m ²)	70%	66%	68%
Overweight (>25 Kg/m ² , <30 Kg/m ²)	20%	24%	22%
Obese (>30 Kg/m ²)	10%	10%	10%
Mean disease duration at enrolment (years +/- SD)	11 (+/-10)	10 (+/-9)	11 (+/-9)
Number of biopsies based on location			
Ileum	145	110	255
Colon (Right, Transverse and Left)	210	227	437
Rectum	139	110	249
Disease behaviour (Montréal Classification)			
Inflammatory (B1)	35%	-	-
Stricturing (B2)	16%	-	-
Penetrating (B3)	31%	-	-
Inflammatory + perianal (B1+P)	9%	-	-
Stenotic + perianal (B2+P)	10%	-	-
Perianal involvement	43%	-	-
Disease location (Montréal Classification)			
CD (N= 187)			
Ileum (L1)	32%	-	-
Colon (L2)	22%	-	-
Ileum & Colon (L3)	36%	-	-
Upper GI Involvement (L4)	10%	-	-
UC (N= 159)	-	-	-
Proctitis	-	17%	-
Left-sided colitis	-	44%	-
Pancolitis	-	39%	-
Medical treatment (current or previous)			
Anti-TNF- α agents	39%	8%	25%
Azathioprine/6-MP	57%	40%	49%
Methotrexate	15%	7%	12%
Systemic corticosteroids	59%	46%	54%
Response to Anti-TNF Therapy	32%	8%	-
Primary non responders	5%	3%	4%
Breakthrough	3%	0%	3%
Adverse events	-	3%	3%
Response to Corticosteroids	70%	58%	65%
Prior Surg. Resections	38%	1%	21%
Complete Remission	87%	79%	83%
Family History	13%	12%	13%
Marital Status			
Single	39%	32%	35%
Married	44%	58%	51%
Divorced	13%	5%	10%
Seperated	2%	3%	2%
Widow/widower	2%	2%	2%
Exercise			
Almost everyday	4%	13%	8%
Several days per week	22%	35%	28%
Once a week	30%	22%	26%
One to three times per month	16%	3%	10%
Less than once a month	28%	28%	28%
Alcohol			
Once a day	5%	3%	4%
Twice a day	2%	0.01%	2%
Less than once a week	46%	36%	41%
Once or twice a week	28%	24%	26%
Several times a week	4%	13%	8%
Never	15%	24%	19%
Smoking Status			
Active at Diagnosis	49%	15%	33%
Active at Enrolment	31%	6%	19%
Extraintestinal disease manifestation	58%	63%	60%

Suppl. Table 2. Clinical characteristics of Cohort 2 patients included in the microbiome analysis

Cohort 2	CD	UC	Non-IBD
Number (%)	83 (21%)	73 (20%)	227 (59%)
Number of patient sampled more than once (min-max sampling year)	8 (0.25 - 2 years)	4 (0.5 - 2 years)	12
Gender (% female)	42%	21%	53%
Mean age at enrolment (years +/-SD)	26 (+/- 7.7)	28 (+/- 7.3)	31 (+/- 8)
Mean age at diagnosis (years +/- SD)	27 (+/-15)	31 (+/-10)	-
Mean BMI (%)			
Normal (<25 Kg/m ²)	41%	28%	29%
Overweight (>25 Kg/m ² , <30 Kg/m ²)	17%	28%	21%
Obese (>30 Kg/m ²)	6%	11%	13%
Unknown	36%	31%	41%
Mean disease duration at enrolment (years +/- SD)	8 (+/- 7.2)	11 (+/- 8)	-
Number of biopsies based on location			
Ileum	70	48	166
Colon (Right, Transverse and Left)	142	122	492
Rectum	38	41	135
Disease behaviour (Montréal Classification)			
Inflammatory (B1)	42%	-	-
Strictureing (B2)	29%	-	-
Penetrating (B3)	19%	-	-
Inflammatory + perianal (B1+P)	6%	-	-
Stenotic + perianal (B2+P)	4%	-	-
Perianal involvement	11%	1%	-
Disease location (Montréal Classification)			
CD (N= 83)			
Ileum (L1)	23%	-	-
Colon (L2)	12%	-	-
Ileum & Colon (L3)	36%	-	-
Upper GI Involvement (L4)	21%	-	-
UC (N= 73)			
Proctitis	-	4%	-
Left-sided colitis	-	12%	-
Pancolitis	-	68%	-
Medical treatment (current or previous)			
Anti-TNF- α agents	68%	46%	-
Azathioprine/6-MP	89%	90%	-
Methotrexate	54%	33%	-
Systemic corticosteroids	88%	86%	-
Response to Anti-TNF Therapy	54%	10%	-
Primary non responders	8%	5%	-
Breakthrough	84%	78%	-
Adverse events	43%	10%	-
Response to Corticosteroids	87%	78%	-
Prior Surg. Resections	47%	1%	-
Complete Remission	55%	61%	-

Suppl. Table 3. Microbial differences between UC and CD in both cohorts. Data was analyzed using MaAsLin pipeline with Benjamini and Hochberg - False discovery rate (BH-FDR) correction (q value)

Variable	Feature	Value	Coefficient	N	N not 0	P-value	Q-value
Cohort 1	Bacteria Firmicutes	UC	0.14510042	941	941	2.17E-30	2.17E-29
Cohort 1	Bacteria Bacteroidetes	UC	-0.1255268	941	941	3.98E-16	1.99E-15
Cohort 1	Bacteria Tenericutes	UC	0.00384711	941	495	6.19E-09	2.06E-08
Cohort 1	Bacteria Actinobacteria	UC	0.0154985	941	939	4.10E-08	1.02E-07
Cohort 1	Bacteria Proteobacteria	UC	-0.0325747	941	941	0.00141521	0.00283043
Cohort 1	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae Faecalibacterium	UC	0.1263978	941	931	2.07E-39	1.24E-37
Cohort 1	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae	UC	0.08871933	941	940	3.07E-36	9.20E-35
Cohort 1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Comamonadaceae Tepidimonas	UC	0.00513894	941	434	2.30E-23	4.60E-22
Cohort 1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Coprococcus	UC	0.01219308	941	804	4.32E-16	6.47E-15
Cohort 1	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae Other	UC	0.01434452	941	840	7.44E-14	8.93E-13
Cohort 1	Bacteria Bacteroidetes Bacteroidia Bacteroidales Bacteroidaceae Bacteroides	UC	-0.1216182	941	941	1.90E-12	1.90E-11
Cohort 1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Lachnospira	UC	0.01092791	941	742	6.74E-12	5.78E-11
Cohort 1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Other	UC	0.02779578	941	940	2.08E-11	1.56E-10
Cohort 1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Roseburia	UC	0.02024491	941	905	1.53E-09	1.02E-08
Cohort 1	Bacteria Actinobacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae Bifidobacterium	UC	0.00758875	941	737	2.89E-07	1.73E-06
Cohort 1	Bacteria Firmicutes Clostridia Clostridiales	UC	0.0200729	941	933	1.17E-06	6.36E-06
Cohort 1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae	UC	-0.0488672	941	920	2.04E-06	9.66E-06
Cohort 1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Klebsiella	UC	-0.002329	941	331	2.09E-06	9.66E-06
Cohort 1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Ruminococcus	UC	-0.0177335	941	934	3.17E-06	1.36E-05
Cohort 1	Bacteria Bacteroidetes Bacteroidia Bacteroidales Prevotellaceae Prevotella	UC	0.04187803	941	907	4.01E-06	1.60E-05
Cohort 1	Bacteria Firmicutes Bacilli Lactobacillales Streptococcaceae Streptococcus	UC	0.00798435	941	878	5.41E-06	2.03E-05
Cohort 1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Lachnobacterium	UC	0.00199737	941	389	4.25E-05	0.00015015
Cohort 1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Blautia	UC	0.01399934	941	932	5.95E-05	0.00019819
Cohort 1	Bacteria Bacteroidetes Bacteroidia Bacteroidales Barnesiellaceae	UC	0.01480365	941	828	8.56E-05	0.00027046
Cohort 1	Bacteria Proteobacteria Gammaproteobacteria Pasteurellales Pasteurellaceae Actinobacillus	UC	0.00284289	941	552	0.00020742	0.00060322
Cohort 1	Bacteria Firmicutes Clostridia Clostridiales Veillonellaceae Veillonella	UC	-0.0049716	941	736	0.00021663	0.00060322
Cohort 1	Bacteria Firmicutes Clostridia Clostridiales Peptostreptococcaceae	UC	0.00186589	941	388	0.00022118	0.00060322
Cohort 1	Bacteria Proteobacteria Actinobacteria Actinomycetales Propionibacteriaceae Propionibacterium	UC	0.00257779	941	564	0.00030967	0.00080784
Cohort 1	Bacteria Bacteroidetes Bacteroidia Bacteroidales Paraprevotellaceae Paraprevotella	UC	0.00119485	941	339	0.00032734	0.00081835
Cohort 1	Bacteria Proteobacteria Betaproteobacteria Neisseriales Neisseriaceae Neisseria	UC	0.00181472	941	436	0.00053151	0.00127562
Cohort 1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Dorea	UC	-0.0035899	941	765	0.00058106	0.00134091
Cohort 1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Other	UC	-0.0022303	941	464	0.00072219	0.00160487
Cohort 1	Bacteria Firmicutes Clostridia Clostridiales Other Other	UC	0.00662859	941	911	0.00078352	0.00167897
Cohort 1	Bacteria Firmicutes Clostridia Clostridiales Veillonellaceae Dialister	UC	0.00380307	941	573	0.00091518	0.00189348
Cohort 1	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae Ruminococcus	UC	0.00620216	941	857	0.00182609	0.00357679
Cohort 1	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae Oscillospira	UC	0.006442	941	913	0.00184801	0.00357679
Cohort 1	Bacteria Actinobacteria Actinobacteria Actinomycetales Micrococcaceae Rothia	UC	0.00151345	941	395	0.00284694	0.00533801
Cohort 1	Bacteria Proteobacteria Gammaproteobacteria Pasteurellales Pasteurellaceae Haemophilus	UC	0.00725492	941	874	0.0052202	0.00949127
Cohort 1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	UC	0.01844271	941	941	0.00779898	0.01376291
Cohort 1	Bacteria Actinobacteria Coriobacteriia Coriobacteriales Coriobacteriaceae Eggerthella	UC	-0.0015836	941	463	0.01454257	0.02493012
Cohort 2	Bacteria Tenericutes	UC	0.00631261	425	168	1.22E-09	6.09E-09
Cohort 2	Bacteria Firmicutes	UC	0.09953186	425	425	1.07E-06	2.66E-06
Cohort 2	Bacteria Actinobacteria	UC	0.01008605	425	421	0.00048575	0.00080959
Cohort 2	Bacteria Proteobacteria	UC	-0.0616258	425	425	0.00208995	0.00261243
Cohort 2	Bacteria Bacteroidetes	UC	-0.0582433	425	425	0.03247732	0.03247732
Cohort 2	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae	UC	0.06930252	425	423	2.21E-11	5.53E-10
Cohort 2	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Coprococcus	UC	0.02186327	425	412	2.00E-09	2.49E-08
Cohort 2	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae Ruminococcus	UC	0.01673773	425	395	4.45E-08	3.56E-07
Cohort 2	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae Faecalibacterium	UC	0.07699281	425	408	5.70E-08	3.56E-07
Cohort 2	Bacteria Firmicutes Clostridia Clostridiales	UC	0.02466659	425	407	3.90E-07	1.95E-06
Cohort 2	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Lachnospira	UC	0.01451396	425	372	1.05E-05	4.38E-05
Cohort 2	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae Other	UC	0.00923985	425	303	1.98E-05	7.06E-05
Cohort 2	Bacteria Actinobacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae Bifidobacterium	UC	0.00594353	425	260	2.58E-05	8.05E-05
Cohort 2	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Roseburia	UC	0.01454638	425	361	6.78E-05	0.00018823
Cohort 2	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Other	UC	0.02008634	425	425	0.00030285	0.00075712
Cohort 2	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae	UC	-0.0762405	425	423	0.00056057	0.00127403
Cohort 2	Bacteria Actinobacteria Coriobacteriia Coriobacteriales Coriobacteriaceae	UC	0.00315137	425	212	0.00062131	0.0012944
Cohort 2	Bacteria Firmicutes Clostridia Clostridiales Other Other	UC	0.01093102	425	422	0.00089377	0.00171879
Cohort 2	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	UC	0.03558998	425	425	0.00128094	0.00228739
Cohort 2	Bacteria Bacteroidetes Bacteroidia Bacteroidales Barnesiellaceae	UC	0.01904359	425	391	0.00698085	0.01163475
Cohort 2	Bacteria Firmicutes Bacilli Lactobacillales Streptococcaceae Other	UC	0.00238997	425	247	0.01607661	0.02511197
Cohort 2	Bacteria Bacteroidetes Bacteroidia Bacteroidales Prevotellaceae Prevotella	UC	0.0072957	425	348	0.02936281	0.0431806
Cohort 2	Bacteria Bacteroidetes Bacteroidia Bacteroidales Bacteroidaceae Bacteroides	UC	-0.0557145	425	425	0.05162713	0.05370435

Suppl. Table 4. Most important 20 OTUs in both cohort (Blue colors are the matched OTUs between cohorts)

Cohort	OTU	Family	Genus	Species
1	denovo118361	f__Comamonadaceae	g__Tepidimonas	s__
1	denovo120251	f__Ruminococcaceae	g__	s__
1	denovo127718	f__Ruminococcaceae	g__Faecalibacterium	s__prausnitzii
1	denovo235444	f__Lachnospiraceae	g__[Ruminococcus]	s__gnavus
1	denovo323534	f__Lachnospiraceae	NA	NA
1	denovo351839	f__Lachnospiraceae	g__	s__
1	denovo380836	f__Ruminococcaceae	g__Faecalibacterium	s__prausnitzii
1	denovo400843	f__Ruminococcaceae	g__Faecalibacterium	s__prausnitzii
1	denovo513014	f__Ruminococcaceae	g__	s__
1	denovo518732	f__Lachnospiraceae	NA	NA
1	denovo532383	f__Lachnospiraceae	NA	NA
1	denovo612215	f__Lachnospiraceae	g__	s__
1	denovo622973	f__Lachnospiraceae	NA	NA
1	denovo639919	f__Ruminococcaceae	g__Faecalibacterium	s__prausnitzii
1	denovo662036	f__Porphyromonadaceae	g__Parabacteroides	s__distasonis
1	denovo66235	f__Lachnospiraceae	NA	NA
1	denovo673970	f__Bacteroidaceae	g__Bacteroides	s__fragilis
1	denovo711777	f__Ruminococcaceae	g__Faecalibacterium	s__prausnitzii
1	denovo739754	f__Lachnospiraceae	g__Dorea	s__
1	denovo8857	f__Ruminococcaceae	g__Faecalibacterium	s__prausnitzii
2	denovo120251	f__Ruminococcaceae	g__	s__
2	denovo235444	f__Lachnospiraceae	g__[Ruminococcus]	s__gnavus
2	denovo260851	f__Ruminococcaceae	g__Ruminococcus	s__
2	denovo34856	f__Lachnospiraceae	g__	s__
2	denovo380836	f__Ruminococcaceae	g__Faecalibacterium	s__prausnitzii
2	denovo400843	f__Ruminococcaceae	g__Faecalibacterium	s__prausnitzii
2	denovo43824	f__Bacteroidaceae	g__Bacteroides	s__
2	denovo506370	f__Lachnospiraceae	g__Coprococcus	s__
2	denovo513014	f__Ruminococcaceae	g__	s__
2	denovo538505	f__	g__	s__
2	denovo612215	f__Lachnospiraceae	g__	s__
2	denovo639919	f__Ruminococcaceae	g__Faecalibacterium	s__prausnitzii
2	denovo684399	f__Bacteroidaceae	g__Bacteroides	s__uniformis
2	denovo694386	f__Coriobacteriaceae	g__Collinsella	NA
2	denovo711777	f__Ruminococcaceae	g__Faecalibacterium	s__prausnitzii
2	denovo749921	f__Enterobacteriaceae	g__	s__
2	denovo848229	f__Bacteroidaceae	g__Bacteroides	s__
2	denovo857322	f__Bacteroidaceae	g__Bacteroides	s__
2	denovo8857	f__Ruminococcaceae	g__Faecalibacterium	s__prausnitzii
2	denovo890957	f__Bacteroidaceae	g__Bacteroides	s__

Suppl. Table 5. Taxa significantly associated with Inflammation Status of Cohort 1 and Cohort 2 biopsy samples. Data was analyzed using MaAsLin pipeline with Benjamini and Hochberg - False discovery rate (BH-FDR) correction (q value).

Variable	Feature	Value	Coefficient	N	N not 0	P-value	Q-value
Endoscopic Assessment	Actinobacteria/Actinobacteria/Actinomycetales/Propionibacteriaceae/Propionibacterium	Cohort 1 Non-Inflamed CD	-0.003710858	136	78	0.021248337	0.701541154
Endoscopic Assessment	Actinobacteria	Cohort 1 Non-Inflamed CD	-0.01007084	136	134	0.042055461	0.701541154
Endoscopic Assessment	Proteobacteria/Gammaproteobacteria/Pasteurellales/Pasteurellaceae/Actinobacillus	Cohort 1 Non-Inflamed CD	-0.003112405	136	83	0.065527427	0.701541154
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Dorea	Cohort 1 Non-Inflamed CD	-0.005146023	136	117	0.069224802	0.701541154
Endoscopic Assessment	Firmicutes/Bacilli/Gemellales/Gemellaceae/Other	Cohort 1 Non-Inflamed CD	-0.002858953	136	80	0.08188897	0.701541154
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/Bacteroidaceae/Bacteroides	Cohort 1 Non-Inflamed CD	0.082519849	136	136	0.083430708	0.701541154
Endoscopic Assessment	Proteobacteria/Deltaproteobacteria/Desulfobivibrionales/Desulfobivibrionaceae/Desulfobivibrio	Cohort 1 Non-Inflamed CD	-0.01030413	136	41	0.08989093	0.701541154
Endoscopic Assessment	Bacteroidetes	Cohort 1 Non-Inflamed CD	0.073142859	136	136	0.102743526	0.701541154
Endoscopic Assessment	Fusobacteria	Cohort 1 Non-Inflamed CD	-0.006967653	136	112	0.104707635	0.701541154
Endoscopic Assessment	Fusobacteria/Fusobacteria/Fusobacteriales/Fusobacteriaceae/Fusobacterium	Cohort 1 Non-Inflamed CD	-0.006967653	136	112	0.104707635	0.701541154
Endoscopic Assessment	Firmicutes/Bacilli/Bacillales/Staphylococcaceae/Staphylococcus	Cohort 1 Non-Inflamed CD	-0.002407469	136	76	0.137001427	0.72792681
Endoscopic Assessment	Firmicutes/Erysipelotrichi/Erysipelotrichales/Erysipelotrichaceae	Cohort 1 Non-Inflamed CD	-0.007050333	136	131	0.13842868	0.72792681
Endoscopic Assessment	Proteobacteria/Betaproteobacteria/Burkholderiales/Comamonadaceae/Tepidimonas	Cohort 1 Non-Inflamed CD	-0.01358956	136	51	0.163764004	0.836791076
Endoscopic Assessment	Firmicutes/Bacilli/Lactobacillales/Streptococcaceae/Streptococcus	Cohort 1 Non-Inflamed CD	-0.004062504	136	127	0.190212828	0.836791076
Endoscopic Assessment	Firmicutes/Bacilli/Lactobacillales/Enterococcaceae/Enterococcus	Cohort 1 Non-Inflamed CD	-0.01296135	136	52	0.195313624	0.836791076
Endoscopic Assessment	Actinobacteria/Actinobacteria/Bifidobacteriales/Bifidobacteriaceae/Bifidobacterium	Cohort 1 Non-Inflamed CD	-0.003162054	136	105	0.225411241	0.836791076
Endoscopic Assessment	Actinobacteria/Coriobacteria/Coriobacteriales/Coriobacteriaceae/Collinsella	Cohort 1 Non-Inflamed CD	-0.005155657	136	107	0.278864655	0.836791076
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Blautia	Cohort 1 Non-Inflamed CD	-0.008964652	136	133	0.283159741	0.836791076
Endoscopic Assessment	Firmicutes/Bacilli/Bacillales/Other/Other	Cohort 1 Non-Inflamed CD	-0.02460917	136	105	0.285533156	0.836791076
Endoscopic Assessment	Proteobacteria/Alphaproteobacteria/RF32	Cohort 1 Non-Inflamed CD	-0.003785601	136	66	0.306175941	0.836791076
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Other	Cohort 1 Non-Inflamed CD	-0.00987929	136	136	0.314694845	0.836791076
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/Odoribacteraceae/Odoribacter	Cohort 1 Non-Inflamed CD	-0.006783971	136	98	0.324368601	0.836791076
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/Prevotellaceae/Prevotella	Cohort 1 Non-Inflamed CD	-0.006352671	136	128	0.350377671	0.836791076
Endoscopic Assessment	Proteobacteria/Gammaproteobacteria/Enterobacteriales/Enterobacteriaceae/Other	Cohort 1 Non-Inflamed CD	-0.001879299	136	81	0.355037268	0.836791076
Endoscopic Assessment	Proteobacteria/Betaproteobacteria/Neisseriales/Neisseriaceae/Neisseria	Cohort 1 Non-Inflamed CD	-0.000820526	136	56	0.355940689	0.836791076
Endoscopic Assessment	Firmicutes/Erysipelotrichi/Erysipelotrichales/Erysipelotrichaceae/Eubacterium	Cohort 1 Non-Inflamed CD	-0.002747623	136	123	0.374593619	0.836791076
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Veillonellaceae/Veillonella	Cohort 1 Non-Inflamed CD	-0.003432231	136	114	0.390786668	0.836791076
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Roseburia	Cohort 1 Non-Inflamed CD	-0.00602524	136	128	0.397601003	0.836791076
Endoscopic Assessment	Firmicutes/Bacilli/Lactobacillales/Lactobacillaceae/Lactobacillus	Cohort 1 Non-Inflamed CD	-0.002179294	136	102	0.40936112	0.836791076
Endoscopic Assessment	Firmicutes	Cohort 1 Non-Inflamed CD	-0.025520481	136	136	0.434126746	0.836791076
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Clostridiaceae	Cohort 1 Non-Inflamed CD	0.002833605	136	104	0.445836947	0.836791076
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Other/Other	Cohort 1 Non-Inflamed CD	-0.004761955	136	135	0.459627594	0.836791076
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/Odoribacteraceae/Butyrivomona	Cohort 1 Non-Inflamed CD	-0.01235598	136	52	0.461950286	0.836791076
Endoscopic Assessment	Actinobacteria/Actinobacteria/Coriobacteriales/Coriobacteriaceae/Eggerthella	Cohort 1 Non-Inflamed CD	-0.01203823	136	65	0.480139025	0.836791076
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Ruminococcus	Cohort 1 Non-Inflamed CD	-0.006275275	136	136	0.499784473	0.836791076
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae/Oscillospira	Cohort 1 Non-Inflamed CD	0.003823201	136	130	0.500313242	0.836791076
Endoscopic Assessment	Proteobacteria/Gammaproteobacteria/Enterobacteriales/Enterobacteriaceae	Cohort 1 Non-Inflamed CD	-0.019828235	136	136	0.514251801	0.836791076
Endoscopic Assessment	Actinobacteria/Actinobacteria/Actinomycetales/Micrococccaceae/Rothia	Cohort 1 Non-Inflamed CD	-0.00690184	136	52	0.520460589	0.836791076
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae/Ruminococcus	Cohort 1 Non-Inflamed CD	-0.002784083	136	121	0.533405849	0.836791076
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Peptostreptococcaceae	Cohort 1 Non-Inflamed CD	-0.000808611	136	59	0.536937057	0.836791076
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae	Cohort 1 Non-Inflamed CD	0.009683516	136	136	0.537061399	0.836791076
Endoscopic Assessment	Proteobacteria	Cohort 1 Non-Inflamed CD	-0.014925518	136	136	0.547656671	0.836791076
Endoscopic Assessment	Proteobacteria/Gammaproteobacteria/Pasteurellales/Pasteurellaceae/Haemophilus	Cohort 1 Non-Inflamed CD	0.003925633	136	128	0.56251016	0.836791076
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Clostridiaceae/Clostridium	Cohort 1 Non-Inflamed CD	-0.000902144	136	76	0.573774787	0.836791076
Endoscopic Assessment	Firmicutes/Bacilli/Lactobacillales/Streptococcaceae/Lactococcus	Cohort 1 Non-Inflamed CD	0.00093634	136	62	0.582747311	0.836791076
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Lachnospira	Cohort 1 Non-Inflamed CD	-0.001970498	136	92	0.585301339	0.836791076
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Eupotysium	Cohort 1 Non-Inflamed CD	0.000472157	136	52	0.587002695	0.836791076
Endoscopic Assessment	Proteobacteria/Betaproteobacteria/Burkholderiales/Alcaligenaceae/Sutterella	Cohort 1 Non-Inflamed CD	0.006110683	136	131	0.618221307	0.858227863
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae	Cohort 1 Non-Inflamed CD	-0.008253264	136	136	0.627659183	0.858227863
Endoscopic Assessment	Proteobacteria/Gammaproteobacteria/Enterobacteriales/Enterobacteriaceae/Klebsiella	Cohort 1 Non-Inflamed CD	-0.000641861	136	48	0.660318044	0.867521809
Endoscopic Assessment	Actinobacteria/Actinobacteria/Actinomycetales/Actinomycetaceae/Actinomycetes	Cohort 1 Non-Inflamed CD	0.00652064	136	82	0.668756427	0.867521809
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Other	Cohort 1 Non-Inflamed CD	0.001727382	136	116	0.673300508	0.867521809
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Lachnobacterium	Cohort 1 Non-Inflamed CD	0.001612202	136	44	0.686786087	0.868201279
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/Rikenellaceae	Cohort 1 Non-Inflamed CD	-0.003647651	136	127	0.701539661	0.870428839
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/Parabacteroides	Cohort 1 Non-Inflamed CD	-0.004083991	136	132	0.756881169	0.878187721
Endoscopic Assessment	Verrucomicrobia	Cohort 1 Non-Inflamed CD	-0.001539082	136	104	0.759567102	0.878187721
Endoscopic Assessment	Verrucomicrobia/Verrucomicrobiae/Verrucomicrobiales/Verrucomicrobiaceae/Akkermansia	Cohort 1 Non-Inflamed CD	-0.001539082	136	104	0.759567102	0.878187721
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Veillonellaceae/Dialister	Cohort 1 Non-Inflamed CD	-0.000839501	136	73	0.769511599	0.878187721
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales	Cohort 1 Non-Inflamed CD	0.002833958	136	136	0.785068752	0.878187721
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Clostridiaceae/Other	Cohort 1 Non-Inflamed CD	-0.000557714	136	90	0.786436765	0.878187721
Endoscopic Assessment	Firmicutes/Bacilli/Turicibacteriales/Turicibacteraceae/Turicibacter	Cohort 1 Non-Inflamed CD	-0.000337679	136	65	0.826893104	0.908226852
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/S247	Cohort 1 Non-Inflamed CD	-0.000614724	136	129	0.87151782	0.916165267
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae/Faecalibacterium	Cohort 1 Non-Inflamed CD	0.003107157	136	135	0.882584385	0.916165267
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Coproccoccus	Cohort 1 Non-Inflamed CD	-0.000478645	136	107	0.883772456	0.916165267
Endoscopic Assessment	Proteobacteria/Deltaproteobacteria/Desulfobivibrionales/Desulfobivibrionaceae/Bilophila	Cohort 1 Non-Inflamed CD	-0.000502584	136	81	0.88881705	0.916165267
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Veillonellaceae/Phascolarctobacterium	Cohort 1 Non-Inflamed CD	-0.000442767	136	94	0.955897184	0.968970571
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/Barnesiellaceae	Cohort 1 Non-Inflamed CD	-0.000350377	136	117	0.968970571	0.968970571
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Clostridiaceae/Clostridium	Cohort 1 Non-Inflamed UC	-0.002636469	200	104	0.041900695	0.926853467
Endoscopic Assessment	Actinobacteria/Actinobacteria/Actinomycetales/Propionibacteriaceae/Propionibacterium	Cohort 1 Non-Inflamed UC	-0.003577566	200	128	0.053054835	0.926853467
Endoscopic Assessment	Proteobacteria/Betaproteobacteria/Neisseriales/Neisseriaceae/Neisseria	Cohort 1 Non-Inflamed UC	-0.001970463	200	95	0.070235714	0.926853467
Endoscopic Assessment	Actinobacteria/Coriobacteria/Coriobacteriales/Coriobacteriaceae/Collinsella	Cohort 1 Non-Inflamed UC	-0.007548381	200	168	0.094725962	0.926853467
Endoscopic Assessment	Proteobacteria/Alphaproteobacteria/RF32	Cohort 1 Non-Inflamed UC	-0.002705271	200	101	0.105899818	0.926853467
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Blautia	Cohort 1 Non-Inflamed UC	-0.010300704	200	198	0.134670016	0.926853467
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/S247	Cohort 1 Non-Inflamed UC	-0.004728111	200	183	0.143501826	0.926853467
Endoscopic Assessment	Fusobacteria	Cohort 1 Non-Inflamed UC	-0.003187794	200	164	0.163028717	0.926853467
Endoscopic Assessment	Fusobacteria/Fusobacteria/Fusobacteriales/Fusobacteriaceae/Fusobacterium	Cohort 1 Non-Inflamed UC	-0.003185479	200	164	0.163435292	0.926853467
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Eupotysium	Cohort 1 Non-Inflamed UC	0.00074269	200	65	0.19647907	0.926853467
Endoscopic Assessment	Firmicutes/Bacilli/Lactobacillales/Streptococcaceae/Streptococcus	Cohort 1 Non-Inflamed UC	-0.004586916	200	189	0.205397096	0.926853467
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Clostridiaceae	Cohort 1 Non-Inflamed UC	0.003916994	200	149	0.245933907	0.926853467
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae/Ruminococcus	Cohort 1 Non-Inflamed UC	-0.004666621	200	185	0.246949929	0.926853467
Endoscopic Assessment	Firmicutes/Bacilli/Bacillales/Staphylococcaceae/Staphylococcus	Cohort 1 Non-Inflamed UC	-0.001963478	200	108	0.248823309	0.926853467
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Other/Other	Cohort 1 Non-Inflamed UC	-0.005071526	200	197	0.250871363	0.926853467
Endoscopic Assessment	Actinobacteria	Cohort 1 Non-Inflamed UC	-0.007092854	200	199	0.261889826	0.926853467
Endoscopic Assessment	Firmicutes/Erysipelotrichi/Erysipelotrichales/Erysipelotrichaceae/Eubacterium	Cohort 1 Non-Inflamed UC	0.003369079	200	165	0.269993481	0.926853467
Endoscopic Assessment	Proteobacteria/Betaproteobacteria/Burkholderiales/Comamonadaceae/Tepidimonas	Cohort 1 Non-Inflamed UC	-0.001560959	200	102	0.284356685	0.926853467
Endoscopic Assessment	Proteobacteria/Gammaproteobacteria/Pasteurellales/Pasteurellaceae/Actinobacillus	Cohort 1 Non-Inflamed UC	-0.002512961	200	125	0.289204178	0.926853467
Endoscopic Assessment	Actinobacteria/Actinobacteria/Actinomycetales/Micrococccaceae/Rothia	Cohort 1 Non-Inflamed UC	0.001148347	200	80	0.293812378	0.926853467
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Ruminococcus	Cohort 1 Non-Inflamed UC	-0.006079818	200	197	0.297100068	0.926853467
Endoscopic Assessment	Firmicutes/Bacilli/Lactobacillales/Lactobacillaceae/Lactobacillus	Cohort 1 Non-Inflamed UC	-0.002383861	200	163	0.324499924	0.926853467
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Veillonellaceae/Dialister	Cohort 1 Non-Inflamed UC	0.002486827	200	132	0.331474282	0.926853467
Endoscopic Assessment	Firmicutes/Bacilli/Gemellales/Gemellaceae/Other	Cohort 1 Non-Inflamed UC	-0.001063564	200	102	0.349960383	0.926853467
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Veillonellaceae/Phascolarctobacterium	Cohort 1 Non-Inflamed UC	-0.003388452	200	114	0.360245785	0.926853467
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Veillonellaceae/Veillonella	Cohort 1 Non-Inflamed UC	-0.001809402	200	150	0.367221281	0.926853467
Endoscopic Assessment	Firmicutes/Erysipelotrichi/Erysipelotrichales/Erysipelotrichaceae	Cohort 1 Non-Inflamed UC	-0.003545075	200	193	0.379167327	0.926853467
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/Rikenellaceae	Cohort 1 Non-Inflamed UC	0.006828087	200	193	0.416682252	0.929131934
Endoscopic Assessment	Proteobacteria/Deltaproteobacteria/Desulfobivibrionales/Desulfobivibrionaceae/Bilophila	Cohort 1 Non-Inflamed UC	0.002115034	200	127	0.462263359	0.929131934
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Roseburia	Cohort 1 Non-Inflamed UC	-0.005028949	200	193	0.473971993	0.929131934
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Lachnospira	Cohort 1 Non-Inflamed UC	-0.001957675	200	166	0.539278163	0.929131934
Endoscopic Assessment	Verrucomicrobia	Cohort 1 Non-Inflamed UC	0.002554769	200	149	0.557249404	0.929131934
Endoscopic Assessment	Verrucomicrobia/Verrucomicrobiae/Verrucomicrobiales/Verrucomicrobiaceae/Akkermansia	Cohort 1 Non-Inflamed UC	0.002554769	200	149	0.557249404	0.929131934
Endoscopic Assessment	Actinobacteria/Actinobacteria/Actinomycetales/Actinomycetaceae/Actinomycetes	Cohort 1 Non-Inflamed UC	0.000591804	200	116	0.567208039	0.929131934
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae	Cohort 1 Non-Inflamed UC	-0.008824993	200	200	0.59723381	0.929131934
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales	Cohort 1 Non-Inflamed UC	-0.003849331	200	199	0.600640272	0.929131934
Endoscopic Assessment	Proteobacteria/Betaproteobacteria/Burkholderiales/Alcaligenaceae/Sutterella	Cohort 1 Non-Inflamed UC	-0.006041557	200	192	0.602138184	0.929131934
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/Paraprevotellaceae/Paraprevotella	Cohort 1 Non-Inflamed UC	-0.001961933	200	70	0.632865791	0.929

Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Other	Cohort 1 Non-Inflamed UC	-0.003019239	200	200	0.73471395	0.929131934
Endoscopic Assessment	Firmicutes/Bacilli/Lactobacillales/Enterococcaceae/Enterococcus	Cohort 1 Non-Inflamed UC	-0.000969673	200	64	0.73908137	0.929131934
Endoscopic Assessment	Firmicutes	Cohort 1 Non-Inflamed UC	-0.008676994	200	200	0.747614537	0.929131934
Endoscopic Assessment	Actinobacteria/Actinobacteria/Bifidobacteriales/Bifidobacteriaceae/Bifidobacterium	Cohort 1 Non-Inflamed UC	-0.000801144	200	166	0.76473648	0.929131934
Endoscopic Assessment	Bacteroidetes	Cohort 1 Non-Inflamed UC	0.009124033	200	200	0.794829951	0.929131934
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/Bacteroidaceae/Bacteroides	Cohort 1 Non-Inflamed UC	0.00951422	200	200	0.795415574	0.929131934
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae	Cohort 1 Non-Inflamed UC	0.003606758	200	200	0.81628958	0.929131934
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Lachnospiraceae	Cohort 1 Non-Inflamed UC	0.000267976	200	89	0.852142034	0.929131934
Endoscopic Assessment	Actinobacteria/Coriobacteriales/Coriobacteriales/Coriobacteriaceae/Eggerthella	Cohort 1 Non-Inflamed UC	0.000226499	200	99	0.859867979	0.929131934
Endoscopic Assessment	Proteobacteria	Cohort 1 Non-Inflamed UC	-0.003953706	200	200	0.870488678	0.929131934
Endoscopic Assessment	Proteobacteria/Gammaproteobacteria/Enterobacteriales/Enterobacteriaceae/Other	Cohort 1 Non-Inflamed UC	-0.000214327	200	84	0.894216976	0.929131934
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae/Oscillospira	Cohort 1 Non-Inflamed UC	0.000575576	200	193	0.899015396	0.929131934
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Coproccoccus	Cohort 1 Non-Inflamed UC	-0.000408883	200	180	0.903358054	0.929131934
Endoscopic Assessment	Proteobacteria/Gammaproteobacteria/Enterobacteriales/Enterobacteriaceae	Cohort 1 Non-Inflamed UC	-0.002685875	200	192	0.910207546	0.929131934
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Peptostreptococcaceae	Cohort 1 Non-Inflamed UC	0.000132251	200	102	0.915054178	0.929131934
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/Parabacteroides	Cohort 1 Non-Inflamed UC	0.000833959	200	199	0.931326538	0.931326538
Endoscopic Assessment	Firmicutes/Bacilli/Lactobacillales/Lactobacillaceae/Lactobacillus	Cohort 2 Non-Inflamed CD	-0.00439241	46	33	0.13446998	0.99408655
Endoscopic Assessment	Proteobacteria/Gammaproteobacteria/Pseudomonadales/Moraxellaceae/Acinetobacter	Cohort 2 Non-Inflamed CD	0.003055006	46	16	0.138171519	0.99408655
Endoscopic Assessment	Firmicutes/Bacilli/Gemellales/Gemellaceae/Other	Cohort 2 Non-Inflamed CD	-0.002862438	46	19	0.14587579	0.99408655
Endoscopic Assessment	Proteobacteria/Betaproteobacteria/Neisseriales/Neisseriaceae/Neisseria	Cohort 2 Non-Inflamed CD	-0.001888859	46	18	0.171629039	0.99408655
Endoscopic Assessment	Actinobacteria/Actinobacteria/Actinomycetales/Actinomycetaceae/Actinomycetes	Cohort 2 Non-Inflamed CD	-0.003457159	46	25	0.188324179	0.99408655
Endoscopic Assessment	Actinobacteria/Actinobacteria/Actinomycetales/Propionibacteriaceae/Propionibacterium	Cohort 2 Non-Inflamed CD	0.003551091	46	29	0.237852431	0.99408655
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Veillonellaceae/Veillonella	Cohort 2 Non-Inflamed CD	-0.00455776	46	29	0.2438476	0.99408655
Endoscopic Assessment	Verrucomicrobia/Verrucomicrobiales/Verrucomicrobiales/Verrucomicrobiaceae/Akkermansia	Cohort 2 Non-Inflamed CD	-0.001697661	46	22	0.310883503	0.99408655
Endoscopic Assessment	Firmicutes/Bacilli/Lactobacillales/Streptococcaceae/Streptococcus	Cohort 2 Non-Inflamed CD	-0.005869087	46	43	0.330692317	0.99408655
Endoscopic Assessment	Fusobacteria/Fusobacteria/Fusobacteriales/Fusobacteriaceae/Fusobacterium	Cohort 2 Non-Inflamed CD	-0.003646443	46	33	0.355565042	0.99408655
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Roseburia	Cohort 2 Non-Inflamed CD	-0.00353645	46	33	0.453021012	0.99408655
Endoscopic Assessment	Proteobacteria/Gammaproteobacteria/Pasteurellales/Pasteurellaceae/Actinobacillus	Cohort 2 Non-Inflamed CD	-0.002051708	46	25	0.454560476	0.99408655
Endoscopic Assessment	Proteobacteria/Gammaproteobacteria/Pasteurellales/Pasteurellaceae/Haemophilus	Cohort 2 Non-Inflamed CD	-0.007848979	46	40	0.478489597	0.99408655
Endoscopic Assessment	Firmicutes/Erysipelotrichi/Erysipelotrichales/Erysipelotrichaceae/Eubacterium	Cohort 2 Non-Inflamed CD	0.001902619	46	35	0.509176557	0.99408655
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Clostridiaceae/Other	Cohort 2 Non-Inflamed CD	0.015760865	46	15	0.510561113	0.99408655
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae/Oscillospira	Cohort 2 Non-Inflamed CD	0.011073106	46	40	0.52167393	0.99408655
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae/Faecalibacterium	Cohort 2 Non-Inflamed CD	0.016047737	46	44	0.524508556	0.99408655
Endoscopic Assessment	Proteobacteria/Gammaproteobacteria/Enterobacteriales/Enterobacteriaceae/Other	Cohort 2 Non-Inflamed CD	-0.001587216	46	23	0.529604273	0.99408655
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/Parabacteroides	Cohort 2 Non-Inflamed CD	0.020920857	46	45	0.542207356	0.99408655
Endoscopic Assessment	Firmicutes/Bacilli/Lactobacillales/Streptococcaceae/Other	Cohort 2 Non-Inflamed CD	-0.001595376	46	23	0.547178493	0.99408655
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/Prevotellaceae/Prevotella	Cohort 2 Non-Inflamed CD	-0.006052139	46	37	0.590972968	0.99408655
Endoscopic Assessment	Firmicutes/Bacilli/Bacillales/Staphylococcaceae/Staphylococcus	Cohort 2 Non-Inflamed CD	-0.001398692	46	23	0.620314811	0.99408655
Endoscopic Assessment	Proteobacteria/Gammaproteobacteria/Enterobacteriales/Enterobacteriaceae/Klebsiella	Cohort 2 Non-Inflamed CD	0.002847657	46	23	0.646374583	0.99408655
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/Bacteroidaceae/Bacteroides	Cohort 2 Non-Inflamed CD	-0.043659571	46	46	0.659751437	0.99408655
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales	Cohort 2 Non-Inflamed CD	0.00334651	46	44	0.669186116	0.99408655
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Blautia	Cohort 2 Non-Inflamed CD	0.008819088	46	45	0.681199319	0.99408655
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae/Ruminococcus	Cohort 2 Non-Inflamed CD	0.000669026	46	24	0.709293875	0.99408655
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Coproccoccus	Cohort 2 Non-Inflamed CD	0.000889872	46	30	0.722489664	0.99408655
Endoscopic Assessment	Proteobacteria/Gammaproteobacteria/Enterobacteriales/Enterobacteriaceae	Cohort 2 Non-Inflamed CD	0.035043229	46	46	0.734414323	0.99408655
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Dorea	Cohort 2 Non-Inflamed CD	-0.001863025	46	28	0.748257084	0.99408655
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae	Cohort 2 Non-Inflamed CD	0.007217247	46	45	0.782721535	0.99408655
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/Paraprevotellaceae/Paraprevotella	Cohort 2 Non-Inflamed CD	-0.002876687	46	14	0.795757286	0.99408655
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/S24_7	Cohort 2 Non-Inflamed CD	-0.000993403	46	38	0.799411982	0.99408655
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae	Cohort 2 Non-Inflamed CD	0.007475639	46	46	0.806057129	0.99408655
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/Odoribacteraceae/Odoribacter	Cohort 2 Non-Inflamed CD	0.002472783	46	25	0.812561244	0.99408655
Endoscopic Assessment	Actinobacteria/Coriobacteriales/Coriobacteriales/Coriobacteriaceae/Collinsella	Cohort 2 Non-Inflamed CD	0.001653511	46	26	0.817828466	0.99408655
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Lachnospira	Cohort 2 Non-Inflamed CD	0.001014581	46	29	0.842464801	0.99408655
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Veillonellaceae/Phascolarctobacterium	Cohort 2 Non-Inflamed CD	-0.000474045	46	21	0.846658374	0.99408655
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Ruminococcus	Cohort 2 Non-Inflamed CD	-0.002606376	46	46	0.85684334	0.99408655
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/Bacteroidaceae/Other	Cohort 2 Non-Inflamed CD	0.000523503	46	26	0.858394766	0.99408655
Endoscopic Assessment	Actinobacteria/Actinobacteria/Bifidobacteriales/Bifidobacteriaceae/Bifidobacterium	Cohort 2 Non-Inflamed CD	0.000388706	46	15	0.859301076	0.99408655
Endoscopic Assessment	Firmicutes/Bacilli/Lactobacillales/Enterococcaceae/Enterococcus	Cohort 2 Non-Inflamed CD	-0.000735541	46	29	0.86618387	0.99408655
Endoscopic Assessment	Actinobacteria/Coriobacteriales/Coriobacteriales/Coriobacteriaceae/Eggerthella	Cohort 2 Non-Inflamed CD	0.000571236	46	15	0.879963498	0.99408655
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Clostridiaceae	Cohort 2 Non-Inflamed CD	0.000529496	46	24	0.886213746	0.99408655
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Peptostreptococcaceae	Cohort 2 Non-Inflamed CD	0.000224129	46	15	0.886995649	0.99408655
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae/Other	Cohort 2 Non-Inflamed CD	-0.000602587	46	21	0.900246511	0.99408655
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Clostridiaceae/Clostridium	Cohort 2 Non-Inflamed CD	-0.001383305	46	14	0.908106397	0.99408655
Endoscopic Assessment	Proteobacteria/Betaproteobacteria/Burkholderiales/Alcaligenaceae/Sutterella	Cohort 2 Non-Inflamed CD	-0.005116488	46	42	0.912145202	0.99408655
Endoscopic Assessment	Proteobacteria/Deltaproteobacteria/Desulfotribionales/Desulfotribionaceae/Bifidobacterium	Cohort 2 Non-Inflamed CD	-0.001053345	46	23	0.921074676	0.99408655
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Other	Cohort 2 Non-Inflamed CD	0.000446415	46	46	0.959789048	0.99408655
Endoscopic Assessment	Firmicutes/Erysipelotrichi/Erysipelotrichales/Erysipelotrichaceae	Cohort 2 Non-Inflamed CD	0.000319732	46	43	0.961161975	0.99408655
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/Barnesiellaceae	Cohort 2 Non-Inflamed CD	-0.000196875	46	37	0.962430519	0.99408655
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Veillonellaceae/Dialister	Cohort 2 Non-Inflamed CD	6.04E-05	46	15	0.985148268	0.99408655
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Other/Other	Cohort 2 Non-Inflamed CD	3.62E-05	46	36	0.993583136	0.99408655
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/Rikenellaceae	Cohort 2 Non-Inflamed CD	0.000122	46	37	0.994086855	0.99408655
Endoscopic Assessment	Proteobacteria/Gammaproteobacteria/Enterobacteriales/Enterobacteriaceae/Other	Cohort 2 Non-Inflamed UC	-0.003947699	42	18	0.093015882	0.964063269
Endoscopic Assessment	Firmicutes/Bacilli/Turicibacteriales/Turicibacteraceae/Turicibacter	Cohort 2 Non-Inflamed UC	-0.002139175	42	14	0.132880973	0.964063269
Endoscopic Assessment	Actinobacteria/Actinobacteria/Actinomycetales/Propionibacteriaceae/Propionibacterium	Cohort 2 Non-Inflamed UC	0.003330083	42	27	0.19789537	0.964063269
Endoscopic Assessment	Actinobacteria/Coriobacteriales/Coriobacteriales/Coriobacteriaceae/Eggerthella	Cohort 2 Non-Inflamed UC	-0.002357341	42	17	0.265052846	0.964063269
Endoscopic Assessment	Firmicutes/Bacilli/Lactobacillales/Enterococcaceae/Enterococcus	Cohort 2 Non-Inflamed UC	-0.003971067	42	27	0.334164558	0.964063269
Endoscopic Assessment	Firmicutes/Bacilli/Lactobacillales/Streptococcaceae/Streptococcus	Cohort 2 Non-Inflamed UC	0.00597345	42	40	0.359025692	0.964063269
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/Prevotellaceae/Prevotella	Cohort 2 Non-Inflamed UC	-0.002548855	42	36	0.364701379	0.964063269
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae/Ruminococcus	Cohort 2 Non-Inflamed UC	-0.007384159	42	37	0.377513978	0.964063269
Endoscopic Assessment	Actinobacteria/Actinobacteria/Actinomycetales/Actinomycetaceae/Actinomycetes	Cohort 2 Non-Inflamed UC	0.002386848	42	24	0.419134583	0.964063269
Endoscopic Assessment	Proteobacteria/Gammaproteobacteria/Pasteurellales/Pasteurellaceae/Actinobacillus	Cohort 2 Non-Inflamed UC	0.0025285	42	15	0.428701323	0.964063269
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Veillonellaceae/Phascolarctobacterium	Cohort 2 Non-Inflamed UC	-0.009579384	42	30	0.482740125	0.964063269
Endoscopic Assessment	Proteobacteria/Gammaproteobacteria/Enterobacteriales/Enterobacteriaceae	Cohort 2 Non-Inflamed UC	-0.0325568	42	42	0.484109151	0.964063269
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Ruminococcus	Cohort 2 Non-Inflamed UC	0.0089217	42	41	0.492835386	0.964063269
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Clostridiaceae	Cohort 2 Non-Inflamed UC	0.0021584	42	27	0.505191224	0.964063269
Endoscopic Assessment	Actinobacteria/Actinobacteria/Actinomycetales/Micrococcaceae/Rothia	Cohort 2 Non-Inflamed UC	0.000961197	42	15	0.508046769	0.964063269
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae	Cohort 2 Non-Inflamed UC	0.020491515	42	42	0.542971497	0.964063269
Endoscopic Assessment	Verrucomicrobia/Verrucomicrobiales/Verrucomicrobiales/Verrucomicrobiaceae/Akkermansia	Cohort 2 Non-Inflamed UC	-0.005904364	42	30	0.55080712	0.964063269
Endoscopic Assessment	Proteobacteria/Gammaproteobacteria/Enterobacteriales/Enterobacteriaceae/Klebsiella	Cohort 2 Non-Inflamed UC	-0.003643071	42	22	0.559734688	0.964063269
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/Odoribacteraceae/Odoribacter	Cohort 2 Non-Inflamed UC	0.006820806	42	38	0.560729393	0.964063269
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/Paraprevotellaceae/Prevotella	Cohort 2 Non-Inflamed UC	-0.000731785	42	13	0.57457493	0.964063269
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae/Oscillospira	Cohort 2 Non-Inflamed UC	-0.004194204	42	42	0.584894247	0.964063269
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Coproccoccus	Cohort 2 Non-Inflamed UC	0.009382173	42	36	0.588065956	0.964063269
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Lachnospiraceae	Cohort 2 Non-Inflamed UC	0.001100923	42	18	0.608356352	0.964063269
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae/Faecalibacterium	Cohort 2 Non-Inflamed UC	0.026182123	42	41	0.616346726	0.964063269
Endoscopic Assessment	Proteobacteria/Betaproteobacteria/Burkholderiales/Alcaligenaceae/Sutterella	Cohort 2 Non-Inflamed UC	-0.011528578	42	42	0.623494691	0.964063269
Endoscopic Assessment	Fusobacteria/Fusobacteria/Fusobacteriales/Fusobacteriaceae/Fusobacterium	Cohort 2 Non-Inflamed UC	-0.001466373	42	30	0.626434713	0.964063269
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Veillonellaceae/Dialister	Cohort 2 Non-Inflamed UC	-0.003476398	42	29	0.633035266	0.964063269
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Dorea	Cohort 2 Non-Inflamed UC	0.001979492	42	30	0.649104755	0.964063269
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae/Other	Cohort 2 Non-Inflamed UC	0.003010493	42	37	0.663555531	0.964063269
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Christensenellaceae	Cohort 2 Non-Inflamed UC	-0.000532552	42	17	0.669104066	0.964063269
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Veillonellaceae/Veillonella	Cohort 2 Non-Inflamed UC	0.00141144	42	26	0.673627729	0.964063269
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/S24_7	Cohort 2 Non-Inflamed UC	0.004327462	42	34	0.700568053	0.964063269
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/Odoribacteraceae/Butyrivimonas	Cohort 2 Non-Inflamed UC	0.002855709	42	22	0.700814631	0.964063269
Endoscopic Assessment	Proteobacteria/Gammaproteobacteria/Pasteurellales/Pasteurellaceae/Haemophilus	Cohort 2 Non-Inflamed UC	0.004477051	42	39	0.703967107	0.964063269
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/Parabacteroides	Cohort 2 Non-Inflamed UC	0.009236348	42	42	0.713936746	0.964063269
Endoscopic Assessment	Proteobacteria/Gammaproteobacteria/Pseudomonadales/Moraxellaceae/Acinetobacter	Cohort 2 Non-Inflamed UC	0.000967349	42	16	0.723054787	0.964063269
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Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Other	Cohort 2 Non-Inflamed UC	-0.002107118	42	40	0.85363113	0.964063269
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Peptostreptococcaceae	Cohort 2 Non-Inflamed UC	-0.000492958	42	20	0.857041719	0.964063269
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Clostridiaceae/Other	Cohort 2 Non-Inflamed UC	0.000122711	42	14	0.87188708	0.964063269
Endoscopic Assessment	Firmicutes/Erysipelotrichi/Erysipelotrichales/Erysipelotrichaceae	Cohort 2 Non-Inflamed UC	0.001476777	42	41	0.874222485	0.964063269
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/Bacteroidaceae/Other	Cohort 2 Non-Inflamed UC	-0.000492321	42	29	0.893617602	0.964063269
Endoscopic Assessment	Proteobacteria/Alphaproteobacteria/RF32	Cohort 2 Non-Inflamed UC	0.001304682	42	24	0.90658799	0.964063269
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Blautia	Cohort 2 Non-Inflamed UC	0.002813798	42	41	0.909144561	0.964063269
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/Rikenellaceae	Cohort 2 Non-Inflamed UC	-0.002593589	42	40	0.924957477	0.964063269
Endoscopic Assessment	Bacteroidetes/Bacteroidia/Bacteroidales/Barnesiellaceae	Cohort 2 Non-Inflamed UC	0.00189208	42	41	0.932964454	0.964063269
Endoscopic Assessment	Actinobacteria/Coriobacteria/Coriobacteriales/Coriobacteriaceae/Collinsella	Cohort 2 Non-Inflamed UC	0.000512208	42	34	0.958711821	0.974428408
Endoscopic Assessment	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Roseburia	Cohort 2 Non-Inflamed UC	-6.32E-05	42	40	0.995724082	0.995724082
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae/Faecalibacterium	AnatomicLocationDiseaseCDileum	0.088173288	941	931	0.001246599	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales	AnatomicLocationDiseaseCDileum	0.02858441	941	847	0.002242054	1
Anatomic Location	Firmicutes/Erysipelotrichi/Erysipelotrichales/Erysipelotrichaceae	AnatomicLocationDiseaseUCColon Transverse	-0.019359645	941	891	0.003789794	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae/Faecalibacterium	AnatomicLocationDiseaseCDColon Right	0.078236737	941	931	0.00539541	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae	AnatomicLocationDiseaseCDileum	0.053741804	941	929	0.007420111	1
Anatomic Location	Proteobacteria/Gammaproteobacteria/Pasteurellales/Pasteurellaceae/Haemophilus	AnatomicLocationDiseaseCDColon Right	-0.018856585	941	869	0.011310768	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Veillonellaceae/Phascolarctobacterium	AnatomicLocationDiseaseUCColon Left	-0.024184435	941	604	0.017761223	1
Anatomic Location	Bacteroidetes/Bacteroidia/Bacteroidales/Odoribacteraceae/Odoribacter	AnatomicLocationDiseaseUCColon Left	-0.017867385	941	754	0.0180154	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Veillonellaceae/Phascolarctobacterium	AnatomicLocationDiseaseUCRectum	-0.022126479	941	604	0.018591433	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Veillonellaceae/Phascolarctobacterium	AnatomicLocationDiseaseCDRectum	-0.020747197	941	604	0.022008004	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales	AnatomicLocationDiseaseUCRectum	0.022194761	941	847	0.022539945	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Lachnospira	AnatomicLocationDiseaseCDRectum	0.010602443	941	742	0.022799164	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales	AnatomicLocationDiseaseUCColon Transverse	0.024051829	941	847	0.027139202	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae/Faecalibacterium	AnatomicLocationDiseaseCDRectum	0.060313759	941	931	0.027564896	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae	AnatomicLocationDiseaseUCRectum	0.0432493	941	941	0.028151446	1
Anatomic Location	Bacteroidetes/Bacteroidia/Bacteroidales/Odoribacteraceae/Odoribacter	AnatomicLocationDiseaseUCileum	-0.015088168	941	754	0.029923479	1
Anatomic Location	Proteobacteria/Betaproteobacteria/Burkholderiales/Alcaligenaceae/Sutterella	AnatomicLocationDiseaseCDColon Transverse	0.038565133	941	868	0.031710501	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales	AnatomicLocationDiseaseCDColon Transverse	0.023882306	941	847	0.035712739	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Veillonellaceae/Phascolarctobacterium	AnatomicLocationDiseaseUCileum	-0.019477975	941	604	0.037139535	1
Anatomic Location	Bacteroidetes/Bacteroidia/Bacteroidales/Odoribacteraceae/Odoribacter	AnatomicLocationDiseaseUCColon Right	-0.014421238	941	754	0.040528456	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales	AnatomicLocationDiseaseCDColon Right	0.019093663	941	847	0.047191413	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales	AnatomicLocationDiseaseCDRectum	0.018402833	941	847	0.049601752	1
Anatomic Location	Bacteroidetes/Bacteroidia/Bacteroidales/Rikenellaceae	AnatomicLocationDiseaseCDColon Right	0.022020853	941	883	0.050425624	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Other/Other	AnatomicLocationDiseaseCDColon Right	-0.009675075	941	813	0.051460088	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae/Oscillospira	AnatomicLocationDiseaseUCColon Left	-0.011534545	941	908	0.053383452	1
Anatomic Location	Proteobacteria/Gammaproteobacteria/Pasteurellales/Pasteurellaceae/Haemophilus	AnatomicLocationDiseaseUCColon Right	-0.014510613	941	869	0.055492188	1
Anatomic Location	Proteobacteria/Gammaproteobacteria/Pasteurellales/Pasteurellaceae/Haemophilus	AnatomicLocationDiseaseCDRectum	-0.013712553	941	869	0.05847759	1
Anatomic Location	Firmicutes/Erysipelotrichi/Erysipelotrichales/Erysipelotrichaceae	AnatomicLocationDiseaseUCileum	-0.010830886	941	891	0.068005273	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Veillonellaceae/Phascolarctobacterium	AnatomicLocationDiseaseUCColon Right	-0.017244896	941	604	0.06850297	1
Anatomic Location	Bacteroidetes/Bacteroidia/Bacteroidales/Rikenellaceae	AnatomicLocationDiseaseCDileum	0.019783095	941	883	0.070176191	1
Anatomic Location	Proteobacteria/Gammaproteobacteria/Pasteurellales/Pasteurellaceae/Haemophilus	AnatomicLocationDiseaseUCileum	-0.012994615	941	869	0.082224075	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales	AnatomicLocationDiseaseUCColon Right	0.01635617	941	847	0.091435103	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae	AnatomicLocationDiseaseCDRectum	0.033615812	941	929	0.094789445	1
Anatomic Location	Proteobacteria/Gammaproteobacteria/Pasteurellales/Pasteurellaceae/Haemophilus	AnatomicLocationDiseaseUCRectum	-0.012515998	941	869	0.095980818	1
Anatomic Location	Bacteroidetes/Bacteroidia/Bacteroidales/Rikenellaceae	AnatomicLocationDiseaseUCileum	0.018446156	941	883	0.102965347	1
Anatomic Location	Bacteroidetes/Bacteroidia/Bacteroidales/Prevotellaceae/Prevotella	AnatomicLocationDiseaseCDRectum	0.004428127	941	804	0.109633734	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Veillonellaceae/Phascolarctobacterium	AnatomicLocationDiseaseCDColon Right	-0.014787805	941	604	0.111495534	1
Anatomic Location	Bacteroidetes/Bacteroidia/Bacteroidales/Rikenellaceae	AnatomicLocationDiseaseUCRectum	0.017824836	941	883	0.117171354	1
Anatomic Location	Firmicutes/Erysipelotrichi/Erysipelotrichales/Erysipelotrichaceae	AnatomicLocationDiseaseUCColon Left	-0.010051049	941	891	0.12059218	1
Anatomic Location	Bacteroidetes/Bacteroidia/Bacteroidales/Rikenellaceae	AnatomicLocationDiseaseCDColon Right	0.004296042	941	804	0.130468388	1
Anatomic Location	Bacteroidetes/Bacteroidia/Bacteroidales/Parabacteroides	AnatomicLocationDiseaseCDColon Transverse	-0.025302643	941	922	0.132752039	1
Anatomic Location	Bacteroidetes/Bacteroidia/Bacteroidales/Odoribacteraceae/Odoribacter	AnatomicLocationDiseaseUCColon Transverse	-0.011741924	941	754	0.132944501	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Other	AnatomicLocationDiseaseCDRectum	0.016701069	941	937	0.135147416	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales	AnatomicLocationDiseaseUCColon Left	0.015529645	941	847	0.141011857	1
Anatomic Location	Proteobacteria/Gammaproteobacteria/Pasteurellales/Pasteurellaceae/Haemophilus	AnatomicLocationDiseaseUCColon Left	-0.011988922	941	869	0.141659551	1
Anatomic Location	Proteobacteria/Gammaproteobacteria/Enterobacteriales/Enterobacteriaceae	AnatomicLocationDiseaseCDileum	-0.041011656	941	920	0.155135688	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Other	AnatomicLocationDiseaseCDileum	0.015748276	941	937	0.157349272	1
Anatomic Location	Firmicutes/Erysipelotrichi/Erysipelotrichales/Erysipelotrichaceae	AnatomicLocationDiseaseCDRectum	-0.008297668	941	891	0.164276693	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae/Faecalibacterium	AnatomicLocationDiseaseUCileum	0.038971752	941	931	0.167319631	1
Anatomic Location	Bacteroidetes/Bacteroidia/Bacteroidales/Rikenellaceae	AnatomicLocationDiseaseCDRectum	0.015103226	941	883	0.168216665	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Veillonellaceae/Phascolarctobacterium	AnatomicLocationDiseaseUCColon Transverse	-0.014409846	941	604	0.170294401	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Other	AnatomicLocationDiseaseUCColon Left	-0.017019477	941	937	0.176282527	1
Anatomic Location	Bacteroidetes/Bacteroidia/Bacteroidales/Odoribacteraceae/Odoribacter	AnatomicLocationDiseaseUCRectum	-0.009441858	941	754	0.176351002	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae/Faecalibacterium	AnatomicLocationDiseaseUCColon Right	0.008278084	941	931	0.180776889	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae/Oscillospira	AnatomicLocationDiseaseCDColon Right	-0.007279202	941	908	0.180849278	1
Anatomic Location	Proteobacteria/Gammaproteobacteria/Pasteurellales/Pasteurellaceae/Haemophilus	AnatomicLocationDiseaseCDileum	-0.009541481	941	869	0.186179433	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae	AnatomicLocationDiseaseUCColon Transverse	-0.0111131	941	869	0.186379756	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae	AnatomicLocationDiseaseUCColon Right	0.025877117	941	941	0.192008887	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae/Ruminococcus	AnatomicLocationDiseaseCDColon Right	-0.005952157	941	800	0.19768389	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae/Faecalibacterium	AnatomicLocationDiseaseUCColon Transverse	0.040827159	941	931	0.198534893	1
Anatomic Location	Bacteroidetes/Bacteroidia/Bacteroidales/Prevotellaceae/Prevotella	AnatomicLocationDiseaseCDColon Transverse	0.004303463	941	804	0.198822511	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Ruminococcus	AnatomicLocationDiseaseCDileum	-0.013510298	941	933	0.203087819	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Other/Other	AnatomicLocationDiseaseCDileum	-0.006114394	941	813	0.204552061	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Other	AnatomicLocationDiseaseCDColon Right	0.014455908	941	937	0.207610483	1
Anatomic Location	Firmicutes/Erysipelotrichi/Erysipelotrichales/Erysipelotrichaceae	AnatomicLocationDiseaseCDColon Transverse	-0.008718521	941	891	0.211214837	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae/Ruminococcus	AnatomicLocationDiseaseCDColon Transverse	-0.006824765	941	800	0.211354524	1
Anatomic Location	Bacteroidetes/Bacteroidia/Bacteroidales/Bacteroidaceae/Bacteroides	AnatomicLocationDiseaseCDColon Transverse	-0.0698768	941	941	0.211601334	1
Anatomic Location	Bacteroidetes/Bacteroidia/Bacteroidales/Odoribacteraceae/Odoribacter	AnatomicLocationDiseaseCDRectum	-0.008392662	941	754	0.212324517	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Veillonellaceae/Phascolarctobacterium	AnatomicLocationDiseaseCDColon Transverse	0.013366614	941	604	0.223374708	1
Anatomic Location	Firmicutes/Erysipelotrichi/Erysipelotrichales/Erysipelotrichaceae	AnatomicLocationDiseaseCDileum	-0.006936295	941	891	0.225915056	1
Anatomic Location	Firmicutes/Erysipelotrichi/Erysipelotrichales/Erysipelotrichaceae	AnatomicLocationDiseaseCDColon Right	-0.007064658	941	891	0.2311961	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales	AnatomicLocationDiseaseUCileum	0.011118947	941	847	0.249971709	1
Anatomic Location	Proteobacteria/Gammaproteobacteria/Enterobacteriales/Enterobacteriaceae	AnatomicLocationDiseaseUCColon Transverse	-0.038551355	941	920	0.251361425	1
Anatomic Location	Bacteroidetes/Bacteroidia/Bacteroidales/Parabacteroides	AnatomicLocationDiseaseUCRectum	-0.016378358	941	922	0.25518042	1
Anatomic Location	Bacteroidetes/Bacteroidia/Bacteroidales/Barnesiellaceae	AnatomicLocationDiseaseUCColon Right	0.011960494	941	809	0.265446497	1
Anatomic Location	Bacteroidetes/Bacteroidia/Bacteroidales/Barnesiellaceae	AnatomicLocationDiseaseCDileum	0.011230471	941	809	0.272556947	1
Anatomic Location	Bacteroidetes/Bacteroidia/Bacteroidales/Prevotellaceae/Prevotella	AnatomicLocationDiseaseCDileum	0.003005567	941	804	0.275622978	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Other/Other	AnatomicLocationDiseaseUCColon Left	-0.005858864	941	813	0.282005081	1
Anatomic Location	Actinobacteria/Coriobacteria/Coriobacteriales/Coriobacteriaceae/Collinsella	AnatomicLocationDiseaseCDColon Transverse	-0.008291618	941	755	0.282991274	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Veillonellaceae/Phascolarctobacterium	AnatomicLocationDiseaseCDileum	-0.009673821	941	604	0.283314759	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Blautia	AnatomicLocationDiseaseUCColon Left	-0.008944598	941	918	0.288125457	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae/Ruminococcus	AnatomicLocationDiseaseUCColon Right	0.004988193	941	800	0.289143619	1
Anatomic Location	Firmicutes/Erysipelotrichi/Erysipelotrichales/Erysipelotrichaceae	AnatomicLocationDiseaseCDRectum	-0.006048707	941	891	0.292663781	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae	AnatomicLocationDiseaseUCileum	0.020528536	941	941	0.294242108	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae	AnatomicLocationDiseaseCDColon Right	0.021541631	941	929	0.296720112	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae/Faecalibacterium	AnatomicLocationDiseaseCDColon Transverse	0.034585291	941	931	0.297110482	1
Anatomic Location	Proteobacteria/Gammaproteobacteria/Enterobacteriales/Enterobacteriaceae	AnatomicLocationDiseaseCDColon Right	-0.030546524	941	920	0.303880641	1
Anatomic Location	Bacteroidetes/Bacteroidia/Bacteroidales/Rikenellaceae	AnatomicLocationDiseaseCDColon Transverse	0.013564807	941	883	0.307500226	1
Anatomic Location	Bacteroidetes/Bacteroidia/Bacteroidales/Parabacteroides	AnatomicLocationDiseaseUCColon Transverse	-0.016413357	941	922	0.308115736	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Lachnospira	AnatomicLocationDiseaseCDileum	0.004692419	941	742	0.311334996	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Ruminococcus	AnatomicLocationDiseaseCDColon Right	-0.010898223	941	933	0.318838284	1
Anatomic Location	Bacteroidetes/Bacteroidia/Bacteroidales/Bacteroidaceae/Bacteroides	AnatomicLocationDiseaseUCRectum	-0.047659892	941	941	0.319178929	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae/Ruminococcus	AnatomicLocationDiseaseCDRectum	-0.004409743	941	800	0.327195422	1
Anatomic Location	Firmicutes/Erysipelotrichi/Erysipelotrichales/Erysipelotrichaceae	AnatomicLocationDiseaseUCColon Right	-0.005786057	941	891	0.335635814	1
Anatomic Location	Bacteroidetes/Bacteroidia/Bacteroidales/Bacteroidaceae/Bacteroides	AnatomicLocationDiseaseCDileum	-0.042951096	941	941	0.34981945	1
Anatomic Location	Verrucomicrobia/Verrucomicrobiales/Verrucomicrobiales/Akkermansia	AnatomicLocationDiseaseCDColon Right	-0.006148007	941	702	0.358034194	1
Anatomic Location	Bacteroidetes/Bacteroidia/Bacteroidales/Rikenellaceae	AnatomicLocationDiseaseUCColon Right	0.010070743	941	883	0.379359871	1
Anatomic Location	Proteobacteria/Gammaproteobacteria/Enterobacteriales/Enterobacteriaceae	AnatomicLocationDiseaseCDRectum	-0.025160561	941	920	0.384671305	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Ruminococcaceae	AnatomicLocationDiseaseUCColon Left	-0.019677276	941	929	0.384885025	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Lachnospira	AnatomicLocationDiseaseUCileum	0.004154594	941	742	0.386686514	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Ruminococcus	AnatomicLocationDiseaseUCColon Transverse	-0.010670437	941	933	0.3881891	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Roseburia	AnatomicLocationDiseaseUCColon Left	-0.008948323	941	904	0.408169786	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae/Blautia	AnatomicLocationDiseaseCDColon Right	-0.006325766	941	918	0.409798366	1
Anatomic Location	Proteobacteria/Gammaproteobacteria/Enterobacteriales/Enterobacteriaceae	AnatomicLocationDiseaseCDColon Transverse	-0.028700505	941	920	0.413645268	1
Anatomic Location	Bacteroidetes/Bacteroidia/Bacteroidales/Bacteroidaceae/Bacteroides	AnatomicLocationDiseaseCDColon Right	-0.03863716	941	941	0.414228966	1
Anatomic Location	Firmicutes/Clostridia/Clostridiales/Lachnospiraceae	AnatomicLocationDiseaseCDileum	0.015292978	941	941	0.418361	1
Anatomic Location	Bacteroidetes/Bacteroidia/Bacteroidales/Barnesiellaceae	AnatomicLocationDiseaseUCColon Left	-0.00926405	941	809	0.423138823	1
Anatomic Location	Firmicutes/Clostridia/Clostrid						

Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae] [Lachnospira]	Anatomic Location Disease UC Rectum	0.003569667	941	742	0.459514563	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae] [Roseburia]	Anatomic Location Disease CD Ileum	0.007070758	941	904	0.460124195	1
Anatomic Location	Verrucomicrobia [Verrucomicrobiae] [Verrucomicrobiales] [Verrucomicrobiaceae] [Akkermansia]	Anatomic Location Disease UC Colon Transverse	0.004634234	941	702	0.462802197	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Ruminococcaceae] [Oscillospira]	Anatomic Location Disease UC Rectum	-0.00395851	941	908	0.471486236	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae] [Other]	Anatomic Location Disease CD Colon Transverse	0.009729696	941	937	0.472819988	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Ruminococcaceae] [Ruminococcus]	Anatomic Location Disease UC Rectum	0.003351724	941	800	0.47291026	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Ruminococcaceae] [Oscillospira]	Anatomic Location Disease UC Colon Right	-0.003935866	941	908	0.477348584	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Ruminococcaceae] [Oscillospira]	Anatomic Location Disease CD Rectum	0.003710281	941	908	0.483714621	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Other] [Other]	Anatomic Location Disease UC Colon Transverse	-0.003872962	941	813	0.490283219	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Ruminococcaceae] [Faecalibacterium]	Anatomic Location Disease UC Rectum	0.019513325	941	931	0.49157705	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae] [Other]	Anatomic Location Disease UC Colon Transverse	0.008894226	941	937	0.492937262	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Ruminococcaceae]	Anatomic Location Disease UC Colon Transverse	0.015765617	941	929	0.499506966	1
Anatomic Location	Bacteroidetes [Bacteroidia] [Bacteroidales] [Bacteroidaceae] [Bacteroides]	Anatomic Location Disease UC Colon Right	-0.031877741	941	941	0.508368808	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae] [Blautia]	Anatomic Location Disease UC Rectum	-0.005098966	941	918	0.511023739	1
Anatomic Location	Bacteroidetes [Bacteroidia] [Bacteroidales] [Bacteroidaceae] [Bacteroides]	Anatomic Location Disease UC Colon Transverse	-0.035019299	941	941	0.512943154	1
Anatomic Location	Bacteroidetes [Bacteroidia] [Bacteroidales] [Odoribacteraceae] [Odoribacter]	Anatomic Location Disease CD Colon Right	-0.004489052	941	754	0.51561682	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae] [Roseburia]	Anatomic Location Disease UC Colon Transverse	0.007190481	941	904	0.519153869	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae] [Ruminococcus]	Anatomic Location Disease UC Rectum	-0.007097217	941	933	0.520714742	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae] [Roseburia]	Anatomic Location Disease CD Rectum	0.006109877	941	904	0.52478086	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae]	Anatomic Location Disease UC Colon Transverse	0.013777352	941	941	0.531499043	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae] [Lachnospira]	Anatomic Location Disease CD Colon Right	0.002943662	941	742	0.53747104	1
Anatomic Location	Actinobacteria [Coriobacteria] [Coriobacteriales] [Coriobacteriaceae] [Collinsella]	Anatomic Location Disease UC Colon Left	-0.004042183	941	755	0.57278907	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Ruminococcaceae] [Oscillospira]	Anatomic Location Disease UC Colon Transverse	0.003411104	941	908	0.579180072	1
Anatomic Location	Proteobacteria [Betaproteobacteria] [Burkholderiales] [Alcaligenaceae] [Sutterella]	Anatomic Location Disease UC Colon Transverse	-0.009511805	941	868	0.57946922	1
Anatomic Location	Proteobacteria [Betaproteobacteria] [Burkholderiales] [Alcaligenaceae] [Sutterella]	Anatomic Location Disease UC Ileum	0.00840345	941	868	0.58171399	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Other] [Other]	Anatomic Location Disease UC Ileum	0.00266889	941	813	0.592697087	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae] [Other]	Anatomic Location Disease UC Rectum	-0.006086546	941	937	0.599568852	1
Anatomic Location	Actinobacteria [Coriobacteria] [Coriobacteriales] [Coriobacteriaceae] [Collinsella]	Anatomic Location Disease UC Ileum	-0.003441849	941	755	0.600256203	1
Anatomic Location	Bacteroidetes [Bacteroidia] [Bacteroidales] [Prevotellaceae] [Prevotella]	Anatomic Location Disease UC Rectum	-0.00148096	941	804	0.605889669	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae]	Anatomic Location Disease CD Colon Right	0.009683252	941	941	0.618852838	1
Anatomic Location	Verrucomicrobia [Verrucomicrobiae] [Verrucomicrobiales] [Verrucomicrobiaceae] [Akkermansia]	Anatomic Location Disease CD Colon Transverse	-0.00390132	941	702	0.621588531	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Other] [Other]	Anatomic Location Disease CD Rectum	-0.002357389	941	813	0.62586131	1
Anatomic Location	Proteobacteria [Gammaproteobacteria] [Enterobacteriales] [Enterobacteriaceae]	Anatomic Location Disease UC Rectum	-0.014312764	941	920	0.636233003	1
Anatomic Location	Verrucomicrobia [Verrucomicrobiae] [Verrucomicrobiales] [Verrucomicrobiaceae] [Akkermansia]	Anatomic Location Disease CD Ileum	-0.003028582	941	702	0.640862533	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Ruminococcus]	Anatomic Location Disease UC Colon Right	-0.004948202	941	933	0.656724672	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae]	Anatomic Location Disease CD Rectum	0.00830538	941	941	0.661404546	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae] [Lachnospira]	Anatomic Location Disease UC Colon Transverse	0.002355106	941	742	0.662712808	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae] [Roseburia]	Anatomic Location Disease UC Rectum	0.004342928	941	904	0.663069306	1
Anatomic Location	Bacteroidetes [Bacteroidia] [Bacteroidales] [Rikenellaceae]	Anatomic Location Disease UC Colon Transverse	0.005453546	941	883	0.668113545	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Ruminococcaceae] [Oscillospira]	Anatomic Location Disease UC Ileum	-0.002263523	941	908	0.678807933	1
Anatomic Location	Bacteroidetes [Bacteroidia] [Bacteroidales] [Porphyromonadaceae] [Parabacteroides]	Anatomic Location Disease UC Ileum	-0.005864552	941	922	0.681919183	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Other] [Other]	Anatomic Location Disease UC Colon Right	-0.00201584	941	813	0.690057503	1
Anatomic Location	Actinobacteria [Coriobacteria] [Coriobacteriales] [Coriobacteriaceae] [Collinsella]	Anatomic Location Disease CD Rectum	-0.002492141	941	755	0.695397824	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Ruminococcaceae] [Ruminococcus]	Anatomic Location Disease UC Colon Transverse	-0.002044844	941	800	0.695504046	1
Anatomic Location	Bacteroidetes [Bacteroidia] [Bacteroidales] [Rikenellaceae]	Anatomic Location Disease UC Colon Left	0.004769769	941	883	0.699023149	1
Anatomic Location	Proteobacteria [Betaproteobacteria] [Burkholderiales] [Alcaligenaceae] [Sutterella]	Anatomic Location Disease UC Colon Left	0.006421299	941	868	0.699682381	1
Anatomic Location	Bacteroidetes [Bacteroidia] [Bacteroidales] [Prevotellaceae] [Prevotella]	Anatomic Location Disease UC Colon Left	-0.001200918	941	804	0.699823658	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae] [Roseburia]	Anatomic Location Disease UC Colon Right	0.003871087	941	904	0.699915496	1
Anatomic Location	Proteobacteria [Gammaproteobacteria] [Enterobacteriales] [Enterobacteriaceae]	Anatomic Location Disease UC Colon Left	-0.01230997	941	920	0.705601456	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae] [Roseburia]	Anatomic Location Disease CD Colon Transverse	-0.004326032	941	904	0.710451383	1
Anatomic Location	Bacteroidetes [Bacteroidia] [Bacteroidales] [Porphyromonadaceae] [Parabacteroides]	Anatomic Location Disease UC Colon Left	-0.005780832	941	922	0.71122994	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Ruminococcaceae]	Anatomic Location Disease CD Colon Transverse	0.008646186	941	929	0.722971125	1
Anatomic Location	Proteobacteria [Gammaproteobacteria] [Enterobacteriales] [Enterobacteriaceae]	Anatomic Location Disease UC Ileum	0.010215988	941	920	0.732252973	1
Anatomic Location	Verrucomicrobia [Verrucomicrobiae] [Verrucomicrobiales] [Verrucomicrobiaceae] [Akkermansia]	Anatomic Location Disease CD Rectum	0.002148375	941	702	0.741600783	1
Anatomic Location	Verrucomicrobia [Verrucomicrobiae] [Verrucomicrobiales] [Verrucomicrobiaceae] [Akkermansia]	Anatomic Location Disease UC Colon Left	0.001969476	941	702	0.744192916	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae] [Other]	Anatomic Location Disease UC Colon Right	-0.003786057	941	937	0.745827336	1
Anatomic Location	Proteobacteria [Betaproteobacteria] [Burkholderiales] [Alcaligenaceae] [Sutterella]	Anatomic Location Disease CD Colon Right	0.0046163	941	868	0.760947096	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Other] [Other]	Anatomic Location Disease UC Rectum	-0.001525051	941	813	0.76114695	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae] [Blautia]	Anatomic Location Disease UC Colon Transverse	0.002607969	941	918	0.763821816	1
Anatomic Location	Bacteroidetes [Bacteroidia] [Bacteroidales] [Prevotellaceae] [Prevotella]	Anatomic Location Disease UC Ileum	-0.000849059	941	804	0.766099317	1
Anatomic Location	Bacteroidetes [Bacteroidia] [Bacteroidales] [Barnesiellaceae]	Anatomic Location Disease UC Ileum	-0.003100207	941	809	0.769856986	1
Anatomic Location	Actinobacteria [Coriobacteria] [Coriobacteriales] [Coriobacteriaceae] [Collinsella]	Anatomic Location Disease CD Colon Right	-0.001881648	941	755	0.773333241	1
Anatomic Location	Bacteroidetes [Bacteroidia] [Bacteroidales] [Barnesiellaceae]	Anatomic Location Disease UC Colon Transverse	0.003295174	941	809	0.782270271	1
Anatomic Location	Bacteroidetes [Bacteroidia] [Bacteroidales] [Porphyromonadaceae] [Parabacteroides]	Anatomic Location Disease UC Colon Right	-0.003977771	941	922	0.783804694	1
Anatomic Location	Bacteroidetes [Bacteroidia] [Bacteroidales] [Porphyromonadaceae] [Parabacteroides]	Anatomic Location Disease CD Rectum	-0.003760105	941	922	0.786270612	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Ruminococcaceae] [Ruminococcus]	Anatomic Location Disease UC Colon Left	0.001343531	941	800	0.790887616	1
Anatomic Location	Actinobacteria [Coriobacteria] [Coriobacteriales] [Coriobacteriaceae] [Collinsella]	Anatomic Location Disease CD Ileum	-0.001655388	941	755	0.794074998	1
Anatomic Location	Bacteroidetes [Bacteroidia] [Bacteroidales] [Barnesiellaceae]	Anatomic Location Disease CD Colon Transverse	0.00321334	941	809	0.796445597	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae] [Lachnospira]	Anatomic Location Disease CD Colon Transverse	-0.001402295	941	742	0.803680127	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Other] [Other]	Anatomic Location Disease CD Colon Transverse	-0.001397149	941	813	0.811706928	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae] [Lachnospira]	Anatomic Location Disease UC Colon Right	-0.001136164	941	742	0.815232601	1
Anatomic Location	Bacteroidetes [Bacteroidia] [Bacteroidales] [Bacteroidaceae] [Bacteroides]	Anatomic Location Disease UC Colon Left	-0.011916445	941	941	0.818421477	1
Anatomic Location	Verrucomicrobia [Verrucomicrobiae] [Verrucomicrobiales] [Verrucomicrobiaceae] [Akkermansia]	Anatomic Location Disease UC Colon Right	0.001212421	941	702	0.821881238	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae] [Blautia]	Anatomic Location Disease CD Colon Transverse	0.002007064	941	918	0.824836825	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Ruminococcus]	Anatomic Location Disease UC Ileum	-0.002415035	941	933	0.826032004	1
Anatomic Location	Bacteroidetes [Bacteroidia] [Bacteroidales] [Prevotellaceae] [Prevotella]	Anatomic Location Disease UC Colon Transverse	0.000669185	941	804	0.834936774	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Ruminococcaceae] [Ruminococcus]	Anatomic Location Disease UC Ileum	-0.000993617	941	800	0.840636636	1
Anatomic Location	Proteobacteria [Betaproteobacteria] [Burkholderiales] [Alcaligenaceae] [Sutterella]	Anatomic Location Disease CD Ileum	0.002853744	941	868	0.846373586	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae] [Blautia]	Anatomic Location Disease UC Colon Right	-0.001463096	941	918	0.851508348	1
Anatomic Location	Bacteroidetes [Bacteroidia] [Bacteroidales] [Porphyromonadaceae] [Parabacteroides]	Anatomic Location Disease CD Colon Right	0.002653591	941	922	0.852103727	1
Anatomic Location	Bacteroidetes [Bacteroidia] [Bacteroidales] [Bacteroidaceae] [Bacteroides]	Anatomic Location Disease CD Rectum	0.008591383	941	941	0.852144664	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Ruminococcaceae]	Anatomic Location Disease UC Colon Right	0.003893921	941	929	0.853045592	1
Anatomic Location	Actinobacteria [Coriobacteria] [Coriobacteriales] [Coriobacteriaceae] [Collinsella]	Anatomic Location Disease UC Rectum	-0.001181971	941	755	0.857966401	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae] [Lachnospira]	Anatomic Location Disease UC Colon Left	-0.000912827	941	742	0.861614816	1
Anatomic Location	Actinobacteria [Coriobacteria] [Coriobacteriales] [Coriobacteriaceae] [Collinsella]	Anatomic Location Disease UC Colon Right	-0.001141409	941	755	0.863810965	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae] [Blautia]	Anatomic Location Disease UC Ileum	-0.001274009	941	918	0.868819071	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Ruminococcaceae]	Anatomic Location Disease UC Rectum	-0.002957984	941	929	0.887257059	1
Anatomic Location	Bacteroidetes [Bacteroidia] [Bacteroidales] [Prevotellaceae] [Prevotella]	Anatomic Location Disease UC Colon Right	-0.00040181	941	804	0.889493845	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae] [Roseburia]	Anatomic Location Disease CD Colon Right	0.001300581	941	904	0.895057047	1
Anatomic Location	Bacteroidetes [Bacteroidia] [Bacteroidales] [Odoribacteraceae] [Odoribacter]	Anatomic Location Disease CD Ileum	-0.000873057	941	754	0.896357936	1
Anatomic Location	Bacteroidetes [Bacteroidia] [Bacteroidales] [Barnesiellaceae]	Anatomic Location Disease CD Rectum	0.001250524	941	809	0.903078786	1
Anatomic Location	Bacteroidetes [Bacteroidia] [Bacteroidales] [Bacteroidaceae] [Bacteroides]	Anatomic Location Disease UC Ileum	0.005753465	941	941	0.903720767	1
Anatomic Location	Bacteroidetes [Bacteroidia] [Bacteroidales] [Barnesiellaceae]	Anatomic Location Disease CD Colon Right	-0.001220388	941	809	0.90782853	1
Anatomic Location	Bacteroidetes [Bacteroidia] [Bacteroidales] [Porphyromonadaceae] [Parabacteroides]	Anatomic Location Disease CD Ileum	0.001551592	941	922	0.910587618	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae] [Roseburia]	Anatomic Location Disease UC Ileum	0.001012353	941	904	0.918649575	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae] [Ruminococcus]	Anatomic Location Disease CD Rectum	-0.000968608	941	933	0.927521475	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Ruminococcaceae] [Oscillospira]	Anatomic Location Disease CD Ileum	0.000461005	941	908	0.930398645	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae] [Ruminococcus]	Anatomic Location Disease CD Colon Transverse	-0.001061425	941	933	0.934508278	1
Anatomic Location	Actinobacteria [Coriobacteria] [Coriobacteriales] [Coriobacteriaceae] [Collinsella]	Anatomic Location Disease UC Colon Transverse	0.000581352	941	755	0.93729535	1
Anatomic Location	Proteobacteria [Gammaproteobacteria] [Pasteurellales] [Pasteurellaceae] [Haemophilus]	Anatomic Location Disease CD Colon Transverse	-0.000599277	941	869	0.94559992	1
Anatomic Location	Proteobacteria [Betaproteobacteria] [Burkholderiales] [Alcaligenaceae] [Sutterella]	Anatomic Location Disease CD Rectum	-0.000970435	941	868	0.947657461	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae] [Blautia]	Anatomic Location Disease CD Ileum	0.000456983	941	918	0.951079837	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae] [Blautia]	Anatomic Location Disease CD Rectum	-0.000301097	941	918	0.967871886	1
Anatomic Location	Bacteroidetes [Bacteroidia] [Bacteroidales] [Odoribacteraceae] [Odoribacter]	Anatomic Location Disease CD Colon Transverse	-0.000270717	941	754	0.973552129	1
Anatomic Location	Verrucomicrobia [Verrucomicrobiae] [Verrucomicrobiales] [Verrucomicrobiaceae] [Akkermansia]	Anatomic Location Disease UC Ileum	-0.000166345	941	702	0.974831265	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Ruminococcaceae]	Anatomic Location Disease UC Ileum	-0.000635611	941	929	0.975559568	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae]	Anatomic Location Disease CD Colon Transverse	-0.000614388	941	941	0.978690729	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Ruminococcaceae] [Ruminococcus]	Anatomic Location Disease CD Ileum	5.86E-05	941	800	0.98957983	1
Anatomic Location	Proteobacteria [Betaproteobacteria] [Burkholderiales] [Alcaligenaceae] [Sutterella]	Anatomic Location Disease UC Rectum	-0.000169227	941	868	0.991197585	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Lachnospiraceae] [Other]	Anatomic Location Disease UC Ileum	7.80E-05	941	937	0.994603381	1
Anatomic Location	Firmicutes [Clostridia] [Clostridiales] [Ruminococcaceae] [Oscillospira]	Anatomic Location Disease CD Colon Transverse	8.41E-06	941	908	0.998955177	1
Anatomic Location	Bacteroidetes [Bacteroidia] [Bacteroidales] [Barnesiellaceae]	Anatomic Location Disease UC Rectum	7.13E-06	941	809	0.999465795	1
Anatomic Location	Proteobacteria [Betaproteobacteria] [Burkholderiales] [Alcaligenaceae] [Sutterella]	Anatomic Location Disease UC Colon Right	-8.26E-06	941	868	0.999573507	1

Suppl. Table 6. Pairwise co-occurrence relationship statistics for Cohort 1. 65 CD and 61 UC taxa were compared for 941 IBD samples. Spearman's correlation coefficient was used for correlation and p value calculated using PERMANOVA.

Rank	Disease	Taxa 1	Taxa 2	rho value	p value	Abundance 1	Abundance 2
Phylum	UC	Bacteroidetes	Firmicutes	0.558224249	3.17E-38	6346738	5663333
Phylum	CD	Actinobacteria	Firmicutes	0.556484819	2.87E-41	124112	5832295
Phylum	UC	Actinobacteria	Firmicutes	0.550028132	6.07E-37	123720	5663333
Phylum	UC	Fusobacteria	Proteobacteria	0.534819747	1.17E-34	99745	1268606
Phylum	CD	Bacteroidetes	Firmicutes	0.467811517	4.55E-28	12733241	5832295
Phylum	UC	Actinobacteria	Bacteroidetes	0.396306171	2.25E-18	123720	6346738
Phylum	UC	Firmicutes	Proteobacteria	0.368291056	6.66E-16	5663333	1268606
Phylum	CD	Fusobacteria	Proteobacteria	0.367135484	4.10E-17	163220	2462894
Phylum	UC	Actinobacteria	Proteobacteria	0.360766007	2.80E-15	123720	1268606
Phylum	CD	Actinobacteria	Proteobacteria	0.351668949	9.70E-16	124112	2462894
Phylum	CD	Actinobacteria	Bacteroidetes	0.333900269	2.98E-14	124112	12733241
Phylum	UC	Firmicutes	Fusobacteria	0.329639697	7.24E-13	5663333	99745
Phylum	CD	Firmicutes	Proteobacteria	0.323579072	1.98E-13	5832295	2462894
Phylum	UC	Tenericutes	Verrucomicrobia	0.294365037	1.91E-10	46270	44703
Phylum	CD	Fusobacteria	Verrucomicrobia	0.291708791	4.36E-11	163220	161515
Phylum	CD	Cyanobacteria	Tenericutes	0.289310054	6.38E-11	5303	22485
Phylum	UC	Cyanobacteria	Verrucomicrobia	0.285282438	7.12E-10	7509	44703
Phylum	CD	Firmicutes	Tenericutes	0.284838308	1.28E-10	5832295	22485
Phylum	CD	Bacteroidetes	Proteobacteria	0.284254966	1.40E-10	12733241	2462894
Phylum	CD	Firmicutes	Verrucomicrobia	0.28015974	2.63E-10	5832295	161515
Phylum	UC	Actinobacteria	Fusobacteria	0.279402866	1.63E-09	123720	99745
Phylum	CD	Actinobacteria	Verrucomicrobia	0.27239886	8.41E-10	124112	161515
Phylum	UC	Cyanobacteria	Tenericutes	0.262802164	1.52E-08	7509	46270
Phylum	UC	Firmicutes	Tenericutes	0.261733131	1.75E-08	5663333	46270
Phylum	CD	Spirochaetes	Verrucomicrobia	0.256185506	8.48E-09	21608	161515
Genus	UC	Propionibacterium	Staphylococcus	0.741083738	1.57E-79	6791	3635
Genus	UC	Propionibacterium	Corynebacterium	0.718155116	1.50E-72	6791	4730
Genus	CD	Streptococcus	Actinomyces	0.705208912	4.72E-75	69222	3690
Genus	UC	Staphylococcus	Corynebacterium	0.690898708	4.14E-65	3635	4730
Genus	CD	Staphylococcus	Corynebacterium	0.680243543	5.69E-68	8542	5075
Genus	UC	Oscillospira	Ruminococcus	0.679287527	3.47E-62	88409	87937
Genus	UC	Streptococcus	Actinomyces	0.668365676	1.48E-59	56319	3661
Genus	UC	Haemophilus	Actinobacillus	0.667888042	1.92E-59	132218	18444
Genus	CD	Propionibacterium	Staphylococcus	0.656915174	5.79E-62	7512	8542
Genus	CD	Propionibacterium	Corynebacterium	0.652603831	6.53E-61	7512	5075
Genus	CD	[Ruminococcus]	Dorea	0.641035163	3.59E-58	316855	41932
Genus	CD	Coprococcus	Ruminococcus	0.633764596	1.65E-56	74912	55319
Genus	CD	Streptococcus	Rothia	0.625299375	1.26E-54	69222	2168
Genus	CD	Haemophilus	Actinobacillus	0.620969364	1.09E-53	215621	37020
Genus	UC	Blautia	Oscillospira	0.620931821	2.52E-49	219254	88409
Genus	CD	Blautia	Dorea	0.616407079	1.03E-52	237652	41932
Genus	CD	Haemophilus	Streptococcus	0.615624041	1.51E-52	215621	69222
Genus	UC	Haemophilus	Streptococcus	0.604660822	3.31E-46	132218	56319
Genus	UC	Actinobacillus	Aggregatibacter	0.602219166	9.39E-46	18444	3121
Genus	UC	Haemophilus	Veillonella	0.592417659	5.63E-44	132218	19949
Genus	CD	Roseburia	Coprococcus	0.589783446	2.48E-47	131441	74912
Genus	UC	Haemophilus	Aggregatibacter	0.588617621	2.65E-43	132218	3121
Genus	CD	Oscillospira	Ruminococcus	0.586014237	1.30E-46	126222	55319
Genus	UC	Streptococcus	Veillonella	0.581385477	4.79E-42	56319	19949
Genus	UC	Veillonella	Leptotrichia	0.580217099	7.60E-42	19949	1174
Genus	CD	Rothia	Actinomyces	0.578368947	3.56E-45	2168	3690
Genus	UC	Actinobacillus	Neisseria	0.576760539	2.94E-41	18444	12747
Genus	UC	Streptococcus	Rothia	0.574811944	6.25E-41	56319	6408
Genus	CD	Actinobacillus	Aggregatibacter	0.57427433	2.02E-44	37020	2166
Genus	UC	Rothia	Actinomyces	0.573105969	1.21E-40	6408	3661
Genus	UC	Veillonella	Actinomyces	0.571625806	2.13E-40	19949	3661
Genus	UC	[Ruminococcus]	Dorea	0.569086753	5.59E-40	134177	20587
Genus	CD	Corynebacterium	Acinetobacter	0.566781265	4.53E-43	5075	2045
Genus	UC	Haemophilus	Neisseria	0.565472019	2.18E-39	132218	12747
Genus	UC	Oscillospira	Coprococcus	0.562987807	5.50E-39	88409	106602
Genus	UC	Faecalibacterium	Coprococcus	0.560752003	1.26E-38	1076582	106602
Genus	CD	Oscillospira	Coprococcus	0.560746725	5.25E-42	126222	74912
Genus	UC	Lactobacillus	Propionibacterium	0.558933894	2.45E-38	51919	6791
Genus	UC	Fusobacterium	Veillonella	0.558801236	2.57E-38	98401	19949
Genus	CD	Ruminococcus	Anaerotruncus	0.556846962	2.49E-41	55319	1299
Genus	CD	Roseburia	Lachnospira	0.554586884	6.07E-41	131441	32709
Genus	UC	Lactobacillus	Staphylococcus	0.552699558	2.34E-37	51919	3635
Genus	UC	Streptococcus	Neisseria	0.551657856	3.40E-37	56319	12747
Genus	UC	Anaerococcus	Finegoldia	0.550990524	4.31E-37	6221	3816
Genus	UC	Propionibacterium	Acinetobacter	0.54763824	1.41E-36	6791	2655
Genus	CD	Blautia	Roseburia	0.546450294	1.43E-39	237652	131441
Genus	CD	Haemophilus	Actinomyces	0.545803125	1.83E-39	215621	3690
Genus	CD	Streptococcus	Propionibacterium	0.541763972	8.47E-39	69222	7512
Genus	CD	Odoribacter	Bilophia	0.541159411	1.06E-38	60883	24699
Genus	UC	Erwinia	Klebsiella	0.540716384	1.57E-35	2165	2793
Genus	CD	Blautia	Coprococcus	0.537910815	3.58E-38	237652	74912
Genus	CD	Erwinia	Klebsiella	0.537809369	3.72E-38	10916	5943
Genus	CD	Lactobacillus	Propionibacterium	0.535657062	8.26E-38	37702	7512
Genus	UC	Oscillospira	Dorea	0.533902024	1.60E-34	88409	20587
Genus	CD	Blautia	Lachnospira	0.533736973	1.67E-37	237652	32709
Genus	CD	Haemophilus	Aggregatibacter	0.532541653	2.59E-37	215621	2166
Genus	UC	Haemophilus	Fusobacterium	0.531652465	3.40E-34	132218	98401
Genus	UC	Lactobacillus	Enterococcus	0.531576536	3.48E-34	51919	6935
Genus	UC	Fusobacterium	Neisseria	0.527500305	1.35E-33	98401	12747
Genus	UC	Neisseria	Leptotrichia	0.526946852	1.62E-33	12747	1174
Genus	UC	Staphylococcus	Acinetobacter	0.525998063	2.21E-33	3635	2655
Genus	CD	Lactobacillus	Corynebacterium	0.525210282	3.66E-36	37702	5075
Genus	CD	Lactobacillus	Acinetobacter	0.524593008	4.56E-36	37702	2045
Genus	CD	Streptococcus	Corynebacterium	0.521979303	1.15E-35	69222	5075
Genus	CD	Faecalibacterium	Coprococcus	0.521691549	1.27E-35	733078	74912
Genus	UC	Corynebacterium	Anaerococcus	0.518349533	2.62E-32	4730	6221
Genus	UC	Actinomyces	Leptotrichia	0.516848691	4.22E-32	3661	1174
Genus	CD	Blautia	Oscillospira	0.516741973	7.18E-35	237652	126222
Genus	CD	Roseburia	Oscillospira	0.516346995	8.23E-35	131441	126222
Genus	CD	Streptococcus	Staphylococcus	0.515550087	1.08E-34	69222	8542
Genus	UC	Blautia	Dorea	0.515294389	6.91E-32	219254	20587
Genus	UC	Neisseria	Porphyromonas	0.515056184	7.46E-32	12747	2922
Genus	CD	Oscillospira	Odoribacter	0.514529928	1.54E-34	126222	60883
Genus	CD	Oscillospira	Coprobacillus	0.513089476	2.53E-34	126222	1745
Genus	CD	Anaerococcus	Peptoniphilus	0.512738678	2.85E-34	1442	1618
Genus	UC	Faecalibacterium	Oscillospira	0.511998917	1.95E-31	1076582	88409

Genus	UC	Streptococcus	Leptotrichia	0.511994284	1.95E-31	56319	1174
Genus	CD	Propionibacterium	Acinetobacter	0.511959367	3.72E-34	7512	2045
Genus	CD	Staphylococcus	Acinetobacter	0.510011468	7.21E-34	8542	2045
Genus	UC	Veillonella	Neisseria	0.507935085	6.89E-31	19949	12747
Genus	UC	Blautia	Coprococcus	0.507603101	7.63E-31	219254	106602
Genus	UC	Blautia	Ruminococcus	0.507522349	7.83E-31	219254	87937
Genus	UC	Lactobacillus	Corynebacterium	0.506706821	1.01E-30	51919	4730
Genus	UC	Streptococcus	Corynebacterium	0.504711444	1.85E-30	56319	4730
Genus	CD	Lactobacillus	Enterococcus	0.503598976	6.20E-33	37702	6760
Genus	UC	Haemophilus	Actinomyces	0.501935926	4.31E-30	132218	3661
Genus	UC	Streptococcus	Staphylococcus	0.501642802	4.71E-30	56319	3635
Genus	UC	Propionibacterium	Enterococcus	0.499830419	8.13E-30	6791	6935
Genus	UC	Corynebacterium	Acinetobacter	0.499131769	1.00E-29	4730	2655
Genus	UC	Tepidimonas	Acinetobacter	0.495896703	2.63E-29	9072	2655
Genus	UC	Finegoldia	Peptoniphilus	0.493693356	5.05E-29	3816	2240
Genus	UC	Blautia	Lachnospira	0.492244172	7.72E-29	219254	37737
Genus	UC	Ruminococcus	Anaerostipes	0.491379421	9.95E-29	87937	3660
Genus	UC	Neisseria	Actinomyces	0.490955757	1.13E-28	12747	3661
Genus	UC	Coprococcus	Ruminococcus	0.488823293	2.09E-28	106602	87937
Genus	UC	Fusobacterium	Actinobacillus	0.487916648	2.72E-28	98401	18444
Genus	UC	Anaerococcus	Peptoniphilus	0.487755395	2.85E-28	6221	2240
Genus	UC	Oscillospira	Odoribacter	0.485413932	5.59E-28	88409	40975
Genus	CD	Oscillospira	Anaerotruncus	0.485119467	2.38E-30	126222	1299
Genus	CD	Ruminococcus	Adlercreutzia	0.484786479	2.64E-30	55319	1491
Genus	UC	Propionibacterium	Pseudomonas	0.484292437	7.70E-28	6791	2086
Genus	UC	Haemophilus	Leptotrichia	0.484071153	8.20E-28	132218	1174
Genus	UC	Corynebacterium	Actinomyces	0.484045014	8.27E-28	4730	3661
Genus	CD	Lactobacillus	Staphylococcus	0.483609391	3.81E-30	37702	8542
Genus	UC	Enterococcus	Staphylococcus	0.483403722	9.92E-28	6935	3635
Genus	UC	Streptococcus	Porphyromonas	0.482523608	1.27E-27	56319	2922
Genus	UC	Streptococcus	Actinobacillus	0.482456204	1.30E-27	56319	18444
Genus	CD	Roseburia	Dialister	0.481289267	7.81E-30	131441	12197
Genus	CD	Ruminococcus	Coprobacillus	0.48115078	8.15E-30	55319	1745
Genus	UC	Parabacteroides	Odoribacter	0.481078881	1.92E-27	198948	40975
Genus	CD	Ruminococcus	Anaerostipes	0.480232633	1.08E-29	55319	1421
Genus	CD	Collinsella	Bifidobacterium	0.477667039	2.37E-29	60637	28165
Genus	UC	Tepidimonas	Pseudomonas	0.476549812	6.83E-27	9072	2086
Genus	CD	Streptococcus	Neisseria	0.476262915	3.63E-29	69222	7180
Genus	UC	Streptococcus	Lactobacillus	0.473918913	1.42E-26	56319	51919
Genus	CD	Actinobacillus	Neisseria	0.473337424	8.78E-29	37020	7180
Genus	UC	Acinetobacter	Pseudomonas	0.473038022	1.80E-26	2655	2086
Genus	UC	Blautia	[Ruminococcus]	0.472576763	2.05E-26	219254	134177
Genus	CD	Coprococcus	Anaerotruncus	0.472232464	1.22E-28	74912	1299
Genus	CD	Coprococcus	Lachnospira	0.472118991	1.26E-28	74912	32709
Genus	CD	Streptococcus	Lactobacillus	0.467519313	4.96E-28	69222	37702
Genus	UC	Actinobacillus	Leptotrichia	0.466754411	9.98E-26	18444	1174
Genus	UC	Streptococcus	Turicibacter	0.466283972	1.13E-25	56319	7532
Genus	UC	Parabacteroides	Bilophila	0.464844739	1.67E-25	198948	12118
Genus	CD	Lactobacillus	Allobaculum	0.464734012	1.12E-27	37702	1330
Genus	UC	Fusobacterium	Streptococcus	0.463150301	2.62E-25	98401	56319
Genus	UC	Odoribacter	Bilophila	0.462512316	3.11E-25	40975	12118
Genus	UC	Clostridium	Turicibacter	0.462058655	3.50E-25	24622	7532
Genus	CD	Blautia	[Ruminococcus]	0.460289587	4.07E-27	237652	316855
Genus	CD	Neisseria	Rothia	0.460052889	4.36E-27	7180	2168
Genus	CD	Faecalibacterium	Ruminococcus	0.45969483	4.83E-27	733078	55319
Genus	CD	Faecalibacterium	Oscillospira	0.458672204	6.47E-27	733078	126222
Genus	CD	Corynebacterium	Rothia	0.458663905	6.49E-27	5075	2168
Genus	UC	Actinobacillus	Veillonella	0.458371546	9.27E-25	18444	19949
Genus	CD	Akkermansia	Lactococcus	0.458138009	7.54E-27	161442	5741
Genus	UC	Veillonella	Rothia	0.457124953	1.28E-24	19949	6408
Genus	UC	Sutterella	Parabacteroides	0.456577	1.48E-24	263260	198948
Genus	CD	Streptococcus	Actinobacillus	0.456135852	1.33E-26	69222	37020
Genus	UC	Rothia	Leptotrichia	0.455922967	1.76E-24	6408	1174
Genus	CD	[Ruminococcus]	Epulopiscium	0.454998196	1.84E-26	316855	22210
Genus	UC	Corynebacterium	Porphyromonas	0.454970777	2.25E-24	4730	2922
Genus	CD	Bilophila	Butyrivibrio	0.454748697	1.97E-26	24699	17198
Genus	UC	Roseburia	Lachnospira	0.454225991	2.73E-24	144133	37737
Genus	UC	Odoribacter	Butyrivibrio	0.454220492	2.73E-24	40975	7200
Genus	CD	Corynebacterium	Peptoniphilus	0.451818251	4.50E-26	5075	1618
Genus	CD	Haemophilus	Veillonella	0.451452725	4.99E-26	215621	33618
Genus	UC	[Ruminococcus]	Epulopiscium	0.449866855	8.35E-24	134177	71308
Genus	UC	[Ruminococcus]	Streptococcus	0.448306408	1.24E-23	134177	56319
Genus	UC	Fusobacterium	Actinomyces	0.448221207	1.27E-23	98401	3661
Genus	CD	Staphylococcus	Actinomyces	0.44764498	1.44E-25	8542	3690
Genus	CD	Streptococcus	Turicibacter	0.447500972	1.49E-25	69222	16042
Genus	CD	Neisseria	Actinomyces	0.447050954	1.69E-25	7180	3690
Genus	UC	Fusobacterium	Porphyromonas	0.446837767	1.80E-23	98401	2922
Genus	UC	Neisseria	Rothia	0.44571306	2.39E-23	12747	6408
Genus	CD	Coprococcus	Adlercreutzia	0.444237271	3.66E-25	74912	1491
Genus	CD	Corynebacterium	Anaerococcus	0.444093331	3.80E-25	5075	1442
Genus	CD	Neisseria	Corynebacterium	0.443970031	3.93E-25	7180	5075
Genus	UC	Akkermansia	Propionibacterium	0.443321033	4.35E-23	44665	6791
Genus	UC	Roseburia	Coprococcus	0.441587926	6.69E-23	144133	106602
Genus	CD	Faecalibacterium	Roseburia	0.441037125	8.71E-25	733078	131441
Genus	CD	Faecalibacterium	Lachnospira	0.440400886	1.03E-24	733078	32709
Genus	UC	Enterococcus	Corynebacterium	0.439756324	1.05E-22	6935	4730
Genus	UC	Actinobacillus	Porphyromonas	0.439168782	1.22E-22	18444	2922
Genus	UC	Staphylococcus	Actinomyces	0.439055184	1.25E-22	3635	3661
Genus	UC	Coprococcus	Dorea	0.438304704	1.50E-22	106602	20587
Genus	CD	Parabacteroides	Bilophila	0.437122934	2.49E-24	491496	24699
Genus	CD	Oscillospira	Dorea	0.436035089	3.33E-24	126222	41932
Genus	UC	Faecalibacterium	Blautia	0.435725992	2.82E-22	1076582	219254
Genus	CD	Clostridium	Turicibacter	0.435710488	3.62E-24	59244	16042
Genus	CD	Propionibacterium	Actinomyces	0.435474661	3.86E-24	7512	3690
Genus	CD	Coprococcus	Coprobacillus	0.435129206	4.23E-24	74912	1745
Genus	CD	Corynebacterium	Actinomyces	0.434273955	5.30E-24	5075	3690
Genus	CD	Blautia	Dialister	0.434119733	5.52E-24	237652	12197
Genus	CD	Neisseria	Propionibacterium	0.432847223	7.72E-24	7180	7512
Genus	UC	Lactobacillus	Turicibacter	0.432631069	5.97E-22	51919	7532
Genus	UC	Propionibacterium	Anaerococcus	0.432530462	6.11E-22	6791	6221
Genus	UC	Haemophilus	Porphyromonas	0.432177615	6.66E-22	132218	2922
Genus	UC	Roseburia	Oscillospira	0.43135553	8.11E-22	144133	88409
Genus	CD	Streptococcus	Leptotrichia	0.431041814	1.24E-23	69222	2045
Genus	UC	Streptococcus	Propionibacterium	0.430806262	9.25E-22	56319	6791
Genus	CD	Blautia	Coprobacillus	0.430341412	1.49E-23	237652	1745
Genus	CD	Faecalibacterium	Collinsella	0.42968881	1.76E-23	733078	60637

Genus	UC	Lactobacillus	Acinetobacter	0.429365496	1.30E-21	51919	2655
Genus	UC	Bifidobacteria	Butyrivibrio	0.429180324	1.36E-21	12118	7200
Genus	UC	Actinobacillus	Actinomyces	0.428895287	1.46E-21	18444	3661
Genus	CD	Roseburia	Ruminococcus	0.427654051	2.99E-23	131441	55319
Genus	CD	Neisseria	Staphylococcus	0.427141752	3.41E-23	7180	8542
Genus	UC	Phascolarctobacterium	Paraprevotella	0.426802222	2.39E-21	50557	14943
Genus	CD	Haemophilus	Rothia	0.426367997	4.16E-23	215621	2168
Genus	CD	Enterococcus	Corynebacterium	0.426344039	4.18E-23	6760	5075
Genus	UC	Corynebacterium	Peptoniphilus	0.426140714	2.80E-21	4730	2240
Genus	CD	Propionibacterium	Enterococcus	0.426036389	4.53E-23	7512	6760
Genus	UC	Blautia	Bifidobacterium	0.424935809	3.72E-21	219254	42302
Genus	CD	Adlercreutzia	Anaerotruncus	0.424718201	6.35E-23	1491	1299
Genus	UC	Akkermansia	Staphylococcus	0.423489059	5.21E-21	44665	3635
Genus	CD	Ruminococcus	Odoribacter	0.423424139	8.83E-23	55319	60883
Genus	CD	Blautia	Ruminococcus	0.423156733	9.45E-23	237652	55319
Genus	UC	Streptococcus	Dorea	0.422601136	6.41E-21	56319	20587
Genus	UC	Propionibacterium	Tepidimonas	0.422276294	6.92E-21	6791	9072
Genus	CD	Haemophilus	Leptotrichia	0.422054967	1.25E-22	215621	2045
Genus	CD	Fingoldia	Peptoniphilus	0.421974686	1.28E-22	1379	1618
Genus	CD	Faecalibacterium	Butyrivibrio	0.421569335	1.41E-22	733078	17198
Genus	CD	Propionibacterium	Rothia	0.420496957	1.85E-22	7512	2168
Genus	CD	Actinomyces	Leptotrichia	0.420402561	1.90E-22	3690	2045
Genus	UC	Veillonella	Porphyromonas	0.42039442	1.07E-20	19949	2922
Genus	UC	Ruminococcus	Dorea	0.420371719	1.08E-20	87937	20587
Genus	CD	Lachnospira	Dialister	0.41941976	2.43E-22	32709	12197
Genus	CD	Haemophilus	Neisseria	0.419378266	2.46E-22	215621	7180
Genus	CD	Enterococcus	Erwinia	0.417999692	3.47E-22	6760	10916
Genus	UC	Propionibacterium	Actinomyces	0.417945305	1.88E-20	6791	3661
Genus	CD	Corynebacterium	Fingoldia	0.417463657	3.97E-22	5075	1379
Genus	CD	Enterococcus	Lactococcus	0.417046771	4.40E-22	6760	5741
Genus	CD	Bifidobacterium	Lachnospira	0.416873447	4.60E-22	28165	32709
Genus	CD	Tepidimonas	Corynebacterium	0.416470138	5.08E-22	2732	5075
Genus	CD	Acinetobacter	Pseudomonas	0.416424456	5.14E-22	2045	2336
Genus	UC	Blautia	Roseburia	0.416087929	2.87E-20	219254	144133
Genus	UC	Fusobacterium	Leptotrichia	0.415596205	3.21E-20	98401	1174
Genus	UC	Ruminococcus	Odoribacter	0.414800299	3.85E-20	87937	40975
Genus	UC	Corynebacterium	Fingoldia	0.41425341	4.36E-20	4730	3816
Genus	CD	Akkermansia	Staphylococcus	0.413114558	1.17E-21	161442	8542
Genus	UC	[Ruminococcus]	Veillonella	0.413065385	5.70E-20	134177	19949
Genus	UC	Roseburia	Dorea	0.412787084	6.07E-20	144133	20587
Genus	UC	Staphylococcus	Pseudomonas	0.412722019	6.16E-20	3635	2086
Genus	UC	Neisseria	Aggregatibacter	0.412523789	6.44E-20	12747	3121
Genus	CD	Staphylococcus	Rothia	0.412515206	1.35E-21	8542	2168
Genus	CD	Ruminococcus	Lachnospira	0.412050618	1.51E-21	55319	32709
Genus	UC	Roseburia	Ruminococcus	0.411600978	7.92E-20	144133	87937
Genus	UC	Sutterella	Bifidobacteria	0.411132929	8.80E-20	263260	12118
Genus	UC	Staphylococcus	Rothia	0.410832936	9.41E-20	3635	6408
Genus	UC	Haemophilus	Rothia	0.410439636	1.03E-19	132218	6408
Genus	CD	Oscillospira	Adlercreutzia	0.410258482	2.34E-21	126222	1491
Genus	UC	Corynebacterium	Pseudomonas	0.409950672	1.15E-19	4730	2086
Genus	CD	Corynebacterium	Pseudomonas	0.409628784	2.73E-21	5075	2336
Genus	CD	Akkermansia	Propionibacterium	0.409609502	2.75E-21	161442	7512
Genus	UC	Collinsella	Dorea	0.409493541	1.27E-19	44662	20587
Genus	CD	Blautia	Bifidobacterium	0.40944541	2.86E-21	237652	28165
Genus	CD	Lactobacillus	Lactococcus	0.409282814	2.97E-21	37702	5741
Genus	UC	Parabacteroides	Butyrivibrio	0.409179368	1.36E-19	198948	7200
Genus	CD	Coprococcus	Odoribacter	0.407903809	4.15E-21	74912	60883
Genus	CD	Streptococcus	Enterococcus	0.407821625	4.23E-21	69222	6760
Genus	CD	Staphylococcus	Peptoniphilus	0.407433345	4.65E-21	8542	1618
Genus	CD	Streptococcus	Veillonella	0.406551533	5.75E-21	69222	33618
Genus	CD	Oscillospira	Lachnospira	0.406221068	6.23E-21	126222	32709
Genus	UC	Blautia	Streptococcus	0.40557547	3.02E-19	219254	56319
Genus	UC	Ruminococcus	Lachnospira	0.405252528	3.24E-19	87937	37737
Genus	CD	Prevotella	[Prevotella]	0.405206562	7.94E-21	849307	42464
Genus	UC	Staphylococcus	Anaerococcus	0.404871647	3.53E-19	3635	6221
Genus	UC	Fusobacterium	Peptostreptococcus	0.404825068	3.56E-19	98401	1021
Genus	UC	Coprococcus	Dialister	0.404762713	3.61E-19	106602	10962
Genus	UC	Propionibacterium	Rothia	0.403815286	4.44E-19	6791	6408
Genus	UC	Ruminococcus	Adlercreutzia	0.401675575	7.08E-19	87937	1273
Genus	CD	Roseburia	Collinsella	0.401617465	1.87E-20	131441	60637
Genus	CD	Eupulviscium	Enterococcus	0.401447444	1.94E-20	22210	6760
Genus	CD	Propionibacterium	Lactococcus	0.400704173	2.32E-20	7512	5741
Genus	UC	Prevotella	Catenibacterium	0.400120655	9.92E-19	778755	7131
Genus	UC	Coprococcus	Collinsella	0.400039939	1.01E-18	106602	44662
Genus	CD	Sutterella	Bifidobacterium	0.399809488	2.86E-20	586426	28165
Genus	CD	Staphylococcus	Tepidimonas	0.399558253	3.03E-20	8542	2732
Genus	CD	Akkermansia	Enterococcus	0.399415212	3.14E-20	161442	6760
Genus	UC	Faecalibacterium	Collinsella	0.399259979	1.19E-18	1076582	44662
Genus	UC	Oscillospira	Adlercreutzia	0.399190817	1.21E-18	88409	1273
Genus	UC	Actinomyces	Porphyromonas	0.398779362	1.32E-18	3661	2922
Genus	UC	Streptococcus	Bifidobacterium	0.398592468	1.38E-18	56319	42302
Genus	CD	Streptococcus	Bifidobacterium	0.397975312	4.39E-20	69222	28165
Genus	CD	Staphylococcus	Anaerococcus	0.397956888	4.41E-20	8542	1442
Genus	UC	Akkermansia	Corynebacterium	0.397578912	1.71E-18	44665	4730
Genus	CD	Lactobacillus	Rothia	0.397383521	5.05E-20	37702	2168
Genus	UC	Oscillospira	Dialister	0.397333571	1.80E-18	88409	10962
Genus	UC	Fusobacterium	Erwinia	0.396399208	2.20E-18	98401	2165
Genus	CD	Sutterella	Collinsella	0.395377632	8.04E-20	586426	60637
Genus	CD	Faecalibacterium	Odoribacter	0.395256527	8.27E-20	733078	60883
Genus	UC	Streptococcus	Enterococcus	0.395089941	2.91E-18	56319	6935
Genus	CD	Streptococcus	Lactococcus	0.395016682	8.74E-20	69222	5741
Genus	UC	Staphylococcus	Porphyromonas	0.394985997	2.98E-18	3635	2922
Genus	UC	Enterococcus	Lactococcus	0.394475867	3.31E-18	6935	3076
Genus	CD	Neisseria	Aggregatibacter	0.393943872	1.12E-19	7180	2166
Genus	CD	Parabacteroides	Coprococcus	0.392425701	1.59E-19	491496	74912
Genus	UC	Roseburia	Dialister	0.392112746	5.46E-18	144133	10962
Genus	CD	Turicibacter	Actinomyces	0.392111471	1.71E-19	16042	3690
Genus	UC	Coprococcus	Butyrivibrio	0.391149166	6.68E-18	106602	7200
Genus	UC	Prevotella	Phascolarctobacterium	0.390916268	7.01E-18	778755	50557
Genus	CD	Enterococcus	Staphylococcus	0.390804224	2.30E-19	6760	8542
Genus	UC	Odoribacter	Dialister	0.390356355	7.88E-18	40975	10962
Genus	UC	Coprococcus	[Eubacterium]	0.390134099	8.26E-18	106602	46965
Genus	UC	Oscillospira	Anaerostipes	0.389935477	8.61E-18	88409	3660
Genus	CD	Coprococcus	Anaerostipes	0.389855356	2.86E-19	74912	1421
Genus	UC	Neisseria	Corynebacterium	0.389080123	1.03E-17	12747	4730
Genus	UC	Coprococcus	Odoribacter	0.38774519	1.36E-17	106602	40975

Genus	CD	Propionibacterium	Tepidimonas	0.387149959	5.27E-19	7512	2732
Genus	UC	Faecalibacterium	Odoribacter	0.386539084	1.74E-17	1076582	40975
Genus	CD	Tepidimonas	Acinetobacter	0.386442595	6.18E-19	2732	2045
Genus	UC	[Ruminococcus]	Actinomyces	0.385520966	2.15E-17	134177	3661
Genus	CD	Streptococcus	Acinetobacter	0.385166825	8.22E-19	69222	2045
Genus	UC	Prevotella	[Prevotella]	0.38443671	2.68E-17	778755	61724
Genus	CD	Akkermansia	Ruminococcus	0.383374942	1.23E-18	161442	55319
Genus	CD	Staphylococcus	Pseudomonas	0.382601082	1.46E-18	8542	2336
Genus	CD	Actinobacillus	Actinomyces	0.382130099	1.62E-18	37020	3690
Genus	UC	Blautia	Dialister	0.381748964	4.63E-17	219254	10962
Genus	UC	Ruminococcus	Dialister	0.380782853	5.63E-17	87937	10962
Genus	CD	Blautia	[Eubacterium]	0.380563428	2.28E-18	237652	57490
Genus	CD	Ruminococcus	Lachnobacterium	0.380054088	2.55E-18	55319	8518
Genus	CD	Propionibacterium	Peptoniphilus	0.379951482	2.61E-18	7512	1618
Genus	CD	Coprococcus	Collinsella	0.379344348	2.98E-18	74912	60637
Genus	CD	Anaerococcus	Finegoldia	0.379281493	3.03E-18	1442	1379
Genus	CD	Coprococcus	Dialister	0.379178871	3.09E-18	74912	12197
Genus	CD	Faecalibacterium	Dialister	0.378864436	3.32E-18	733078	12197
Genus	CD	Collinsella	Slackia	0.378555554	3.55E-18	60637	2271
Genus	UC	Clostridium	Enterococcus	0.378178052	9.51E-17	24622	6935
Genus	UC	Fusobacterium	Corynebacterium	0.378143909	9.58E-17	98401	4730
Genus	UC	Enterococcus	Erwinia	0.378008573	9.84E-17	6935	2165
Genus	CD	Epulopiscium	Dorea	0.377412298	4.55E-18	22210	41932
Genus	CD	Bifidobacterium	Dialister	0.377293062	4.67E-18	28165	12197
Genus	UC	Prevotella	Paraprevotella	0.377115642	1.18E-16	778755	14943
Genus	UC	Corynebacterium	Rothia	0.376658602	1.29E-16	4730	6408
Genus	CD	[Eubacterium]	Dorea	0.375513461	6.87E-18	57490	41932
Genus	UC	Fusobacterium	Aggregatibacter	0.37541776	1.65E-16	98401	3121
Genus	CD	Akkermansia	Lactobacillus	0.375334413	7.15E-18	161442	37702
Genus	CD	Turicibacter	Lactococcus	0.374739207	8.13E-18	16042	5741
Genus	CD	Akkermansia	Corynebacterium	0.37416684	9.19E-18	161442	5075
Genus	CD	Ruminococcus	Dialister	0.374145871	9.24E-18	55319	12197
Genus	UC	Streptococcus	Lactococcus	0.373892587	2.23E-16	56319	3076
Genus	UC	Lactobacillus	Actinomyces	0.373092256	2.61E-16	51919	3661
Genus	UC	Faecalibacterium	Dorea	0.372389942	3.00E-16	1076582	20587
Genus	UC	Enterococcus	Klebsiella	0.372345114	3.02E-16	6935	2793
Genus	UC	Bifidobacterium	Dialister	0.372019112	3.22E-16	42302	10962
Genus	UC	Porphyromonas	Aggregatibacter	0.371763195	3.39E-16	2922	3121
Genus	CD	Oscillospira	[Eubacterium]	0.371296153	1.70E-17	126222	57490
Genus	CD	Actinobacillus	Corynebacterium	0.370232493	2.13E-17	37020	5075
Genus	CD	Fusobacterium	Actinomyces	0.370157696	2.17E-17	156436	3690
Genus	UC	Veillonella	Erwinia	0.369956164	4.82E-16	19949	2165
Genus	CD	Staphylococcus	Lactococcus	0.369771835	2.35E-17	8542	5741
Genus	CD	Parabacteroides	Oscillospira	0.369501859	2.49E-17	491496	126222
Genus	CD	Finegoldia	Acinetobacter	0.368687102	2.96E-17	1379	2045
Genus	UC	Ruminococcus	Bifidobacterium	0.36850576	6.39E-16	87937	42302
Genus	CD	Enterococcus	Actinomyces	0.368471884	3.10E-17	6760	3690
Genus	CD	Bifidobacterium	Veillonella	0.368189611	3.29E-17	28165	33618
Genus	CD	Fusobacterium	Streptococcus	0.368080689	3.36E-17	156436	69222
Genus	UC	Sutterella	Odoribacter	0.367838613	7.27E-16	263260	40975
Genus	UC	Tepidimonas	Corynebacterium	0.366999785	8.55E-16	9072	4730
Genus	UC	Blautia	Eggerthella	0.366570169	9.29E-16	219254	2725
Genus	CD	Propionibacterium	Anaerococcus	0.365692811	5.55E-17	7512	1442
Genus	UC	Sutterella	Coprococcus	0.365312191	1.18E-15	263260	106602
Genus	CD	Prevotella	Phascolarctobacterium	0.365103396	6.28E-17	849307	111437
Genus	CD	Corynebacterium	Lactococcus	0.364752507	6.76E-17	5075	5741
Genus	CD	Lachnospira	Coprobacillus	0.36464859	6.90E-17	32709	1745
Genus	CD	Sutterella	Dialister	0.364310149	7.41E-17	586426	12197
Genus	UC	Neisseria	Propionibacterium	0.364046453	1.51E-15	12747	6791
Genus	CD	Sutterella	Oscillospira	0.363933178	8.01E-17	586426	126222
Genus	CD	Roseburia	Bifidobacterium	0.362808392	1.01E-16	131441	28165
Genus	CD	Lactococcus	Actinomyces	0.362660833	1.04E-16	5741	3690
Genus	CD	Lactobacillus	Pseudomonas	0.362182889	1.15E-16	37702	2336
Genus	UC	Coprococcus	Lachnospira	0.362136946	2.16E-15	106602	37737
Genus	CD	Odoribacter	Anaerotruncus	0.361848865	1.23E-16	60883	1299
Genus	CD	Coprococcus	Lachnobacterium	0.361768303	1.25E-16	74912	8518
Genus	UC	Faecalibacterium	Ruminococcus	0.361723622	2.34E-15	1076582	87937
Genus	UC	Blautia	Adlercreutzia	0.360683825	2.85E-15	219254	1273
Genus	UC	Faecalibacterium	Dialister	0.360323947	3.05E-15	1076582	10962
Genus	CD	Anaerostipes	Adlercreutzia	0.359942324	1.83E-16	1421	1491
Genus	CD	Neisseria	Acinetobacter	0.359916239	1.84E-16	7180	2045
Genus	CD	Streptococcus	Tepidimonas	0.359596949	1.96E-16	69222	2732
Genus	CD	Streptococcus	Aggregatibacter	0.359439161	2.02E-16	69222	2166
Genus	UC	[Prevotella]	Catenibacterium	0.358964469	3.93E-15	61724	7131
Genus	CD	Enterococcus	Klebsiella	0.358508013	2.45E-16	6760	5943
Genus	CD	Roseburia	Anaerostipes	0.35810233	2.66E-16	131441	1421
Genus	UC	Propionibacterium	Lactococcus	0.357836199	4.86E-15	6791	3076
Genus	CD	Actinobacillus	Staphylococcus	0.357488356	3.01E-16	37020	8542
Genus	CD	Oscillospira	Dialister	0.357141682	3.23E-16	126222	12197
Genus	CD	Roseburia	Dorea	0.357013418	3.32E-16	131441	41932
Genus	UC	Anaerococcus	Porphyromonas	0.356939996	5.74E-15	6221	2922
Genus	CD	Coprobacillus	Adlercreutzia	0.356738115	3.51E-16	1745	1491
Genus	CD	Rothia	Anaerococcus	0.356325615	3.81E-16	2168	1442
Genus	UC	Neisseria	Staphylococcus	0.356002396	6.83E-15	12747	3635
Genus	CD	Streptococcus	Lachnospira	0.35569408	4.33E-16	69222	32709
Genus	UC	Lactobacillus	Clostridium	0.355662788	7.28E-15	51919	24622
Genus	CD	Lactobacillus	Turicibacter	0.35543837	4.56E-16	37702	16042
Genus	CD	Prevotella	Collinsella	0.355102059	4.88E-16	849307	60637
Genus	UC	Staphylococcus	Lactococcus	0.354849511	8.46E-15	3635	3076
Genus	UC	Bifidobacterium	Turicibacter	0.3547236	8.66E-15	42302	7532
Genus	UC	Akkermansia	Allobaculum	0.35456688	8.91E-15	44665	1951
Genus	UC	Blautia	[Eubacterium]	0.354563767	8.91E-15	219254	46965
Genus	UC	Enterococcus	Rothia	0.353971061	9.94E-15	6935	6408
Genus	UC	Parabacteroides	Coprococcus	0.353927724	1.00E-14	198948	106602
Genus	CD	Neisseria	Leptotrichia	0.353493465	6.74E-16	7180	2045
Genus	CD	Coprococcus	Dorea	0.353254445	7.07E-16	74912	41932
Genus	CD	Parabacteroides	Odoribacter	0.352910654	7.58E-16	491496	60883
Genus	CD	Clostridium	Enterococcus	0.352782738	7.77E-16	59244	6760
Genus	UC	Lactobacillus	Bifidobacterium	0.35262248	1.27E-14	51919	42302
Genus	CD	Streptococcus	Parvimonas	0.352138	8.84E-16	69222	1550
Genus	UC	[Ruminococcus]	Fusobacterium	0.351886849	1.46E-14	134177	98401
Genus	CD	Coprococcus	Bilophila	0.351822321	9.41E-16	74912	24699
Genus	CD	Veillonella	Neisseria	0.351160104	1.07E-15	33618	7180
Genus	CD	Neisseria	Lactococcus	0.35106902	1.09E-15	7180	5741
Genus	UC	Sutterella	Collinsella	0.350996504	1.71E-14	263260	44662
Genus	CD	Veillonella	Actinomyces	0.350429618	1.24E-15	33618	3690

Genus	UC	Turicibacter	Staphylococcus	0.350370008	1.92E-14	7532	3635
Genus	UC	[Ruminococcus]	[Eubacterium]	0.350305412	1.94E-14	134177	46965
Genus	UC	Lactobacillus	Lactococcus	0.350138763	2.00E-14	51919	3076
Genus	UC	Sutterella	Porphyromonas	0.349530576	2.24E-14	263260	2922
Genus	CD	Lactococcus	Rothia	0.349389919	1.52E-15	5741	2168
Genus	CD	Ruminococcus	Clostridium	0.349043611	1.63E-15	55319	59244
Genus	UC	Streptococcus	Lachnospira	0.34855878	2.67E-14	56319	37737
Genus	CD	Faecalibacterium	Anaerotruncus	0.34852227	1.81E-15	733078	1299
Genus	UC	Turicibacter	Lactococcus	0.347781902	3.07E-14	7532	3076
Genus	CD	Lactobacillus	Actinomyces	0.347446379	2.23E-15	37702	3690
Genus	UC	Coprococcus	Bilophila	0.347181572	3.42E-14	106602	12118
Genus	CD	Fusobacterium	Neisseria	0.346920275	2.48E-15	156436	7180
Genus	CD	Sutterella	Roseburia	0.346681463	2.60E-15	586426	131441
Genus	CD	Fusobacterium	Veillonella	0.346321351	2.78E-15	156436	33618
Genus	CD	Lachnospira	Lachnobacterium	0.345858993	3.05E-15	32709	8518
Genus	CD	Staphylococcus	Fingoldia	0.345601122	3.20E-15	8542	1379
Genus	CD	Anaerococcus	Actinomyces	0.345491051	3.27E-15	1442	3690
Genus	UC	Blautia	Collinsella	0.345400711	4.70E-14	219254	44662
Genus	CD	Oscillospira	Anaerostipes	0.345175987	3.48E-15	126222	1421
Genus	UC	Lactobacillus	Allobaculum	0.344951544	5.09E-14	51919	1951
Genus	UC	Veillonella	Aggregatibacter	0.344502565	5.52E-14	19949	3121
Genus	CD	Faecalibacterium	Blautia	0.344414734	4.04E-15	733078	237652
Genus	CD	Roseburia	Coprobacillus	0.344273633	4.15E-15	131441	1745
Genus	UC	Enterococcus	Actinomyces	0.344025564	6.00E-14	6935	3661
Genus	UC	Lactococcus	Actinomyces	0.343843599	6.20E-14	3076	3661
Genus	CD	[Ruminococcus]	[Eubacterium]	0.343559975	4.76E-15	316855	57490
Genus	CD	Turicibacter	Corynebacterium	0.343483234	4.83E-15	16042	5075
Genus	UC	Fusobacterium	Rothia	0.343265994	6.87E-14	98401	6408
Genus	CD	Actinomyces	Acinetobacter	0.342765934	5.55E-15	3690	2045
Genus	UC	Porphyromonas	Leptotrichia	0.342515371	7.85E-14	2922	1174
Genus	CD	Enterococcus	Rothia	0.342501985	5.84E-15	6760	2168
Genus	CD	Anaerococcus	Acinetobacter	0.341587944	6.96E-15	1442	2045
Genus	UC	Clostridium	Actinomyces	0.341536282	9.33E-14	24622	3661
Genus	UC	Propionibacterium	Allobaculum	0.341500223	9.38E-14	6791	1951
Genus	CD	Fusobacterium	Enterococcus	0.341129607	7.60E-15	156436	6760
Genus	CD	Actinobacillus	Leptotrichia	0.34101519	7.77E-15	37020	2045
Genus	UC	Corynebacterium	Lactococcus	0.340784882	1.06E-13	4730	3076
Genus	UC	Porphyromonas	Peptoniphilus	0.339852899	1.25E-13	2922	2240
Genus	UC	Aggregatibacter	Leptotrichia	0.339850528	1.25E-13	3121	1174
Genus	CD	Odoribacter	Butyrivibrio	0.339662926	1.01E-14	60883	17198
Genus	CD	Haemophilus	Fusobacterium	0.338353912	1.29E-14	215621	156436
Genus	UC	Streptococcus	Aggregatibacter	0.338262332	1.65E-13	56319	3121
Genus	UC	Collinsella	Bifidobacterium	0.337482872	1.89E-13	44662	42302
Genus	CD	Faecalibacterium	Anaerostipes	0.337460321	1.53E-14	733078	1421
Genus	UC	Phascolarctobacterium	Bilophila	0.336764522	2.14E-13	50557	12118
Genus	CD	Coprobacillus	Anaerotruncus	0.336694619	1.77E-14	1745	1299
Genus	UC	Actinobacillus	Rothia	0.33653457	2.23E-13	18444	6408
Genus	CD	Lactobacillus	Clostridium	0.336456818	1.85E-14	37702	59244
Genus	CD	Actinomyces	Peptoniphilus	0.336387442	1.87E-14	3690	1618
Genus	UC	Ruminococcus	Streptococcus	0.336212585	2.36E-13	87937	56319
Genus	CD	Turicibacter	Rothia	0.33610657	1.97E-14	16042	2168
Genus	CD	Roseburia	Odoribacter	0.335496806	2.21E-14	131441	60883
Genus	CD	Neisseria	Tepidimonas	0.335391491	2.26E-14	7180	2732
Genus	UC	[Ruminococcus]	Staphylococcus	0.335266717	2.78E-13	134177	3635
Genus	UC	Akkermansia	Lachnobacterium	0.335194631	2.81E-13	44665	8632
Genus	UC	[Eubacterium]	Dorea	0.335148368	2.83E-13	46965	20587
Genus	UC	Blautia	Coprobacillus	0.335084593	2.87E-13	219254	1848
Genus	UC	Sutterella	Corynebacterium	0.334491315	3.17E-13	263260	4730
Genus	CD	Prevotella	Catenibacterium	0.334378612	2.73E-14	849307	8290
Genus	CD	Prevotella	Paraprevotella	0.334378411	2.73E-14	849307	19724
Genus	CD	Fusobacterium	Actinobacillus	0.334216598	2.81E-14	156436	37020
Genus	CD	Faecalibacterium	Bilophila	0.333983119	2.94E-14	733078	24699
Genus	CD	Actinobacillus	Porphyromonas	0.333967634	2.95E-14	37020	2953
Genus	CD	Rothia	Leptotrichia	0.333507708	3.21E-14	2168	2045
Genus	CD	Faecalibacterium	Lachnobacterium	0.33328849	3.34E-14	733078	8518
Genus	CD	[Ruminococcus]	Pseudomonas	0.333156397	3.43E-14	316855	2336
Genus	UC	Veillonella	Staphylococcus	0.333086091	4.04E-13	19949	3635
Genus	UC	Turicibacter	Klebsiella	0.332476501	4.48E-13	7532	2793
Genus	CD	Actinobacillus	Propionibacterium	0.332386787	3.95E-14	37020	7512
Genus	UC	Turicibacter	Actinomyces	0.33228766	4.62E-13	7532	3661
Genus	CD	Parabacteroides	Anaerotruncus	0.332157629	4.13E-14	491496	1299
Genus	CD	Blautia	Eggerthella	0.331925174	4.31E-14	237652	5510
Genus	UC	Akkermansia	Lactococcus	0.331525169	5.26E-13	44665	3076
Genus	CD	Actinobacillus	Rothia	0.331418147	4.73E-14	37020	2168
Genus	UC	Staphylococcus	Allobaculum	0.331105359	5.65E-13	3635	1951
Genus	UC	Staphylococcus	Tepidimonas	0.330683112	6.07E-13	3635	9072
Genus	UC	Rothia	Porphyromonas	0.330650574	6.11E-13	6408	2922
Genus	CD	Neisseria	Enterococcus	0.330495448	5.61E-14	7180	6760
Genus	CD	Streptococcus	Dorea	0.330382953	5.73E-14	69222	41932
Genus	UC	Streptococcus	Clostridium	0.330229404	6.56E-13	56319	24622
Genus	CD	Turicibacter	Propionibacterium	0.329766447	6.42E-14	16042	7512
Genus	CD	Coprococcus	[Eubacterium]	0.329711606	6.48E-14	74912	57490
Genus	CD	Veillonella	Enterococcus	0.329514184	6.72E-14	33618	6760
Genus	CD	Streptococcus	Peptoniphilus	0.329323143	6.96E-14	69222	1618
Genus	CD	Ruminococcus	Desulfovibrio	0.329225707	7.09E-14	55319	95532
Genus	CD	Ruminococcus	Turicibacter	0.329110362	7.24E-14	55319	16042
Genus	CD	Bifidobacterium	Dorea	0.328548831	8.02E-14	28165	41932
Genus	CD	Rothia	Acinetobacter	0.328388232	8.26E-14	2168	2045
Genus	UC	Enterococcus	Acinetobacter	0.32807996	9.41E-13	6935	2655
Genus	CD	Turicibacter	Enterococcus	0.327869623	9.08E-14	16042	6760
Genus	CD	[Ruminococcus]	Veillonella	0.327810507	9.18E-14	316855	33618
Genus	UC	Propionibacterium	Porphyromonas	0.32749951	1.04E-12	6791	2922
Genus	UC	Veillonella	Corynebacterium	0.327411384	1.05E-12	19949	4730
Genus	CD	Actinobacillus	Acinetobacter	0.327209637	1.02E-13	37020	2045
Genus	CD	Lachnobacterium	Anaerostipes	0.326783734	1.11E-13	8518	1421
Genus	CD	Acinetobacter	Peptoniphilus	0.326761704	1.11E-13	2045	1618
Genus	UC	Lactobacillus	Pseudomonas	0.326430773	1.24E-12	51919	2086
Genus	CD	Veillonella	Leptotrichia	0.326390754	1.19E-13	33618	2045
Genus	CD	Propionibacterium	Pseudomonas	0.326346882	1.20E-13	7512	2336
Genus	CD	Faecalibacterium	Adlercreutzia	0.326268772	1.22E-13	733078	1491
Genus	UC	Prevotella	Propionibacterium	0.326037688	1.32E-12	778755	6791
Genus	CD	Streptococcus	Anaerococcus	0.325961483	1.29E-13	69222	1442
Genus	CD	Ruminococcus	Lactococcus	0.325903648	1.30E-13	55319	5741
Genus	UC	Phascolarctobacterium	Desulfovibrio	0.325217008	1.52E-12	50557	24640
Genus	CD	Fusobacterium	Lactococcus	0.3247844	1.59E-13	156436	5741
Genus	UC	Prevotella	Staphylococcus	0.324665106	1.66E-12	778755	3635

Genus	CD	Oscillospira	Bilophila	0.324632942	1.63E-13	126222	24699
Genus	CD	[Ruminococcus]	Enterococcus	0.324252714	1.75E-13	316855	6760
Genus	CD	Bifidobacterium	Actinomyces	0.324171008	1.78E-13	28165	3690
Genus	CD	Lactobacillus	Adlercreutzia	0.324099896	1.80E-13	37702	1491
Genus	CD	Roseburia	Anaerotruncus	0.323844648	1.88E-13	131441	1299
Genus	UC	Faecalibacterium	Roseburia	0.323744936	1.94E-12	1076582	144133
Genus	UC	Actinobacillus	Corynebacterium	0.322804051	2.26E-12	18444	4730
Genus	CD	Streptococcus	Pseudomonas	0.322221081	2.52E-13	69222	2336
Genus	UC	Staphylococcus	Peptoniphilus	0.322207144	2.49E-12	3635	2240
Genus	CD	Sutterella	Parabacteroides	0.321886265	2.68E-13	586426	491496
Genus	UC	[Ruminococcus]	Corynebacterium	0.321566678	2.77E-12	134177	4730
Genus	CD	Actinomyces	Aggregatibacter	0.321564715	2.83E-13	3690	2166
Genus	UC	Actinobacillus	Staphylococcus	0.321067732	3.00E-12	18444	3635
Genus	UC	Veillonella	Propionibacterium	0.321042609	3.02E-12	19949	6791
Genus	UC	Haemophilus	Erwinia	0.32063164	3.23E-12	132218	2165
Genus	CD	Coprococcus	Butyrivibrio	0.320185095	3.62E-13	74912	17198
Genus	UC	Sutterella	Fusobacterium	0.320161458	3.48E-12	263260	98401
Genus	UC	Fusobacterium	Epulopiscium	0.320157051	3.49E-12	98401	71308
Genus	UC	[Ruminococcus]	Propionibacterium	0.319884004	3.64E-12	134177	6791
Genus	UC	Staphylococcus	Finnegoldia	0.319814488	3.69E-12	3635	3816
Genus	UC	Akkermansia	Pseudomonas	0.319587589	3.82E-12	44665	2086
Genus	UC	Roseburia	Anaerostipes	0.318799304	4.35E-12	144133	3660
Genus	CD	Parabacteroides	Blautia	0.31861325	4.78E-13	491496	237652
Genus	CD	Sutterella	Coprococcus	0.318468094	4.91E-13	586426	74912
Genus	UC	[Ruminococcus]	Collinsella	0.318416368	4.62E-12	134177	44662
Genus	UC	Prevotella	Sutterella	0.318395056	4.64E-12	778755	263260
Genus	CD	Coprococcus	Desulfovibrio	0.318280376	5.07E-13	74912	95532
Genus	CD	Akkermansia	Actinomyces	0.318273992	5.08E-13	161442	3690
Genus	UC	Haemophilus	Corynebacterium	0.318223005	4.77E-12	132218	4730
Genus	CD	Parabacteroides	Acidaminococcus	0.317888458	5.44E-13	491496	41357
Genus	CD	Sutterella	Dorea	0.317431452	5.89E-13	586426	41932
Genus	UC	Prevotella	Corynebacterium	0.317296914	5.54E-12	778755	4730
Genus	UC	Ruminococcus	[Eubacterium]	0.317233992	5.60E-12	87937	46965
Genus	CD	Phascolarctobacterium	Slackia	0.317190484	6.14E-13	111437	2271
Genus	CD	Actinobacillus	Parvimonas	0.31702005	6.33E-13	37020	1550
Genus	CD	Veillonella	Rothia	0.316981021	6.37E-13	33618	2168
Genus	CD	Oscillospira	Eggerthella	0.316681935	6.72E-13	126222	5510
Genus	CD	Clostridium	Lachnobacterium	0.316664505	6.74E-13	59244	8518
Genus	CD	Akkermansia	Streptococcus	0.316232529	7.27E-13	161442	69222
Genus	UC	Clostridium	Dorea	0.316096252	6.72E-12	24622	20587
Genus	UC	Lactococcus	Rothia	0.315992305	6.83E-12	3076	6408
Genus	CD	Clostridium	Actinomyces	0.315893123	7.71E-13	59244	3690
Genus	UC	Propionibacterium	Peptoniphilus	0.315504685	7.39E-12	6791	2240
Genus	CD	Rothia	Parvimonas	0.314707139	9.48E-13	2168	1550
Genus	CD	Lactobacillus	Bifidobacterium	0.314615398	9.63E-13	37702	28165
Genus	UC	Clostridium	Bifidobacterium	0.313867788	9.59E-12	24622	42302
Genus	UC	Turicibacter	Enterococcus	0.313572608	1.01E-11	7532	6935
Genus	UC	Fusobacterium	Staphylococcus	0.313538196	1.01E-11	98401	3635
Genus	UC	[Eubacterium]	Catenibacterium	0.313508009	1.02E-11	46965	7131
Genus	UC	Akkermansia	Lactobacillus	0.313363097	1.04E-11	44665	51919
Genus	CD	Haemophilus	Lactococcus	0.313193128	1.23E-12	215621	5741
Genus	UC	Lactobacillus	Rothia	0.312958986	1.11E-11	51919	6408
Genus	UC	Oscillospira	[Eubacterium]	0.312460148	1.20E-11	88409	46965
Genus	CD	[Prevotella]	Catenibacterium	0.3122762	1.44E-12	42464	8290
Genus	CD	Bifidobacterium	Propionibacterium	0.311751106	1.58E-12	28165	7512
Genus	UC	Streptococcus	Acinetobacter	0.311138707	1.48E-11	56319	2655
Genus	CD	Sutterella	Bilophila	0.31109956	1.77E-12	586426	24699
Genus	UC	[Ruminococcus]	Clostridium	0.310849144	1.55E-11	134177	24622
Genus	CD	Fusobacterium	Akkermansia	0.310801757	1.86E-12	156436	161442
Genus	UC	Haemophilus	Turicibacter	0.310555408	1.62E-11	132218	7532
Genus	UC	Enterococcus	Allobaculum	0.310395942	1.66E-11	6935	1951
Genus	CD	Lactobacillus	Anaerococcus	0.310344661	2.01E-12	37702	1442
Genus	CD	Epulopiscium	Erwinia	0.31023052	2.05E-12	22210	10916
Genus	CD	Neisseria	Porphyromonas	0.310190175	2.07E-12	7180	2953
Genus	CD	Corynebacterium	Porphyromonas	0.310081947	2.10E-12	5075	2953
Genus	CD	Collinsella	Dialister	0.310009004	2.13E-12	60637	12197
Genus	UC	Prevotella	Pseudomonas	0.309977406	1.77E-11	778755	2086
Genus	UC	Corynebacterium	Allobaculum	0.309824442	1.82E-11	4730	1951
Genus	UC	Veillonella	Enterococcus	0.309750503	1.84E-11	19949	6935
Genus	UC	Clostridium	Staphylococcus	0.309693936	1.85E-11	24622	3635
Genus	CD	Enterococcus	Acinetobacter	0.309387827	2.37E-12	6760	2045
Genus	CD	Lactobacillus	Neisseria	0.309194831	2.45E-12	37702	7180
Genus	CD	Turicibacter	Staphylococcus	0.308650562	2.69E-12	16042	8542
Genus	CD	Actinobacillus	Peptoniphilus	0.308650219	2.69E-12	37020	1618
Genus	CD	Coprococcus	Turicibacter	0.308042887	2.98E-12	74912	16042
Genus	CD	Clostridium	Lachnospira	0.307425945	3.31E-12	59244	32709
Genus	UC	Turicibacter	Propionibacterium	0.30722284	2.72E-11	7532	6791
Genus	UC	Bifidobacterium	Eggerthella	0.307128405	2.76E-11	42302	2725
Genus	UC	Prevotella	Actinomyces	0.307042443	2.80E-11	778755	3661
Genus	UC	Turicibacter	Corynebacterium	0.306620144	2.99E-11	7532	4730
Genus	CD	Desulfovibrio	Butyrivibrio	0.306579839	3.81E-12	95532	17198
Genus	UC	Desulfovibrio	Bilophila	0.306307396	3.14E-11	24640	12118
Genus	CD	Streptococcus	Clostridium	0.306200185	4.06E-12	69222	59244
Genus	CD	Corynebacterium	Allobaculum	0.306104148	4.13E-12	5075	1330
Genus	UC	Streptococcus	Anaerococcus	0.306088922	3.25E-11	56319	6221
Genus	CD	Lachnospira	Dorea	0.305965532	4.23E-12	32709	41932
Genus	CD	Ruminococcus	Lactobacillus	0.305792952	4.35E-12	55319	37702
Genus	CD	Ruminococcus	Eggerthella	0.305326916	4.71E-12	55319	5510
Genus	UC	Oscillospira	Bifidobacterium	0.305174714	3.74E-11	88409	42302
Genus	CD	Fusobacterium	Parvimonas	0.305152704	4.85E-12	156436	1550
Genus	CD	Tepidimonas	Actinomyces	0.305034793	4.94E-12	2732	3690
Genus	UC	Propionibacterium	Finnegoldia	0.304988509	3.85E-11	6791	3816
Genus	CD	Collinsella	Dorea	0.304919027	5.04E-12	60637	41932
Genus	UC	Ruminococcus	Clostridium	0.304170064	4.36E-11	87937	24622
Genus	CD	Haemophilus	Propionibacterium	0.304149551	5.73E-12	215621	7512
Genus	CD	Parabacteroides	Ruminococcus	0.30378223	6.10E-12	491496	55319
Genus	UC	Turicibacter	Rothia	0.303767531	4.64E-11	7532	6408
Genus	CD	Phascolarctobacterium	Desulfovibrio	0.303766994	6.11E-12	111437	95532
Genus	CD	Propionibacterium	Allobaculum	0.303696131	6.18E-12	7512	1330
Genus	UC	Acinetobacter	Allobaculum	0.303607159	4.75E-11	2655	1951
Genus	UC	Sutterella	[Eubacterium]	0.303016843	5.20E-11	263260	46965
Genus	CD	Haemophilus	Corynebacterium	0.302065279	8.11E-12	215621	5075
Genus	UC	Dorea	Veillonella	0.30169968	6.36E-11	20587	19949
Genus	UC	[Ruminococcus]	Haemophilus	0.30168312	6.37E-11	134177	132218
Genus	UC	Fusobacterium	Propionibacterium	0.301075617	6.99E-11	98401	6791
Genus	CD	[Eubacterium]	Eggerthella	0.301060699	9.58E-12	57490	5510

Genus	CD	Actinobacillus	Lactococcus	0.300846372	9.92E-12	37020	5741
Genus	UC	Blautia	Actinomyces	0.300779444	7.31E-11	219254	3661
Genus	CD	Dorea	Actinomyces	0.300196135	1.10E-11	41932	3690
Genus	CD	Lachnospira	Anaerostipes	0.300101275	1.12E-11	32709	1421
Genus	CD	Streptococcus	Porphyromonas	0.299862107	1.17E-11	69222	2953
Genus	UC	Clostridium	Klebsiella	0.299518281	8.84E-11	24622	2793
Genus	UC	Neisseria	Lactococcus	0.299463072	8.91E-11	12747	3076
Genus	CD	[Eubacterium]	Coprobacillus	0.299454559	1.25E-11	57490	1745
Genus	CD	Haemophilus	Turicibacter	0.299360462	1.27E-11	215621	16042
Genus	UC	Oscillospira	Coprobacillus	0.298695077	1.00E-10	88409	1848
Genus	UC	Phascolarctobacterium	Butyrivimonas	0.298694628	1.00E-10	50557	7200
Genus	UC	[Ruminococcus]	Enterococcus	0.298609495	1.01E-10	134177	6935
Genus	CD	[Ruminococcus]	Actinomyces	0.298459109	1.47E-11	316855	3690
Genus	UC	Blautia	Veillonella	0.298407223	1.04E-10	219254	19949
Genus	UC	Clostridium	Corynebacterium	0.298084652	1.10E-10	24622	4730
Genus	CD	Bifidobacterium	Lactococcus	0.297961855	1.59E-11	28165	5741
Genus	CD	Epulopiscium	Staphylococcus	0.297720815	1.66E-11	22210	8542
Genus	UC	Faecalibacterium	Lachnospira	0.297683373	1.16E-10	1076582	37737
Genus	UC	[Ruminococcus]	Erwinia	0.297455115	1.20E-10	134177	2165
Genus	UC	Sutterella	[Ruminococcus]	0.297372362	1.22E-10	263260	134177
Genus	CD	Turicibacter	Lachnobacterium	0.297091577	1.83E-11	16042	8518
Genus	UC	Fusobacterium	Anaerococcus	0.296851977	1.32E-10	98401	6221
Genus	UC	Anaerococcus	Acinetobacter	0.296835526	1.32E-10	6221	2655
Genus	CD	Parabacteroides	Butyrivimonas	0.296769971	1.93E-11	491496	17198
Genus	UC	Butyrivimonas	Lachnobacterium	0.296650697	1.36E-10	7200	8632
Genus	UC	Actinobacillus	Peptostreptococcus	0.296271374	1.44E-10	18444	1021
Genus	UC	Sutterella	Staphylococcus	0.296029672	1.49E-10	263260	3635
Genus	UC	Desulfovibrio	Butyrivimonas	0.295992562	1.50E-10	24640	7200
Genus	UC	Prevotella	Desulfovibrio	0.295832927	1.53E-10	778755	24640
Genus	CD	Veillonella	Erwinia	0.295648739	2.32E-11	33618	10916
Genus	CD	Phascolarctobacterium	Butyrivimonas	0.295477975	2.38E-11	111437	17198
Genus	CD	Sutterella	Odoribacter	0.295167935	2.51E-11	586426	60883
Genus	CD	Fusobacterium	Corynebacterium	0.294958306	2.59E-11	156436	5075
Genus	UC	Corynebacterium	Leptotrichia	0.294673025	1.82E-10	4730	1174
Genus	CD	Prevotella	Coprococcus	0.293881417	3.08E-11	849307	74912
Genus	CD	Coprococcus	Clostridium	0.293749092	3.15E-11	74912	59244
Genus	UC	Erwinia	Porphyromonas	0.293681909	2.11E-10	2165	2922
Genus	CD	Bifidobacterium	Corynebacterium	0.293404585	3.33E-11	28165	5075
Genus	CD	Actinomyces	Parvimonas	0.293330048	3.37E-11	3690	1550
Genus	UC	Parabacteroides	Dialister	0.293287765	2.23E-10	198948	10962
Genus	CD	Blautia	Collinsella	0.293258519	3.41E-11	237652	60637
Genus	CD	Akkermansia	Rothia	0.292682693	3.73E-11	161442	2168
Genus	UC	Faecalibacterium	Sutterella	0.292311876	2.58E-10	1076582	263260
Genus	UC	Prevotella	Butyrivimonas	0.292296093	2.58E-10	778755	7200
Genus	CD	Prevotella	Desulfovibrio	0.292289086	3.98E-11	849307	95532
Genus	CD	Lachnobacterium	Adlercreutzia	0.292026736	4.15E-11	8518	1491
Genus	UC	Lactobacillus	Erwinia	0.291898484	2.74E-10	51919	2165
Genus	UC	Parabacteroides	Oscillospira	0.29173987	2.80E-10	198948	88409
Genus	UC	[Prevotella]	Rothia	0.291441971	2.93E-10	61724	6408
Genus	CD	Roseburia	Lachnobacterium	0.29132651	4.63E-11	131441	8518
Genus	CD	Haemophilus	Lachnospira	0.291060458	4.83E-11	215621	32709
Genus	UC	Ruminococcus	Butyrivimonas	0.291059611	3.10E-10	87937	7200
Genus	UC	Dorea	Actinomyces	0.291039288	3.10E-10	20587	3661
Genus	UC	Bifidobacterium	Lactococcus	0.290707438	3.26E-10	42302	3076
Genus	CD	Anaerostipes	Coprobacillus	0.290589562	5.21E-11	1421	1745
Genus	UC	Oscillospira	Lachnospira	0.290582334	3.32E-10	88409	37737
Genus	UC	Akkermansia	Acinetobacter	0.290293951	3.46E-10	44665	2655
Genus	CD	Sutterella	Blautia	0.29001524	5.71E-11	586426	237652
Genus	CD	Collinsella	Acidaminococcus	0.289818977	5.89E-11	60637	41357
Genus	CD	Fusobacterium	Staphylococcus	0.289753821	5.95E-11	156436	8542
Genus	UC	Faecalibacterium	Parabacteroides	0.289482963	3.89E-10	1076582	198948
Genus	UC	Veillonella	Lactococcus	0.289286298	4.01E-10	19949	3076
Genus	UC	Sutterella	Akkermansia	0.289247097	4.03E-10	263260	44665
Genus	CD	Aggregatibacter	Leptotrichia	0.288957851	6.74E-11	2166	2045
Genus	CD	Haemophilus	Dorea	0.288921708	6.78E-11	215621	41932
Genus	UC	Akkermansia	Desulfovibrio	0.288568387	4.44E-10	44665	24640
Genus	UC	Phascolarctobacterium	Catenibacterium	0.288169375	4.71E-10	50557	7131
Genus	UC	Anaerococcus	Actinomyces	0.288130592	4.73E-10	6221	3661
Genus	CD	Veillonella	Acinetobacter	0.288119007	7.69E-11	33618	2045
Genus	UC	Sutterella	Veillonella	0.288006234	4.82E-10	263260	19949
Genus	CD	Eggerthella	Coprobacillus	0.287846723	8.03E-11	5510	1745
Genus	CD	Propionibacterium	Finegoldia	0.287630082	8.31E-11	7512	1379
Genus	UC	Roseburia	Bifidobacterium	0.287568047	5.13E-10	144133	42302
Genus	UC	Dialister	Eggerthella	0.287381013	5.27E-10	10962	2725
Genus	UC	Streptococcus	Erwinia	0.287233517	5.38E-10	56319	2165
Genus	CD	Actinobacillus	Anaerococcus	0.287128379	8.98E-11	37020	1442
Genus	CD	Rothia	Pseudomonas	0.287073901	9.06E-11	2168	2336
Genus	CD	Ruminococcus	Collinsella	0.286217197	1.04E-10	55319	60637
Genus	CD	Anaerostipes	Anaerotruncus	0.286082841	1.06E-10	1421	1299
Genus	UC	Sutterella	Butyrivimonas	0.285921554	6.50E-10	263260	7200
Genus	UC	Oscillospira	Collinsella	0.285872991	6.54E-10	88409	44662
Genus	UC	Haemophilus	Staphylococcus	0.285826634	6.59E-10	132218	3635
Genus	UC	Lactococcus	Allobaculum	0.285458883	6.94E-10	3076	1951
Genus	UC	Bifidobacterium	Dorea	0.284953763	7.46E-10	42302	20587
Genus	CD	Fusobacterium	Acinetobacter	0.284718869	1.31E-10	156436	2045
Genus	CD	Ruminococcus	Bifidobacterium	0.284633051	1.32E-10	55319	28165
Genus	CD	Akkermansia	Acinetobacter	0.284611916	1.33E-10	161442	2045
Genus	CD	Porphyromonas	Parvimonas	0.284228528	1.41E-10	2953	1550
Genus	CD	Roseburia	[Eubacterium]	0.283915536	1.48E-10	131441	57490
Genus	UC	Streptococcus	[Eubacterium]	0.283897027	8.67E-10	56319	46965
Genus	UC	Bifidobacterium	Enterococcus	0.283863497	8.71E-10	42302	6935
Genus	UC	[Ruminococcus]	Lactobacillus	0.283685715	8.93E-10	134177	51919
Genus	UC	Fusobacterium	Dorea	0.283318828	9.40E-10	98401	20587
Genus	UC	Neisseria	Erwinia	0.283010948	9.82E-10	12747	2165
Genus	CD	Haemophilus	Staphylococcus	0.282850711	1.74E-10	215621	8542
Genus	CD	Veillonella	Klebsiella	0.282801482	1.76E-10	33618	5943
Genus	UC	[Ruminococcus]	Coprococcus	0.282798932	1.01E-09	134177	106602
Genus	CD	Neisseria	Peptoniphilus	0.282749187	1.77E-10	7180	1618
Genus	CD	Collinsella	Odoribacter	0.282612323	1.81E-10	60637	60883
Genus	CD	Rothia	Peptoniphilus	0.282542533	1.83E-10	2168	1618
Genus	UC	Neisseria	Acinetobacter	0.282506758	1.05E-09	12747	2655
Genus	UC	Desulfovibrio	[Prevotella]	0.282429875	1.07E-09	24640	61724
Genus	CD	Desulfovibrio	Catenibacterium	0.282420307	1.86E-10	95532	8290
Genus	CD	Coprococcus	Bifidobacterium	0.282299665	1.90E-10	74912	28165
Genus	CD	Corynebacterium	Parvimonas	0.28227939	1.90E-10	5075	1550
Genus	CD	Bifidobacterium	Staphylococcus	0.282262469	1.91E-10	28165	8542

Genus	UC	Akkermansia	Ruminococcus	0.282124396	1.11E-09	44665	87937
Genus	CD	Actinobacillus	Veillonella	0.281988118	1.99E-10	37020	33618
Genus	CD	Blautia	Anaerotruncus	0.281836836	2.04E-10	237652	1299
Genus	UC	Clostridium	Veillonella	0.281590705	1.20E-09	24622	19949
Genus	UC	Parabacteroides	Collinsella	0.281557451	1.21E-09	198948	44662
Genus	CD	Streptococcus	Epulopiscium	0.281158863	2.26E-10	69222	22210
Genus	UC	Oscillospira	Butyrivibrio	0.280484362	1.40E-09	88409	7200
Genus	CD	Lactobacillus	Lachnospira	0.280451568	2.52E-10	37702	32709
Genus	UC	Streptococcus	Klebsiella	0.280302259	1.44E-09	56319	2793
Genus	CD	Coprococcus	Acidaminococcus	0.279581718	2.87E-10	74912	41357
Genus	UC	Clostridium	Propionibacterium	0.279537324	1.60E-09	24622	6791
Genus	CD	Oscillospira	Collinsella	0.279474513	2.92E-10	126222	60637
Genus	CD	Neisseria	Anaerococcus	0.279297381	3.00E-10	7180	1442
Genus	UC	[Prevotella]	Propionibacterium	0.279278711	1.66E-09	61724	6791
Genus	UC	Ruminococcus	Coprobacillus	0.279016394	1.72E-09	87937	1848
Genus	UC	Rothia	Peptostreptococcus	0.278918092	1.74E-09	6408	1021
Genus	CD	Faecalibacterium	Desulfovibrio	0.278788196	3.24E-10	733078	95532
Genus	UC	[Eubacterium]	Actinomyces	0.278763169	1.78E-09	46965	3661
Genus	CD	Enterococcus	Pseudomonas	0.278754655	3.26E-10	6760	2336
Genus	CD	Staphylococcus	Allobaculum	0.278671834	3.30E-10	8542	1330
Genus	UC	Enterococcus	Anaerococcus	0.278418196	1.87E-09	6935	6221
Genus	CD	Erwinia	Staphylococcus	0.277769366	3.78E-10	10916	8542
Genus	UC	Bifidobacterium	Actinomyces	0.27716201	2.22E-09	42302	3661
Genus	UC	Oscillospira	Streptococcus	0.277082968	2.25E-09	88409	56319
Genus	CD	Odoribacter	Adlercreutzia	0.277037181	4.22E-10	60883	1491
Genus	UC	Sutterella	Streptococcus	0.276761501	2.35E-09	263260	56319
Genus	UC	Staphylococcus	Leptotrichia	0.276717206	2.36E-09	3635	1174
Genus	UC	Propionibacterium	Klebsiella	0.276515315	2.43E-09	6791	2793
Genus	CD	Actinomyces	Pseudomonas	0.27615695	4.81E-10	3690	2336
Genus	CD	Collinsella	Lachnospira	0.275646761	5.19E-10	60637	32709
Genus	UC	Epulopiscium	Veillonella	0.275255779	2.89E-09	71308	19949
Genus	UC	Lachnospira	Coprobacillus	0.274925814	3.02E-09	37737	1848
Genus	CD	Faecalibacterium	Coprobacillus	0.274829741	5.87E-10	733078	1745
Genus	UC	Actinobacillus	Erwinia	0.274583364	3.16E-09	18444	2165
Genus	CD	Dorea	Eggerthella	0.274191564	6.45E-10	41932	5510
Genus	CD	Fusobacterium	Rothia	0.274072228	6.57E-10	156436	2168
Genus	UC	Ruminococcus	Turicibacter	0.273642071	3.60E-09	87937	7532
Genus	CD	Tepidimonas	Peptoniphilus	0.273552247	7.09E-10	2732	1618
Genus	CD	[Ruminococcus]	Erwinia	0.273060929	7.63E-10	316855	10916
Genus	CD	Parabacteroides	Coprobacillus	0.272952561	7.75E-10	491496	1745
Genus	CD	Lachnospira	Eggerthella	0.272882472	7.83E-10	32709	5510
Genus	CD	Catenibacterium	Slackia	0.272787926	7.94E-10	8290	2271
Genus	CD	Veillonella	Staphylococcus	0.272504683	8.28E-10	33618	8542
Genus	UC	[Ruminococcus]	Eggerthella	0.272244287	4.35E-09	134177	2725
Genus	UC	Phascolarctobacterium	Collinsella	0.272153696	4.40E-09	50557	44662
Genus	UC	Faecalibacterium	Bifidobacterium	0.272003264	4.49E-09	1076582	42302
Genus	UC	Turicibacter	Acinetobacter	0.271800648	4.62E-09	7532	2655
Genus	CD	Erwinia	Acinetobacter	0.27177484	9.22E-10	10916	2045
Genus	UC	Phascolarctobacterium	Veillonella	0.271707111	4.68E-09	50557	19949
Genus	CD	Oscillospira	Desulfovibrio	0.271379095	9.77E-10	126222	95532
Genus	CD	Akkermansia	Turicibacter	0.271077074	1.02E-09	161442	16042
Genus	CD	Phascolarctobacterium	Dorea	0.270721026	1.08E-09	111437	41932
Genus	UC	Sutterella	Neisseria	0.270711023	5.35E-09	263260	12747
Genus	CD	Actinobacillus	Tepidimonas	0.27018033	1.16E-09	37020	2732
Genus	UC	Porphyromonas	Acinetobacter	0.270112165	5.79E-09	2922	2655
Genus	CD	Butyrivibrio	Slackia	0.270076076	1.18E-09	17198	2271
Genus	UC	Bifidobacterium	Adlercreutzia	0.27002818	5.86E-09	42302	1273
Genus	CD	[Ruminococcus]	Klebsiella	0.269876137	1.22E-09	316855	5943
Genus	UC	Actinomyces	Aggregatibacter	0.269568127	6.23E-09	3661	3121
Genus	UC	Clostridium	Lactococcus	0.269275004	6.48E-09	24622	3076
Genus	CD	Staphylococcus	Porphyromonas	0.269171876	1.35E-09	8542	2953
Genus	UC	Sutterella	Actinomyces	0.268841472	6.87E-09	263260	3661
Genus	UC	Prevotella	Collinsella	0.268778936	6.92E-09	778755	44662
Genus	UC	Dorea	Corynebacterium	0.268629116	7.06E-09	20587	4730
Genus	UC	Lachnospira	Anaerostipes	0.268529184	7.16E-09	37737	3660
Genus	CD	[Ruminococcus]	Haemophilus	0.268300541	1.53E-09	316855	215621
Genus	CD	[Ruminococcus]	Streptococcus	0.268275674	1.54E-09	316855	69222
Genus	CD	Lactococcus	Anaerococcus	0.268058492	1.59E-09	5741	1442
Genus	UC	Lachnospira	Leptotrichia	0.26750186	8.21E-09	37737	1174
Genus	CD	Clostridium	Corynebacterium	0.26740697	1.74E-09	59244	5075
Genus	CD	Collinsella	Bilophila	0.267300167	1.77E-09	60637	24699
Genus	UC	Parabacteroides	Blautia	0.267284003	8.45E-09	198948	219254
Genus	UC	Blautia	Anaerostipes	0.267032706	8.73E-09	219254	3660
Genus	UC	Prevotella	Veillonella	0.267024216	8.74E-09	778755	19949
Genus	CD	Akkermansia	Epulopiscium	0.266946542	1.86E-09	161442	22210
Genus	CD	[Ruminococcus]	Clostridium	0.266937047	1.86E-09	316855	59244
Genus	UC	Blautia	Clostridium	0.266456115	9.42E-09	219254	24622
Genus	UC	Dorea	Lactococcus	0.266269624	9.66E-09	20587	3076
Genus	UC	[Ruminococcus]	Bifidobacterium	0.266085614	9.90E-09	134177	42302
Genus	UC	Clostridium	Erwinia	0.265775166	1.03E-08	24622	2165
Genus	CD	Veillonella	Corynebacterium	0.265573653	2.27E-09	33618	5075
Genus	UC	Streptococcus	Epulopiscium	0.265439966	1.08E-08	56319	71308
Genus	UC	Epulopiscium	Clostridium	0.265246188	1.11E-08	71308	24622
Genus	CD	Faecalibacterium	Parabacteroides	0.264836077	2.52E-09	733078	491496
Genus	UC	Sutterella	Desulfovibrio	0.264828928	1.17E-08	263260	24640
Genus	CD	Haemophilus	Porphyromonas	0.264713311	2.56E-09	215621	2953
Genus	CD	Porphyromonas	Peptoniphilus	0.264671346	2.58E-09	2953	1618
Genus	CD	Fusobacterium	Propionibacterium	0.264409701	2.68E-09	156436	7512
Genus	CD	Desulfovibrio	[Prevotella]	0.264185126	2.77E-09	95532	42464
Genus	UC	Actinobacillus	Anaerococcus	0.264159087	1.27E-08	18444	6221
Genus	UC	Staphylococcus	Klebsiella	0.263973924	1.31E-08	3635	2793
Genus	UC	Lachnospira	Dialister	0.263644845	1.36E-08	37737	10962
Genus	UC	Actinomyces	Peptostreptococcus	0.263630202	1.37E-08	3661	1021
Genus	UC	Propionibacterium	Erwinia	0.26339897	1.41E-08	6791	2165
Genus	UC	Coprococcus	Lachnobacterium	0.263195903	1.45E-08	106602	8632
Genus	CD	Coprococcus	[Prevotella]	0.263105451	3.22E-09	74912	42464
Genus	CD	Ruminococcus	[Eubacterium]	0.263009982	3.27E-09	55319	57490
Genus	UC	Lactobacillus	Actinobacillus	0.262800393	1.52E-08	51919	18444
Genus	UC	[Ruminococcus]	Coprobacillus	0.26279237	1.52E-08	134177	1848
Genus	UC	Actinobacillus	Propionibacterium	0.262791394	1.52E-08	18444	6791
Genus	CD	Odoribacter	Eggerthella	0.262750257	3.39E-09	60883	5510
Genus	CD	Haemophilus	Tepidimonas	0.262525376	3.50E-09	215621	2732
Genus	CD	Dorea	Veillonella	0.262500518	3.51E-09	41932	33618
Genus	CD	Desulfovibrio	Adlercreutzia	0.262384567	3.57E-09	95532	1491
Genus	CD	Brachyspira	Lactococcus	0.262281341	3.62E-09	21273	5741
Genus	CD	Bilophila	Anaerotruncus	0.262140242	3.70E-09	24699	1299

Genus	CD	Veillonella	Tepidimonas	0.262026833	3.76E-09	33618	2732
Genus	CD	Bifidobacterium	Turicibacter	0.261880879	3.83E-09	28165	16042
Genus	UC	Fusobacterium	Acinetobacter	0.261852803	1.72E-08	98401	2655
Genus	UC	Coprococcus	Coprobaillus	0.261792326	1.73E-08	106602	1848
Genus	CD	Akkermansia	Bifidobacterium	0.261781729	3.89E-09	161442	28165
Genus	CD	Parabacteroides	Adlercreutzia	0.26167732	3.95E-09	491496	1491
Genus	UC	Lactobacillus	Klebsiella	0.261492911	1.80E-08	51919	2793
Genus	UC	Neisseria	Anaerococcus	0.261404338	1.82E-08	12747	6221
Genus	CD	Rothia	Porphyromonas	0.261382109	4.11E-09	2168	2953
Genus	CD	Collinsella	Butyricimonas	0.261370962	4.12E-09	60637	17198
Genus	UC	Epulopiscium	Enterococcus	0.261321604	1.84E-08	71308	6935
Genus	CD	Tepidimonas	Rothia	0.261249425	4.19E-09	2732	2168
Genus	UC	Sutterella	Propionibacterium	0.260987891	1.92E-08	263260	6791
Genus	UC	Collinsella	Bilophila	0.260940713	1.94E-08	44662	12118
Genus	CD	Corynebacterium	Aggregatibacter	0.260699471	4.53E-09	5075	2166
Genus	CD	Turicibacter	Leptotrichia	0.260483235	4.67E-09	16042	2045
Genus	UC	Akkermansia	Rothia	0.260409631	2.07E-08	44665	6408
Genus	CD	Ruminococcus	Butyricimonas	0.260316223	4.78E-09	55319	17198
Genus	UC	Haemophilus	Peptostreptococcus	0.259966674	2.19E-08	132218	1021
Genus	UC	Haemophilus	Dorea	0.259650764	2.29E-08	132218	20587
Genus	UC	Epulopiscium	Staphylococcus	0.259343143	2.38E-08	71308	3635
Genus	CD	Rothia	Aggregatibacter	0.259219472	5.57E-09	2168	2166
Genus	UC	Rothia	Acinetobacter	0.259047801	2.47E-08	6408	2655
Genus	CD	Desulfococcus	Bilophila	0.258820092	5.89E-09	95532	24699
Genus	UC	Epulopiscium	Corynebacterium	0.258478754	2.66E-08	71308	4730
Genus	UC	Dorea	Neisseria	0.257903858	2.86E-08	20587	12747
Genus	UC	Fusobacterium	Klebsiella	0.257811983	2.89E-08	98401	2793
Genus	UC	Coprococcus	Adlercreutzia	0.257744364	2.92E-08	106602	1273
Genus	UC	Neisseria	Peptostreptococcus	0.257642358	2.95E-08	12747	1021
Genus	CD	Brachyspira	Akkermansia	0.257444623	7.13E-09	21273	161442
Genus	UC	Catenibacterium	Porphyromonas	0.257207054	3.12E-08	7131	2922
Genus	CD	Faecalibacterium	Prevotella	0.257194756	7.38E-09	733078	849307
Genus	UC	Lactobacillus	Anaerococcus	0.25718997	3.13E-08	51919	6221
Genus	CD	Tepidimonas	Anaerococcus	0.257048471	7.53E-09	2732	1442
Genus	CD	Staphylococcus	Aggregatibacter	0.256873187	7.71E-09	8542	2166
Genus	CD	Brachyspira	Propionibacterium	0.256862055	7.73E-09	21273	7512
Genus	CD	Staphylococcus	Klebsiella	0.256762637	7.83E-09	8542	5943
Genus	CD	Akkermansia	Clostridium	0.256689483	7.91E-09	161442	59244
Genus	CD	[Ruminococcus]	Lactobacillus	0.256603688	8.01E-09	316855	37702
Genus	CD	Akkermansia	Neisseria	0.25656777	8.05E-09	161442	7180
Genus	CD	Blautia	Streptococcus	0.256480708	8.14E-09	237652	69222
Genus	UC	Prevotella	Lactobacillus	0.256422513	3.45E-08	778755	51919
Genus	CD	Clostridium	Rothia	0.256354465	8.29E-09	59244	2168
Genus	UC	Lactobacillus	Porphyromonas	0.256262992	3.52E-08	51919	2922
Genus	CD	Blautia	Anaerostipes	0.256258997	8.40E-09	237652	1421
Genus	CD	Blautia	Lachnobacterium	0.255997772	8.70E-09	237652	8518
Genus	CD	Acinetobacter	Allobaculum	0.255796046	8.95E-09	2045	1330
Genus	CD	Lactobacillus	Finegoldia	0.25564756	9.13E-09	37702	1379
Genus	UC	Coprococcus	[Prevotella]	0.255562809	3.85E-08	106602	61724
Genus	UC	Parabacteroides	Akkermansia	0.255503593	3.87E-08	198948	44665
Genus	CD	Haemophilus	Enterococcus	0.255442837	9.39E-09	215621	6760
Genus	CD	Parabacteroides	Dialister	0.255403411	9.44E-09	491496	12197
Genus	CD	Propionibacterium	Parvimonas	0.255290095	9.59E-09	7512	1550
Genus	CD	Phascolarctobacterium	Acidaminococcus	0.254898402	1.01E-08	111437	41357
Genus	CD	[Ruminococcus]	Propionibacterium	0.254839778	1.02E-08	316855	7512
Genus	UC	Akkermansia	[Prevotella]	0.254811213	4.23E-08	44665	61724
Genus	UC	Fusobacterium	Lactobacillus	0.254521687	4.38E-08	98401	51919
Genus	CD	Dialister	Anaerostipes	0.254438443	1.08E-08	12197	1421
Genus	UC	Faecalibacterium	Peptostreptococcus	0.254392545	4.46E-08	1076582	1021
Genus	CD	Anaerococcus	Allobaculum	0.254373664	1.09E-08	1442	1330
Genus	CD	Roseburia	Streptococcus	0.25431427	1.10E-08	131441	69222
Genus	UC	[Prevotella]	Porphyromonas	0.254042309	4.66E-08	61724	2922
Genus	UC	Fusobacterium	Phascolarctobacterium	0.253968915	4.70E-08	98401	50557
Genus	UC	[Eubacterium]	Veillonella	0.253933765	4.72E-08	46965	19949
Genus	CD	Haemophilus	Acinetobacter	0.253920049	1.16E-08	215621	2045
Genus	CD	Klebsiella	Acinetobacter	0.253889672	1.16E-08	5943	2045
Genus	CD	Turicibacter	Parvimonas	0.253520818	1.22E-08	16042	1550
Genus	UC	Veillonella	Klebsiella	0.253479419	5.00E-08	19949	2793
Genus	UC	Porphyromonas	Finegoldia	0.253462335	5.01E-08	2922	3816
Genus	CD	Eggerthella	Anaerotruncus	0.25343332	1.24E-08	5510	1299
Genus	CD	Bifidobacterium	Enterococcus	0.253320744	1.26E-08	28165	6760
Genus	CD	Epulopiscium	Propionibacterium	0.253320377	1.26E-08	22210	7512
Genus	UC	Roseburia	Odoribacter	0.253160768	5.20E-08	144133	40975
Genus	CD	Fusobacterium	Tepidimonas	0.252894988	1.33E-08	156436	2732
Genus	CD	Sutterella	Slackia	0.252754335	1.36E-08	586426	2271
Genus	UC	[Ruminococcus]	Klebsiella	0.252731162	5.49E-08	134177	2793
Genus	UC	Actinobacillus	Enterococcus	0.252644883	5.55E-08	18444	6935
Genus	UC	Fusobacterium	Finegoldia	0.252302081	5.79E-08	98401	3816
Genus	UC	Paraprevotella	Catenibacterium	0.25229415	5.79E-08	14943	7131
Genus	UC	Prevotella	Leptotrichia	0.252120571	5.92E-08	778755	1174
Genus	CD	Epulopiscium	Clostridium	0.252025309	1.50E-08	22210	59244
Genus	UC	Ruminococcus	Bilophila	0.251538453	6.36E-08	87937	12118
Genus	UC	Oscillospira	Eggerthella	0.251447773	6.43E-08	88409	2725
Genus	CD	Epulopiscium	Actinobacillus	0.25139275	1.63E-08	22210	37020
Genus	CD	Finegoldia	Pseudomonas	0.251307601	1.65E-08	1379	2336
Genus	CD	Haemophilus	Anaerococcus	0.251154494	1.68E-08	215621	1442
Genus	CD	Odoribacter	Dialister	0.250868332	1.75E-08	60883	12197
Genus	CD	Ruminococcus	Dorea	0.250811097	1.76E-08	55319	41932
Genus	UC	Prevotella	[Eubacterium]	0.250680299	7.08E-08	778755	46965
Genus	UC	Propionibacterium	Leptotrichia	0.250477944	7.26E-08	6791	1174
Genus	CD	Brachyspira	Paraprevotella	0.250417567	1.86E-08	21273	19724
Genus	CD	Actinomyces	Porphyromonas	0.250262208	1.90E-08	3690	2953
Genus	CD	Staphylococcus	Parvimonas	0.250185414	1.92E-08	8542	1550
Genus	UC	Prevotella	Akkermansia	0.250152043	7.55E-08	778755	44665
Genus	CD	Veillonella	Propionibacterium	0.250028024	1.96E-08	33618	7512

Suppl. Table 7. Pairwise co-occurrence relationship statistics for Cohort 2. 48 CD and 41 UC taxa were compared for 462 IBD samples. Spearman's correlation coefficient was used for correlation and p value calculated using PERMANOVA.

Rank	Disease	Taxa 1	Taxa 2	rho value	p value	Abundance 1	Abundance 2
Phylum	UC	Actinobacteria	Bacteroidetes	0.271863684	9.46E-05	28160	2333626
Phylum	UC	Actinobacteria	Firmicutes	0.646345224	3.68E-25	28160	1842867
Phylum	UC	Actinobacteria	Fusobacteria	0.313313333	5.93E-06	28160	55772
Phylum	UC	Actinobacteria	Proteobacteria	0.356836065	2.00E-07	28160	1462556
Phylum	UC	Bacteroidetes	Firmicutes	0.388049192	1.26E-08	2333626	1842867
Phylum	UC	Cyanobacteria	Tenericutes	0.302534516	1.27E-05	1502	2178
Phylum	UC	Cyanobacteria	Verrucomicrobia	0.273808666	8.38E-05	1502	16067
Phylum	UC	Firmicutes	Fusobacteria	0.358026389	1.81E-07	1842867	55772
Phylum	UC	Firmicutes	Synergistetes	0.316603689	4.67E-06	1842867	1430
Phylum	UC	Fusobacteria	Proteobacteria	0.366465995	8.77E-08	55772	1462556
Phylum	UC	Tenericutes	Verrucomicrobia	0.324473566	2.61E-06	2178	16067
Phylum	CD	Actinobacteria	Firmicutes	0.47696111	2.07E-14	32231	1999749
Phylum	CD	Actinobacteria	Fusobacteria	0.348732613	5.98E-08	32231	29327
Phylum	CD	Actinobacteria	Proteobacteria	0.277092493	2.10E-05	32231	1409554
Phylum	CD	Actinobacteria	Tenericutes	0.267474364	4.12E-05	32231	1699
Phylum	CD	Bacteroidetes	Firmicutes	0.346797425	7.15E-08	4265418	1999749
Phylum	CD	Firmicutes	Fusobacteria	0.254940747	9.56E-05	1999749	29327
Phylum	CD	Fusobacteria	Proteobacteria	0.381715946	2.34E-09	29327	1409554
Genus	UC	Faecalibacterium	Prevotella	0.262596288	0.0001659	331663	172617
Genus	UC	Faecalibacterium	Blautia	0.473153171	1.31E-12	331663	82300
Genus	UC	Faecalibacterium	Coprococcus	0.630184018	1.21E-23	331663	55499
Genus	UC	Faecalibacterium	Oscillospira	0.47998766	5.60E-13	331663	31590
Genus	UC	Faecalibacterium	Roseburia	0.494718743	8.34E-14	331663	21852
Genus	UC	Faecalibacterium	Phascolarctobacterium	0.340172283	7.78E-07	331663	18891
Genus	UC	Faecalibacterium	Lachnospira	0.585976491	6.36E-20	331663	14874
Genus	UC	Faecalibacterium	.Prevotella.	0.301668938	1.35E-05	331663	24138
Genus	UC	Faecalibacterium	Odoribacter	0.423880819	3.61E-10	331663	17945
Genus	UC	Faecalibacterium	.Eubacterium.	0.352139754	2.95E-07	331663	9544
Genus	UC	Faecalibacterium	Ruminococcus	0.557646975	8.05E-18	331663	15821
Genus	UC	Faecalibacterium	Bilophila	0.35859129	1.72E-07	331663	6604
Genus	UC	Faecalibacterium	Dorea	0.291422153	2.70E-05	331663	18372
Genus	UC	Faecalibacterium	Collinsella	0.308814348	8.18E-06	331663	9712
Genus	UC	Faecalibacterium	Bifidobacterium	0.441114603	5.60E-11	331663	9462
Genus	UC	Faecalibacterium	Clostridium	0.330843489	1.61E-06	331663	1190
Genus	UC	Faecalibacterium	Acidaminococcus	0.252887352	0.0002923	331663	4006
Genus	UC	Faecalibacterium	Dialister	0.38788334	1.28E-08	331663	2139
Genus	UC	Parabacteroides	Sutterella	0.351064412	3.23E-07	90529	122182
Genus	UC	Parabacteroides	Prevotella	0.277277589	6.75E-05	90529	172617
Genus	UC	Parabacteroides	Akkermansia	0.298926583	1.63E-05	90529	16041
Genus	UC	Parabacteroides	Phascolarctobacterium	0.277437556	6.68E-05	90529	18891
Genus	UC	Parabacteroides	Odoribacter	0.438186794	7.74E-11	90529	17945
Genus	UC	Parabacteroides	Butyrivimonas	0.501718865	3.27E-14	90529	10649
Genus	UC	Parabacteroides	Bilophila	0.260537627	0.0001874	90529	6604
Genus	UC	Parabacteroides	Collinsella	0.414607701	9.41E-10	90529	9712
Genus	UC	Parabacteroides	Acidaminococcus	0.332132149	1.46E-06	90529	4006
Genus	UC	Sutterella	Prevotella	0.253498046	0.0002823	122182	172617
Genus	UC	Sutterella	Akkermansia	0.312717115	6.19E-06	122182	16041
Genus	UC	Sutterella	.Eubacterium.	0.297681801	1.77E-05	122182	9544
Genus	UC	Sutterella	Bilophila	0.430501215	1.78E-10	122182	6604
Genus	UC	Sutterella	Bifidobacterium	0.329889816	1.73E-06	122182	9462
Genus	UC	Sutterella	Acidaminococcus	0.318994484	3.92E-06	122182	4006
Genus	UC	Prevotella	Coprococcus	0.35320032	2.70E-07	172617	55499
Genus	UC	Prevotella	Streptococcus	0.280336458	5.56E-05	172617	45945
Genus	UC	Prevotella	Phascolarctobacterium	0.383691295	1.88E-08	172617	18891
Genus	UC	Prevotella	Lachnospira	0.288174841	3.35E-05	172617	14874
Genus	UC	Prevotella	.Prevotella.	0.402322089	3.21E-09	172617	24138
Genus	UC	Prevotella	.Eubacterium.	0.313214611	5.97E-06	172617	9544
Genus	UC	Prevotella	Butyrivimonas	0.347942799	4.17E-07	172617	10649
Genus	UC	Prevotella	Dorea	0.268068543	0.0001193	172617	18372

Genus	UC	Prevotella	Paraprevotella	0.366443983	8.79E-08	172617	6987
Genus	UC	Prevotella	Collinsella	0.400922459	3.68E-09	172617	9712
Genus	UC	Prevotella	Bifidobacterium	0.342322326	6.56E-07	172617	9462
Genus	UC	Prevotella	Clostridium	0.400110551	3.98E-09	172617	1190
Genus	UC	Prevotella	Corynebacterium	0.346643261	4.63E-07	172617	2021
Genus	UC	.Ruminococcus.	Epulopiscium	0.322622416	3.00E-06	119215	10749
Genus	UC	.Ruminococcus.	Enterococcus	0.366720149	8.58E-08	119215	11416
Genus	UC	.Ruminococcus.	.Eubacterium.	0.311393331	6.81E-06	119215	9544
Genus	UC	.Ruminococcus.	Dorea	0.289863926	2.99E-05	119215	18372
Genus	UC	.Ruminococcus.	Klebsiella	0.347839334	4.20E-07	119215	7603
Genus	UC	.Ruminococcus.	Propionibacterium	0.3079839	8.68E-06	119215	1989
Genus	UC	.Ruminococcus.	Actinobacillus	0.275257845	7.66E-05	119215	3273
Genus	UC	.Ruminococcus.	Corynebacterium	0.441523128	5.35E-11	119215	2021
Genus	UC	.Ruminococcus.	Staphylococcus	0.342120924	6.66E-07	119215	2125
Genus	UC	.Ruminococcus.	Tepidimonas	0.362100707	1.28E-07	119215	1125
Genus	UC	Fusobacterium	Haemophilus	0.423549961	3.73E-10	55616	35744
Genus	UC	Fusobacterium	Streptococcus	0.41643258	7.81E-10	55616	45945
Genus	UC	Fusobacterium	Epulopiscium	0.388492237	1.21E-08	55616	10749
Genus	UC	Fusobacterium	Enterococcus	0.46658433	2.93E-12	55616	11416
Genus	UC	Fusobacterium	Dorea	0.273856297	8.36E-05	55616	18372
Genus	UC	Fusobacterium	Veillonella	0.423219563	3.86E-10	55616	8449
Genus	UC	Fusobacterium	Propionibacterium	0.350673754	3.33E-07	55616	1989
Genus	UC	Fusobacterium	Actinobacillus	0.438788349	7.24E-11	55616	3273
Genus	UC	Fusobacterium	Corynebacterium	0.284639599	4.22E-05	55616	2021
Genus	UC	Fusobacterium	Staphylococcus	0.393156018	7.77E-09	55616	2125
Genus	UC	Fusobacterium	Actinomyces	0.353173914	2.71E-07	55616	1460
Genus	UC	Blautia	Coprococcus	0.458661988	7.52E-12	82300	55499
Genus	UC	Blautia	Oscillospira	0.511662594	8.33E-15	82300	31590
Genus	UC	Blautia	Roseburia	0.453784144	1.33E-11	82300	21852
Genus	UC	Blautia	Phascolarctobacterium	0.311772971	6.63E-06	82300	18891
Genus	UC	Blautia	Lachnospira	0.485293399	2.85E-13	82300	14874
Genus	UC	Blautia	Odoribacter	0.36726132	8.19E-08	82300	17945
Genus	UC	Blautia	.Eubacterium.	0.256892606	0.000232	82300	9544
Genus	UC	Blautia	Ruminococcus	0.560258644	5.25E-18	82300	15821
Genus	UC	Blautia	Lactobacillus	0.287722333	3.45E-05	82300	8775
Genus	UC	Blautia	Bilophila	0.365677862	9.39E-08	82300	6604
Genus	UC	Blautia	Dorea	0.580145243	1.79E-19	82300	18372
Genus	UC	Blautia	Collinsella	0.340979196	7.30E-07	82300	9712
Genus	UC	Blautia	Bifidobacterium	0.55748433	8.26E-18	82300	9462
Genus	UC	Blautia	Clostridium	0.263486858	0.0001573	82300	1190
Genus	UC	Blautia	Acidaminococcus	0.36984703	6.53E-08	82300	4006
Genus	UC	Blautia	Dialister	0.443394086	4.34E-11	82300	2139
Genus	UC	Blautia	Coprobaillus	0.288530683	3.27E-05	82300	1836
Genus	UC	Blautia	Lactococcus	0.305570345	1.03E-05	82300	1289
Genus	UC	Haemophilus	Streptococcus	0.636970395	2.86E-24	35744	45945
Genus	UC	Haemophilus	Enterococcus	0.514855617	5.32E-15	35744	11416
Genus	UC	Haemophilus	.Eubacterium.	0.257070776	0.0002296	35744	9544
Genus	UC	Haemophilus	Lactobacillus	0.267926099	0.0001204	35744	8775
Genus	UC	Haemophilus	Veillonella	0.549573565	2.94E-17	35744	8449
Genus	UC	Haemophilus	Clostridium	0.272467594	9.11E-05	35744	1190
Genus	UC	Haemophilus	Propionibacterium	0.371916607	5.44E-08	35744	1989
Genus	UC	Haemophilus	Actinobacillus	0.550462381	2.56E-17	35744	3273
Genus	UC	Haemophilus	Corynebacterium	0.275436675	7.58E-05	35744	2021
Genus	UC	Haemophilus	Staphylococcus	0.431610804	1.58E-10	35744	2125
Genus	UC	Haemophilus	Actinomyces	0.349193169	3.76E-07	35744	1460
Genus	UC	Coprococcus	Oscillospira	0.415669893	8.45E-10	55499	31590
Genus	UC	Coprococcus	Roseburia	0.475936979	9.29E-13	55499	21852
Genus	UC	Coprococcus	Phascolarctobacterium	0.252739468	0.0002948	55499	18891
Genus	UC	Coprococcus	Lachnospira	0.558298356	7.24E-18	55499	14874
Genus	UC	Coprococcus	.Prevotella.	0.270439707	0.0001032	55499	24138
Genus	UC	Coprococcus	Odoribacter	0.391075834	9.46E-09	55499	17945
Genus	UC	Coprococcus	.Eubacterium.	0.27168632	9.56E-05	55499	9544
Genus	UC	Coprococcus	Ruminococcus	0.641872809	9.87E-25	55499	15821
Genus	UC	Coprococcus	Bilophila	0.342729057	6.35E-07	55499	6604

Genus	UC	Coprococcus	Dorea	0.28850836	3.27E-05	55499	18372
Genus	UC	Coprococcus	Collinsella	0.302551826	1.27E-05	55499	9712
Genus	UC	Coprococcus	Desulfovibrio	0.318274719	4.13E-06	55499	9790
Genus	UC	Coprococcus	Bifidobacterium	0.511125412	8.98E-15	55499	9462
Genus	UC	Coprococcus	Clostridium	0.416121868	8.06E-10	55499	1190
Genus	UC	Coprococcus	Acidaminococcus	0.317954459	4.23E-06	55499	4006
Genus	UC	Coprococcus	Dialister	0.396453142	5.67E-09	55499	2139
Genus	UC	Coprococcus	Coprobacillus	0.282469108	4.85E-05	55499	1836
Genus	UC	Oscillospira	Akkermansia	0.260182093	0.0001914	31590	16041
Genus	UC	Oscillospira	Roseburia	0.266447867	0.0001317	31590	21852
Genus	UC	Oscillospira	Phascolarctobacterium	0.33371429	1.29E-06	31590	18891
Genus	UC	Oscillospira	Lachnospira	0.36228915	1.26E-07	31590	14874
Genus	UC	Oscillospira	Odoribacter	0.522364954	1.82E-15	31590	17945
Genus	UC	Oscillospira	.Eubacterium.	0.27220473	9.26E-05	31590	9544
Genus	UC	Oscillospira	Ruminococcus	0.6464355	3.61E-25	31590	15821
Genus	UC	Oscillospira	Bilophila	0.533162539	3.70E-16	31590	6604
Genus	UC	Oscillospira	Dorea	0.489215088	1.72E-13	31590	18372
Genus	UC	Oscillospira	Collinsella	0.275514576	7.54E-05	31590	9712
Genus	UC	Oscillospira	Bifidobacterium	0.388054588	1.26E-08	31590	9462
Genus	UC	Oscillospira	Acidaminococcus	0.26961115	0.0001086	31590	4006
Genus	UC	Oscillospira	Dialister	0.316636541	4.66E-06	31590	2139
Genus	UC	Oscillospira	Coprobacillus	0.441741538	5.22E-11	31590	1836
Genus	UC	Oscillospira	Anaerotruncus	0.430453947	1.79E-10	31590	1458
Genus	UC	Streptococcus	Roseburia	0.269572719	0.0001089	45945	21852
Genus	UC	Streptococcus	Lachnospira	0.296306892	1.95E-05	45945	14874
Genus	UC	Streptococcus	Enterococcus	0.632043318	8.16E-24	45945	11416
Genus	UC	Streptococcus	.Eubacterium.	0.302353435	1.29E-05	45945	9544
Genus	UC	Streptococcus	Ruminococcus	0.341617101	6.93E-07	45945	15821
Genus	UC	Streptococcus	Lactobacillus	0.427522079	2.45E-10	45945	8775
Genus	UC	Streptococcus	Paraprevotella	0.326250646	2.28E-06	45945	6987
Genus	UC	Streptococcus	Veillonella	0.567951051	1.46E-18	45945	8449
Genus	UC	Streptococcus	Bifidobacterium	0.261580555	0.0001762	45945	9462
Genus	UC	Streptococcus	Klebsiella	0.347525291	4.31E-07	45945	7603
Genus	UC	Streptococcus	Clostridium	0.334221494	1.24E-06	45945	1190
Genus	UC	Streptococcus	Propionibacterium	0.485171443	2.89E-13	45945	1989
Genus	UC	Streptococcus	Actinobacillus	0.495665998	7.36E-14	45945	3273
Genus	UC	Streptococcus	Corynebacterium	0.356946196	1.98E-07	45945	2021
Genus	UC	Streptococcus	Staphylococcus	0.541612521	1.02E-16	45945	2125
Genus	UC	Streptococcus	Actinomyces	0.549733238	2.87E-17	45945	1460
Genus	UC	Streptococcus	Lactococcus	0.267044007	0.000127	45945	1289
Genus	UC	Akkermansia	Phascolarctobacterium	0.252086704	0.000306	16041	18891
Genus	UC	Akkermansia	Ruminococcus	0.264084603	0.0001518	16041	15821
Genus	UC	Akkermansia	Lactobacillus	0.291807703	2.63E-05	16041	8775
Genus	UC	Akkermansia	Butyricimonas	0.257841738	0.0002195	16041	10649
Genus	UC	Akkermansia	Bilophila	0.265996656	0.0001353	16041	6604
Genus	UC	Akkermansia	Acidaminococcus	0.332183874	1.45E-06	16041	4006
Genus	UC	Akkermansia	Coprobacillus	0.272238392	9.24E-05	16041	1836
Genus	UC	Akkermansia	Anaerotruncus	0.311417133	6.80E-06	16041	1458
Genus	UC	Roseburia	Lachnospira	0.647086992	3.12E-25	21852	14874
Genus	UC	Roseburia	.Prevotella.	0.250534589	0.0003343	21852	24138
Genus	UC	Roseburia	.Eubacterium.	0.289870507	2.99E-05	21852	9544
Genus	UC	Roseburia	Ruminococcus	0.543022542	8.22E-17	21852	15821
Genus	UC	Roseburia	Bifidobacterium	0.405682986	2.31E-09	21852	9462
Genus	UC	Roseburia	Clostridium	0.284160132	4.35E-05	21852	1190
Genus	UC	Roseburia	Dialister	0.39995809	4.04E-09	21852	2139
Genus	UC	Phascolarctobacterium	Lachnospira	0.361887262	1.30E-07	18891	14874
Genus	UC	Phascolarctobacterium	.Prevotella.	0.265053586	0.0001432	18891	24138
Genus	UC	Phascolarctobacterium	Butyricimonas	0.390457152	1.00E-08	18891	10649
Genus	UC	Phascolarctobacterium	Bilophila	0.258697401	0.0002088	18891	6604
Genus	UC	Phascolarctobacterium	Dorea	0.258123757	0.0002159	18891	18372
Genus	UC	Phascolarctobacterium	Collinsella	0.275494417	7.55E-05	18891	9712
Genus	UC	Phascolarctobacterium	Acidaminococcus	0.280781641	5.40E-05	18891	4006
Genus	UC	Lachnospira	Odoribacter	0.375070607	4.11E-08	14874	17945
Genus	UC	Lachnospira	Ruminococcus	0.63882007	1.92E-24	14874	15821

Genus	UC	Lachnospira	Dorea	0.29406556	2.26E-05	14874	18372
Genus	UC	Lachnospira	Collinsella	0.256686197	0.0002348	14874	9712
Genus	UC	Lachnospira	Bifidobacterium	0.543523514	7.60E-17	14874	9462
Genus	UC	Lachnospira	Clostridium	0.442333518	4.89E-11	14874	1190
Genus	UC	Odoribacter	Ruminococcus	0.437687241	8.18E-11	17945	15821
Genus	UC	Odoribacter	Butyricimonas	0.495489225	7.53E-14	17945	10649
Genus	UC	Odoribacter	Bilophila	0.373363821	4.79E-08	17945	6604
Genus	UC	Odoribacter	Dorea	0.383664449	1.89E-08	17945	18372
Genus	UC	Odoribacter	Collinsella	0.306349774	9.73E-06	17945	9712
Genus	UC	Odoribacter	Bifidobacterium	0.333845953	1.28E-06	17945	9462
Genus	UC	Enterococcus	Ruminococcus	0.297249629	1.83E-05	11416	15821
Genus	UC	Enterococcus	Lactobacillus	0.384926554	1.68E-08	11416	8775
Genus	UC	Enterococcus	Veillonella	0.464764566	3.64E-12	11416	8449
Genus	UC	Enterococcus	Bifidobacterium	0.281420764	5.19E-05	11416	9462
Genus	UC	Enterococcus	Klebsiella	0.311004931	7.00E-06	11416	7603
Genus	UC	Enterococcus	Clostridium	0.265609054	0.0001385	11416	1190
Genus	UC	Enterococcus	Propionibacterium	0.43844446	7.52E-11	11416	1989
Genus	UC	Enterococcus	Actinobacillus	0.389663825	1.08E-08	11416	3273
Genus	UC	Enterococcus	Corynebacterium	0.409745018	1.54E-09	11416	2021
Genus	UC	Enterococcus	Staphylococcus	0.441816806	5.18E-11	11416	2125
Genus	UC	Enterococcus	Actinomyces	0.544836123	6.20E-17	11416	1460
Genus	UC	Enterococcus	Tepidimonas	0.260737411	0.0001852	11416	1125
Genus	UC	Enterococcus	Lactococcus	0.381868175	2.22E-08	11416	1289
Genus	UC	.Eubacterium.	Ruminococcus	0.30659411	9.57E-06	9544	15821
Genus	UC	.Eubacterium.	Dorea	0.354917601	2.34E-07	9544	18372
Genus	UC	.Eubacterium.	Bifidobacterium	0.304614607	1.10E-05	9544	9462
Genus	UC	.Eubacterium.	Propionibacterium	0.388254011	1.23E-08	9544	1989
Genus	UC	.Eubacterium.	Actinobacillus	0.373393387	4.77E-08	9544	3273
Genus	UC	.Eubacterium.	Corynebacterium	0.300835158	1.43E-05	9544	2021
Genus	UC	.Eubacterium.	Staphylococcus	0.374009397	4.52E-08	9544	2125
Genus	UC	Ruminococcus	Lactobacillus	0.295745657	2.02E-05	15821	8775
Genus	UC	Ruminococcus	Bilophila	0.351499986	3.11E-07	15821	6604
Genus	UC	Ruminococcus	Dorea	0.407149472	1.99E-09	15821	18372
Genus	UC	Ruminococcus	Collinsella	0.262211041	0.0001697	15821	9712
Genus	UC	Ruminococcus	Desulfovibrio	0.282788054	4.75E-05	15821	9790
Genus	UC	Ruminococcus	Bifidobacterium	0.61631639	2.05E-22	15821	9462
Genus	UC	Ruminococcus	Clostridium	0.411449286	1.30E-09	15821	1190
Genus	UC	Ruminococcus	Acidaminococcus	0.312860926	6.13E-06	15821	4006
Genus	UC	Ruminococcus	Dialister	0.472916489	1.35E-12	15821	2139
Genus	UC	Ruminococcus	Coprobacillus	0.307855354	8.76E-06	15821	1836
Genus	UC	Ruminococcus	Anaerotruncus	0.329264763	1.82E-06	15821	1458
Genus	UC	Ruminococcus	Lactococcus	0.357515349	1.89E-07	15821	1289
Genus	UC	Lactobacillus	Dorea	0.27006746	0.0001056	8775	18372
Genus	UC	Lactobacillus	Bifidobacterium	0.306716726	9.49E-06	8775	9462
Genus	UC	Lactobacillus	Clostridium	0.250300487	0.0003388	8775	1190
Genus	UC	Lactobacillus	Propionibacterium	0.45787494	8.25E-12	8775	1989
Genus	UC	Lactobacillus	Actinobacillus	0.371257293	5.77E-08	8775	3273
Genus	UC	Lactobacillus	Corynebacterium	0.496992912	6.17E-14	8775	2021
Genus	UC	Lactobacillus	Staphylococcus	0.473335288	1.28E-12	8775	2125
Genus	UC	Lactobacillus	Actinomyces	0.354057865	2.52E-07	8775	1460
Genus	UC	Lactobacillus	Dialister	0.274884086	7.84E-05	8775	2139
Genus	UC	Lactobacillus	Lactococcus	0.294307264	2.23E-05	8775	1289
Genus	UC	Butyricimonas	Dorea	0.251969735	0.0003081	10649	18372
Genus	UC	Butyricimonas	Paraprevotella	0.386536068	1.45E-08	10649	6987
Genus	UC	Butyricimonas	Collinsella	0.262011137	0.0001717	10649	9712
Genus	UC	Butyricimonas	Acidaminococcus	0.259476222	0.0001995	10649	4006
Genus	UC	Bilophila	Dorea	0.305165174	1.06E-05	6604	18372
Genus	UC	Bilophila	Collinsella	0.324663038	2.57E-06	6604	9712
Genus	UC	Bilophila	Desulfovibrio	0.322752311	2.97E-06	6604	9790
Genus	UC	Bilophila	Bifidobacterium	0.400225364	3.94E-09	6604	9462
Genus	UC	Bilophila	Acidaminococcus	0.417113569	7.28E-10	6604	4006
Genus	UC	Bilophila	Dialister	0.318458479	4.08E-06	6604	2139
Genus	UC	Bilophila	Anaerotruncus	0.409228622	1.62E-09	6604	1458
Genus	UC	Dorea	Collinsella	0.359689392	1.57E-07	18372	9712

Genus	UC	Dorea	Bifidobacterium	0.458157364	7.98E-12	18372	9462
Genus	UC	Dorea	Actinomyces	0.265104309	0.0001428	18372	1460
Genus	UC	Dorea	Coprobacillus	0.306794693	9.43E-06	18372	1836
Genus	UC	Paraprevotella	Desulfovibrio	0.257027203	0.0002302	6987	9790
Genus	UC	Paraprevotella	Bifidobacterium	0.254321117	0.0002692	6987	9462
Genus	UC	Collinsella	Desulfovibrio	0.331300556	1.55E-06	9712	9790
Genus	UC	Collinsella	Bifidobacterium	0.469819702	1.98E-12	9712	9462
Genus	UC	Collinsella	Acidaminococcus	0.321923239	3.16E-06	9712	4006
Genus	UC	Veillonella	Klebsiella	0.259023117	0.0002049	8449	7603
Genus	UC	Veillonella	Clostridium	0.312452087	6.31E-06	8449	1190
Genus	UC	Veillonella	Actinomyces	0.435780123	1.01E-10	8449	1460
Genus	UC	Veillonella	Tepidimonas	0.259513543	0.000199	8449	1125
Genus	UC	Desulfovibrio	Bifidobacterium	0.396138456	5.85E-09	9790	9462
Genus	UC	Desulfovibrio	Acidaminococcus	0.385249738	1.63E-08	9790	4006
Genus	UC	Desulfovibrio	Dialister	0.259289397	0.0002017	9790	2139
Genus	UC	Turicibacter	Clostridium	0.284655374	4.21E-05	5166	1190
Genus	UC	Bifidobacterium	Clostridium	0.334998794	1.17E-06	9462	1190
Genus	UC	Bifidobacterium	Acidaminococcus	0.398425943	4.69E-09	9462	4006
Genus	UC	Bifidobacterium	Actinomyces	0.253556855	0.0002813	9462	1460
Genus	UC	Bifidobacterium	Dialister	0.473870401	1.20E-12	9462	2139
Genus	UC	Bifidobacterium	Lactococcus	0.367423542	8.07E-08	9462	1289
Genus	UC	Klebsiella	Propionibacterium	0.272285081	9.22E-05	7603	1989
Genus	UC	Klebsiella	Actinobacillus	0.268888895	0.0001135	7603	3273
Genus	UC	Klebsiella	Staphylococcus	0.257598993	0.0002227	7603	2125
Genus	UC	Klebsiella	Actinomyces	0.320033017	3.63E-06	7603	1460
Genus	UC	Klebsiella	Tepidimonas	0.286373424	3.77E-05	7603	1125
Genus	UC	Clostridium	Acidaminococcus	0.352987864	2.75E-07	1190	4006
Genus	UC	Clostridium	Lactococcus	0.329933671	1.73E-06	1190	1289
Genus	UC	Acidaminococcus	Dialister	0.308041456	8.64E-06	4006	2139
Genus	UC	Propionibacterium	Actinobacillus	0.360283834	1.49E-07	1989	3273
Genus	UC	Propionibacterium	Corynebacterium	0.531704392	4.60E-16	1989	2021
Genus	UC	Propionibacterium	Staphylococcus	0.62002255	9.76E-23	1989	2125
Genus	UC	Propionibacterium	Actinomyces	0.452397047	1.56E-11	1989	1460
Genus	UC	Propionibacterium	Tepidimonas	0.35666878	2.02E-07	1989	1125
Genus	UC	Actinobacillus	Corynebacterium	0.3078455	8.76E-06	3273	2021
Genus	UC	Actinobacillus	Staphylococcus	0.434007916	1.22E-10	3273	2125
Genus	UC	Actinobacillus	Actinomyces	0.320807405	3.43E-06	3273	1460
Genus	UC	Corynebacterium	Staphylococcus	0.652649393	8.91E-26	2021	2125
Genus	UC	Corynebacterium	Actinomyces	0.352420377	2.88E-07	2021	1460
Genus	UC	Corynebacterium	Tepidimonas	0.360664583	1.44E-07	2021	1125
Genus	UC	Staphylococcus	Actinomyces	0.463102744	4.44E-12	2125	1460
Genus	UC	Staphylococcus	Tepidimonas	0.359700295	1.57E-07	2125	1125
Genus	UC	Actinomyces	Tepidimonas	0.259495953	0.0001992	1460	1125
Genus	CD	Faecalibacterium	Sutterella	0.259093833	7.27E-05	274838	187292
Genus	CD	Faecalibacterium	Prevotella	0.382175255	2.23E-09	274838	100233
Genus	CD	Faecalibacterium	Blautia	0.286479493	1.06E-05	274838	98202
Genus	CD	Faecalibacterium	Coprococcus	0.538793319	1.22E-18	274838	19239
Genus	CD	Faecalibacterium	Oscillospira	0.392431875	7.52E-10	274838	45124
Genus	CD	Faecalibacterium	Roseburia	0.510337059	1.38E-16	274838	33288
Genus	CD	Faecalibacterium	Phascolarctobacterium	0.271458313	3.13E-05	274838	16258
Genus	CD	Faecalibacterium	Lachnospira	0.505765029	2.83E-16	274838	32847
Genus	CD	Faecalibacterium	Odoribacter	0.372965853	5.72E-09	274838	17034
Genus	CD	Faecalibacterium	.Eubacterium.	0.271212329	3.18E-05	274838	18593
Genus	CD	Faecalibacterium	Ruminococcus	0.569509077	4.35E-21	274838	14653
Genus	CD	Faecalibacterium	Bilophila	0.330240481	3.15E-07	274838	11846
Genus	CD	Faecalibacterium	Collinsella	0.37333136	5.52E-09	274838	4752
Genus	CD	Faecalibacterium	Desulfovibrio	0.340382725	1.28E-07	274838	3334
Genus	CD	Faecalibacterium	Turicibacter	0.264303897	5.12E-05	274838	3815
Genus	CD	Faecalibacterium	Bifidobacterium	0.280503849	1.64E-05	274838	5617
Genus	CD	Faecalibacterium	Clostridium	0.252756896	0.0001102	274838	3610
Genus	CD	Faecalibacterium	Dialister	0.283029742	1.37E-05	274838	2908
Genus	CD	Faecalibacterium	Porphyromonas	0.259904998	6.89E-05	274838	1487
Genus	CD	Parabacteroides	Sutterella	0.493373698	1.88E-15	151028	187292
Genus	CD	Parabacteroides	Oscillospira	0.303701162	2.84E-06	151028	45124

Genus	CD	Parabacteroides	Odoribacter	0.404889309	1.91E-10	151028	17034
Genus	CD	Parabacteroides	Ruminococcus	0.257849544	7.89E-05	151028	14653
Genus	CD	Parabacteroides	Butyricimonas	0.250567279	0.0001269	151028	6268
Genus	CD	Parabacteroides	Bilophila	0.440402058	2.78E-12	151028	11846
Genus	CD	Parabacteroides	Collinsella	0.422386372	2.53E-11	151028	4752
Genus	CD	Parabacteroides	Acidaminococcus	0.321367425	6.73E-07	151028	10362
Genus	CD	Sutterella	Blautia	0.267241987	4.19E-05	187292	98202
Genus	CD	Sutterella	Phascolarctobacterium	0.288072986	9.43E-06	187292	16258
Genus	CD	Sutterella	Bilophila	0.386699368	1.39E-09	187292	11846
Genus	CD	Sutterella	Collinsella	0.393211841	6.91E-10	187292	4752
Genus	CD	Sutterella	Acidaminococcus	0.389638033	1.01E-09	187292	10362
Genus	CD	Prevotella	Blautia	0.305804237	2.41E-06	100233	98202
Genus	CD	Prevotella	Coprococcus	0.461891014	1.67E-13	100233	19239
Genus	CD	Prevotella	Roseburia	0.303535272	2.88E-06	100233	33288
Genus	CD	Prevotella	Phascolarctobacterium	0.34450176	8.83E-08	100233	16258
Genus	CD	Prevotella	.Prevotella.	0.470492563	5.14E-14	100233	19242
Genus	CD	Prevotella	.Eubacterium.	0.350477116	5.08E-08	100233	18593
Genus	CD	Prevotella	Ruminococcus	0.301636222	3.35E-06	100233	14653
Genus	CD	Prevotella	Collinsella	0.359066417	2.25E-08	100233	4752
Genus	CD	Prevotella	Clostridium	0.399029663	3.67E-10	100233	3610
Genus	CD	Prevotella	Propionibacterium	0.270946266	3.24E-05	100233	7262
Genus	CD	Prevotella	Staphylococcus	0.274506317	2.53E-05	100233	3169
Genus	CD	Prevotella	Porphyromonas	0.387599782	1.26E-09	100233	1487
Genus	CD	.Ruminococcus.	Fusobacterium	0.251838615	0.000117	169355	29002
Genus	CD	.Ruminococcus.	Blautia	0.543287574	5.52E-19	169355	98202
Genus	CD	.Ruminococcus.	Coprococcus	0.272974861	2.81E-05	169355	19239
Genus	CD	.Ruminococcus.	Streptococcus	0.378197197	3.36E-09	169355	64572
Genus	CD	.Ruminococcus.	Roseburia	0.314850313	1.16E-06	169355	33288
Genus	CD	.Ruminococcus.	Epulopiscium	0.425151667	1.82E-11	169355	69139
Genus	CD	.Ruminococcus.	Enterococcus	0.291896066	7.08E-06	169355	52522
Genus	CD	.Ruminococcus.	.Eubacterium.	0.436804699	4.36E-12	169355	18593
Genus	CD	.Ruminococcus.	Dorea	0.586850376	1.38E-22	169355	10117
Genus	CD	.Ruminococcus.	Porphyromonas	0.307246658	2.15E-06	169355	1487
Genus	CD	.Ruminococcus.	Tepidimonas	0.268926576	3.73E-05	169355	1318
Genus	CD	Fusobacterium	Blautia	0.286649299	1.05E-05	29002	98202
Genus	CD	Fusobacterium	Haemophilus	0.367069648	1.03E-08	29002	117037
Genus	CD	Fusobacterium	Streptococcus	0.44891232	9.35E-13	29002	64572
Genus	CD	Fusobacterium	Enterococcus	0.288169445	9.37E-06	29002	52522
Genus	CD	Fusobacterium	Veillonella	0.479095666	1.53E-14	29002	15059
Genus	CD	Fusobacterium	Propionibacterium	0.313331406	1.31E-06	29002	7262
Genus	CD	Fusobacterium	Actinobacillus	0.378037848	3.42E-09	29002	2347
Genus	CD	Fusobacterium	Neisseria	0.373097381	5.65E-09	29002	3564
Genus	CD	Fusobacterium	Corynebacterium	0.282494191	1.42E-05	29002	3243
Genus	CD	Fusobacterium	Staphylococcus	0.354060686	3.63E-08	29002	3169
Genus	CD	Fusobacterium	Actinomyces	0.421594971	2.78E-11	29002	2747
Genus	CD	Fusobacterium	Rothia	0.381144867	2.48E-09	29002	2938
Genus	CD	Fusobacterium	Dialister	0.257629649	8.01E-05	29002	2908
Genus	CD	Fusobacterium	Porphyromonas	0.362365379	1.64E-08	29002	1487
Genus	CD	Fusobacterium	Acinetobacter	0.260434729	6.65E-05	29002	1364
Genus	CD	Blautia	Coprococcus	0.508369131	1.88E-16	98202	19239
Genus	CD	Blautia	Oscillospira	0.254929616	9.57E-05	98202	45124
Genus	CD	Blautia	Streptococcus	0.373476534	5.44E-09	98202	64572
Genus	CD	Blautia	Roseburia	0.518336626	3.81E-17	98202	33288
Genus	CD	Blautia	Lachnospira	0.522770319	1.84E-17	98202	32847
Genus	CD	Blautia	.Eubacterium.	0.457107011	3.18E-13	98202	18593
Genus	CD	Blautia	Ruminococcus	0.386279026	1.45E-09	98202	14653
Genus	CD	Blautia	Dorea	0.589519424	7.98E-23	98202	10117
Genus	CD	Blautia	Collinsella	0.286032343	1.10E-05	98202	4752
Genus	CD	Blautia	Veillonella	0.311066614	1.58E-06	98202	15059
Genus	CD	Blautia	Bifidobacterium	0.392156062	7.75E-10	98202	5617
Genus	CD	Blautia	Dialister	0.434075927	6.12E-12	98202	2908
Genus	CD	Blautia	Porphyromonas	0.292889324	6.57E-06	98202	1487
Genus	CD	Blautia	Tepidimonas	0.256596302	8.58E-05	98202	1318
Genus	CD	Haemophilus	Coprococcus	0.268274524	3.90E-05	117037	19239

Genus	CD	Haemophilus	Streptococcus	0.535061073	2.32E-18	117037	64572
Genus	CD	Haemophilus	Lachnospira	0.307558389	2.09E-06	117037	32847
Genus	CD	Haemophilus	Veillonella	0.382490595	2.16E-09	117037	15059
Genus	CD	Haemophilus	Propionibacterium	0.252028673	0.0001155	117037	7262
Genus	CD	Haemophilus	Actinobacillus	0.577295972	9.48E-22	117037	2347
Genus	CD	Haemophilus	Neisseria	0.385636874	1.55E-09	117037	3564
Genus	CD	Haemophilus	Corynebacterium	0.252481261	0.0001122	117037	3243
Genus	CD	Haemophilus	Staphylococcus	0.26540766	4.75E-05	117037	3169
Genus	CD	Haemophilus	Actinomyces	0.360213812	2.02E-08	117037	2747
Genus	CD	Haemophilus	Rothia	0.345720425	7.89E-08	117037	2938
Genus	CD	Coprococcus	Oscillospira	0.364659582	1.31E-08	19239	45124
Genus	CD	Coprococcus	Streptococcus	0.275685552	2.32E-05	19239	64572
Genus	CD	Coprococcus	Roseburia	0.598706919	1.16E-23	19239	33288
Genus	CD	Coprococcus	Phascolarctobacterium	0.30260348	3.10E-06	19239	16258
Genus	CD	Coprococcus	Lachnospira	0.503255646	4.17E-16	19239	32847
Genus	CD	Coprococcus	.Prevotella.	0.336539972	1.81E-07	19239	19242
Genus	CD	Coprococcus	Odoribacter	0.266794601	4.32E-05	19239	17034
Genus	CD	Coprococcus	.Eubacterium.	0.403678651	2.19E-10	19239	18593
Genus	CD	Coprococcus	Ruminococcus	0.505685299	2.86E-16	19239	14653
Genus	CD	Coprococcus	Dorea	0.314823915	1.16E-06	19239	10117
Genus	CD	Coprococcus	Collinsella	0.31240597	1.41E-06	19239	4752
Genus	CD	Coprococcus	Veillonella	0.325308683	4.82E-07	19239	15059
Genus	CD	Coprococcus	Bifidobacterium	0.374049502	5.13E-09	19239	5617
Genus	CD	Coprococcus	Clostridium	0.355009052	3.32E-08	19239	3610
Genus	CD	Coprococcus	Dialister	0.396822644	4.67E-10	19239	2908
Genus	CD	Coprococcus	Porphyromonas	0.309181743	1.84E-06	19239	1487
Genus	CD	Oscillospira	Odoribacter	0.505100932	3.13E-16	45124	17034
Genus	CD	Oscillospira	.Eubacterium.	0.351472984	4.63E-08	45124	18593
Genus	CD	Oscillospira	Ruminococcus	0.434873496	5.55E-12	45124	14653
Genus	CD	Oscillospira	Bilophila	0.320631542	7.16E-07	45124	11846
Genus	CD	Oscillospira	Dorea	0.374418559	4.94E-09	45124	10117
Genus	CD	Oscillospira	Porphyromonas	0.261438781	6.21E-05	45124	1487
Genus	CD	Oscillospira	Eggerthella	0.500991339	5.92E-16	45124	1641
Genus	CD	Streptococcus	Roseburia	0.261692704	6.11E-05	64572	33288
Genus	CD	Streptococcus	Lachnospira	0.282516416	1.42E-05	64572	32847
Genus	CD	Streptococcus	Epulopiscium	0.296204266	5.10E-06	64572	69139
Genus	CD	Streptococcus	Enterococcus	0.53039608	5.14E-18	64572	52522
Genus	CD	Streptococcus	.Eubacterium.	0.278716598	1.87E-05	64572	18593
Genus	CD	Streptococcus	Lactobacillus	0.325078467	4.91E-07	64572	16151
Genus	CD	Streptococcus	Dorea	0.299707224	3.89E-06	64572	10117
Genus	CD	Streptococcus	Veillonella	0.559744948	2.78E-20	64572	15059
Genus	CD	Streptococcus	Bifidobacterium	0.325198563	4.86E-07	64572	5617
Genus	CD	Streptococcus	Klebsiella	0.356820186	2.79E-08	64572	4816
Genus	CD	Streptococcus	Clostridium	0.341158316	1.20E-07	64572	3610
Genus	CD	Streptococcus	Propionibacterium	0.336112023	1.88E-07	64572	7262
Genus	CD	Streptococcus	Actinobacillus	0.410175135	1.05E-10	64572	2347
Genus	CD	Streptococcus	Neisseria	0.375275315	4.53E-09	64572	3564
Genus	CD	Streptococcus	Corynebacterium	0.372810242	5.81E-09	64572	3243
Genus	CD	Streptococcus	Staphylococcus	0.449065026	9.17E-13	64572	3169
Genus	CD	Streptococcus	Pseudomonas	0.303583008	2.87E-06	64572	4860
Genus	CD	Streptococcus	Actinomyces	0.571145745	3.17E-21	64572	2747
Genus	CD	Streptococcus	Rothia	0.450478837	7.63E-13	64572	2938
Genus	CD	Streptococcus	Porphyromonas	0.323374833	5.68E-07	64572	1487
Genus	CD	Streptococcus	Acinetobacter	0.327843965	3.88E-07	64572	1364
Genus	CD	Akkermansia	Lactobacillus	0.333940441	2.28E-07	22878	16151
Genus	CD	Roseburia	Lachnospira	0.704101955	1.33E-35	33288	32847
Genus	CD	Roseburia	.Eubacterium.	0.302148477	3.21E-06	33288	18593
Genus	CD	Roseburia	Ruminococcus	0.601901931	5.83E-24	33288	14653
Genus	CD	Roseburia	Lactobacillus	0.299370878	3.99E-06	33288	16151
Genus	CD	Roseburia	Collinsella	0.318199342	8.78E-07	33288	4752
Genus	CD	Roseburia	Veillonella	0.31803944	8.89E-07	33288	15059
Genus	CD	Roseburia	Bifidobacterium	0.531612792	4.18E-18	33288	5617
Genus	CD	Roseburia	Clostridium	0.385892064	1.51E-09	33288	3610
Genus	CD	Roseburia	Rothia	0.262658184	5.73E-05	33288	2938

Genus	CD	Roseburia	Dialister	0.553410331	8.95E-20	33288	2908
Genus	CD	Roseburia	Porphyromonas	0.282599289	1.41E-05	33288	1487
Genus	CD	Phascolarctobacterium	Butyricimonas	0.343294901	9.85E-08	16258	6268
Genus	CD	Phascolarctobacterium	Paraprevotella	0.286479326	1.06E-05	16258	4425
Genus	CD	Phascolarctobacterium	Collinsella	0.254606833	9.77E-05	16258	4752
Genus	CD	Phascolarctobacterium	Desulfovibrio	0.277374342	2.06E-05	16258	3334
Genus	CD	Phascolarctobacterium	Acidaminococcus	0.324808435	5.03E-07	16258	10362
Genus	CD	Lachnospira	Ruminococcus	0.500004021	6.89E-16	32847	14653
Genus	CD	Lachnospira	Lactobacillus	0.328515702	3.66E-07	32847	16151
Genus	CD	Lachnospira	Bifidobacterium	0.523122159	1.74E-17	32847	5617
Genus	CD	Lachnospira	Clostridium	0.322873514	5.93E-07	32847	3610
Genus	CD	Lachnospira	Rothia	0.262955086	5.61E-05	32847	2938
Genus	CD	Lachnospira	Dialister	0.351180886	4.76E-08	32847	2908
Genus	CD	Epulopiscium	Dorea	0.253882389	0.0001024	69139	10117
Genus	CD	Epulopiscium	Turicibacter	0.26499128	4.89E-05	69139	3815
Genus	CD	Epulopiscium	Klebsiella	0.375268455	4.53E-09	69139	4816
Genus	CD	Epulopiscium	Clostridium	0.287660001	9.73E-06	69139	3610
Genus	CD	Epulopiscium	Propionibacterium	0.327571478	3.97E-07	69139	7262
Genus	CD	Epulopiscium	Corynebacterium	0.267485029	4.12E-05	69139	3243
Genus	CD	Epulopiscium	Staphylococcus	0.277230736	2.08E-05	69139	3169
Genus	CD	Epulopiscium	Actinomyces	0.2732041	2.77E-05	69139	2747
Genus	CD	.Prevotella.	Turicibacter	0.291376902	7.36E-06	19242	3815
Genus	CD	.Prevotella.	Clostridium	0.267734979	4.05E-05	19242	3610
Genus	CD	.Prevotella.	Propionibacterium	0.251800367	0.0001172	19242	7262
Genus	CD	Odoribacter	Ruminococcus	0.327296354	4.06E-07	17034	14653
Genus	CD	Odoribacter	Butyricimonas	0.455877491	3.75E-13	17034	6268
Genus	CD	Odoribacter	Bilophila	0.468394843	6.88E-14	17034	11846
Genus	CD	Odoribacter	Eggerthella	0.252766406	0.0001101	17034	1641
Genus	CD	Enterococcus	Lactobacillus	0.366249114	1.12E-08	52522	16151
Genus	CD	Enterococcus	Veillonella	0.392950681	7.11E-10	52522	15059
Genus	CD	Enterococcus	Klebsiella	0.363177911	1.51E-08	52522	4816
Genus	CD	Enterococcus	Clostridium	0.274387717	2.55E-05	52522	3610
Genus	CD	Enterococcus	Propionibacterium	0.291696588	7.19E-06	52522	7262
Genus	CD	Enterococcus	Neisseria	0.286712584	1.04E-05	52522	3564
Genus	CD	Enterococcus	Corynebacterium	0.306606696	2.26E-06	52522	3243
Genus	CD	Enterococcus	Staphylococcus	0.406424859	1.61E-10	52522	3169
Genus	CD	Enterococcus	Actinomyces	0.42488449	1.88E-11	52522	2747
Genus	CD	Enterococcus	Rothia	0.315898343	1.06E-06	52522	2938
Genus	CD	Enterococcus	Acinetobacter	0.298604062	4.24E-06	52522	1364
Genus	CD	.Eubacterium.	Ruminococcus	0.352045206	4.39E-08	18593	14653
Genus	CD	.Eubacterium.	Dorea	0.494445558	1.60E-15	18593	10117
Genus	CD	.Eubacterium.	Collinsella	0.261309333	6.27E-05	18593	4752
Genus	CD	.Eubacterium.	Porphyromonas	0.313667712	1.28E-06	18593	1487
Genus	CD	Ruminococcus	Lactobacillus	0.335997941	1.90E-07	14653	16151
Genus	CD	Ruminococcus	Bilophila	0.362245347	1.66E-08	14653	11846
Genus	CD	Ruminococcus	Collinsella	0.440217905	2.84E-12	14653	4752
Genus	CD	Ruminococcus	Bifidobacterium	0.531878046	4.00E-18	14653	5617
Genus	CD	Ruminococcus	Corynebacterium	0.276685806	2.16E-05	14653	3243
Genus	CD	Ruminococcus	Dialister	0.498641959	8.48E-16	14653	2908
Genus	CD	Ruminococcus	Porphyromonas	0.26974603	3.52E-05	14653	1487
Genus	CD	Ruminococcus	Eggerthella	0.253420261	0.0001056	14653	1641
Genus	CD	Lactobacillus	Bifidobacterium	0.406470621	1.60E-10	16151	5617
Genus	CD	Lactobacillus	Propionibacterium	0.443232165	1.94E-12	16151	7262
Genus	CD	Lactobacillus	Corynebacterium	0.282081637	1.47E-05	16151	3243
Genus	CD	Lactobacillus	Staphylococcus	0.402939712	2.38E-10	16151	3169
Genus	CD	Lactobacillus	Pseudomonas	0.302709079	3.08E-06	16151	4860
Genus	CD	Lactobacillus	Paracoccus	0.273129463	2.78E-05	16151	5011
Genus	CD	Lactobacillus	Acinetobacter	0.446370638	1.30E-12	16151	1364
Genus	CD	Bilophila	Collinsella	0.359707034	2.12E-08	11846	4752
Genus	CD	Bilophila	Acidaminococcus	0.337275517	1.69E-07	11846	10362
Genus	CD	Bilophila	Eggerthella	0.252540142	0.0001118	11846	1641
Genus	CD	Dorea	Porphyromonas	0.31755647	9.26E-07	10117	1487
Genus	CD	Paraprevotella	Collinsella	0.255714634	9.09E-05	4425	4752
Genus	CD	Collinsella	Bifidobacterium	0.346808354	7.14E-08	4752	5617

Genus	CD	Collinsella	Acidaminococcus	0.322967657	5.88E-07	4752	10362
Genus	CD	Collinsella	Dialister	0.267924056	4.00E-05	4752	2908
Genus	CD	Collinsella	Tepidimonas	0.253347539	0.0001061	4752	1318
Genus	CD	Veillonella	Bifidobacterium	0.3924651	7.49E-10	15059	5617
Genus	CD	Veillonella	Klebsiella	0.290368204	7.95E-06	15059	4816
Genus	CD	Veillonella	Actinobacillus	0.262845982	5.65E-05	15059	2347
Genus	CD	Veillonella	Neisseria	0.285472034	1.14E-05	15059	3564
Genus	CD	Veillonella	Actinomyces	0.420851908	3.03E-11	15059	2747
Genus	CD	Veillonella	Rothia	0.450769452	7.34E-13	15059	2938
Genus	CD	Veillonella	Dialister	0.294887738	5.64E-06	15059	2908
Genus	CD	Desulfovibrio	Corynebacterium	0.350788181	4.94E-08	3334	3243
Genus	CD	Desulfovibrio	Tepidimonas	0.338670938	1.50E-07	3334	1318
Genus	CD	Bifidobacterium	Clostridium	0.268158593	3.93E-05	5617	3610
Genus	CD	Bifidobacterium	Acidaminococcus	0.324971691	4.96E-07	5617	10362
Genus	CD	Bifidobacterium	Dialister	0.442034014	2.26E-12	5617	2908
Genus	CD	Klebsiella	Clostridium	0.347377416	6.78E-08	4816	3610
Genus	CD	Klebsiella	Propionibacterium	0.278441426	1.91E-05	4816	7262
Genus	CD	Klebsiella	Actinobacillus	0.259193986	7.22E-05	4816	2347
Genus	CD	Klebsiella	Corynebacterium	0.317170236	9.56E-07	4816	3243
Genus	CD	Klebsiella	Staphylococcus	0.306857453	2.21E-06	4816	3169
Genus	CD	Klebsiella	Acinetobacter	0.31025618	1.68E-06	4816	1364
Genus	CD	Clostridium	Porphyromonas	0.306548773	2.27E-06	3610	1487
Genus	CD	Propionibacterium	Actinobacillus	0.294655549	5.74E-06	7262	2347
Genus	CD	Propionibacterium	Neisseria	0.259072922	7.28E-05	7262	3564
Genus	CD	Propionibacterium	Corynebacterium	0.590138292	7.02E-23	7262	3243
Genus	CD	Propionibacterium	Staphylococcus	0.664995475	1.32E-30	7262	3169
Genus	CD	Propionibacterium	Pseudomonas	0.39430711	6.14E-10	7262	4860
Genus	CD	Propionibacterium	Actinomyces	0.312057495	1.46E-06	7262	2747
Genus	CD	Propionibacterium	Rothia	0.346006319	7.69E-08	7262	2938
Genus	CD	Propionibacterium	Paracoccus	0.301626031	3.35E-06	7262	5011
Genus	CD	Propionibacterium	Tepidimonas	0.328058029	3.80E-07	7262	1318
Genus	CD	Propionibacterium	Acinetobacter	0.476161418	2.32E-14	7262	1364
Genus	CD	Actinobacillus	Neisseria	0.458008925	2.82E-13	2347	3564
Genus	CD	Actinobacillus	Staphylococcus	0.369045407	8.48E-09	2347	3169
Genus	CD	Actinobacillus	Actinomyces	0.334322689	2.20E-07	2347	2747
Genus	CD	Actinobacillus	Rothia	0.250097689	0.0001308	2347	2938
Genus	CD	Neisseria	Corynebacterium	0.31900622	8.20E-07	3564	3243
Genus	CD	Neisseria	Staphylococcus	0.375374926	4.48E-09	3564	3169
Genus	CD	Neisseria	Actinomyces	0.402363211	2.53E-10	3564	2747
Genus	CD	Neisseria	Rothia	0.344514177	8.82E-08	3564	2938
Genus	CD	Neisseria	Porphyromonas	0.281725709	1.51E-05	3564	1487
Genus	CD	Corynebacterium	Staphylococcus	0.63701278	1.82E-27	3243	3169
Genus	CD	Corynebacterium	Pseudomonas	0.356408107	2.90E-08	3243	4860
Genus	CD	Corynebacterium	Actinomyces	0.349977828	5.32E-08	3243	2747
Genus	CD	Corynebacterium	Rothia	0.282573512	1.42E-05	3243	2938
Genus	CD	Corynebacterium	Porphyromonas	0.337444598	1.67E-07	3243	1487
Genus	CD	Corynebacterium	Paracoccus	0.266950624	4.27E-05	3243	5011
Genus	CD	Corynebacterium	Tepidimonas	0.335822475	1.93E-07	3243	1318
Genus	CD	Corynebacterium	Acinetobacter	0.433059743	6.94E-12	3243	1364
Genus	CD	Staphylococcus	Pseudomonas	0.375118528	4.60E-09	3169	4860
Genus	CD	Staphylococcus	Actinomyces	0.407338466	1.45E-10	3169	2747
Genus	CD	Staphylococcus	Rothia	0.335513283	1.98E-07	3169	2938
Genus	CD	Staphylococcus	Porphyromonas	0.278873776	1.85E-05	3169	1487
Genus	CD	Staphylococcus	Paracoccus	0.267035041	4.25E-05	3169	5011
Genus	CD	Staphylococcus	Tepidimonas	0.387190672	1.32E-09	3169	1318
Genus	CD	Staphylococcus	Acinetobacter	0.441687003	2.36E-12	3169	1364
Genus	CD	Pseudomonas	Acinetobacter	0.338804407	1.48E-07	4860	1364
Genus	CD	Actinomyces	Rothia	0.443497587	1.88E-12	2747	2938
Genus	CD	Actinomyces	Porphyromonas	0.295204875	5.51E-06	2747	1487
Genus	CD	Tepidimonas	Acinetobacter	0.302087902	3.23E-06	1318	1364

Suppl. Table 8. Taxa significantly associated with sport, smoking status and alcohol abuse in biopsy samples of Cohort 1. Data was analyzed using MaAsLin pipeline with Benjamini and Hochberg - False discovery rate (BH-FDR) correction (q value).

Variable	Feature	Value	Disease	Coefficient	N	N not 0	P-value	Q-value
Sport	Bacteria Firmicutes Clostridia Clostridiales	SportB	CD	-0.0344626	485	425	1E-05	3E-03
Sport	Bacteria Bacteroidetes Bacteroidia Bacteroidales [Barnesiellaceae]	SportC	CD	-0.0310528	485	401	3E-05	3E-03
Sport	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Blautia	SportC	CD	-0.019083	485	471	9E-05	6E-03
Sport	Bacteria Firmicutes Clostridia Clostridiales	SportC	CD	-0.0262536	485	425	2E-04	1E-02
Sport	Bacteria Firmicutes Erysipelotrichi Erysipelotrichales Erysipelotrichaceae	SportC	CD	-0.0147652	485	464	3E-04	1E-02
Sport	Bacteria Bacteroidetes Bacteroidia Bacteroidales [Barnesiellaceae]	SportB	CD	-0.0283835	485	401	6E-04	1E-02
Sport	Bacteria Firmicutes Clostridia Clostridiales Veillonellaceae Veillonella	SportB	CD	0.0122846	485	393	6E-04	1E-02
Sport	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae Faecalibacterium	SportB	CD	-0.0626382	485	475	2E-03	4E-02
Sport	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae	SportC	CD	-0.0439351	485	473	2E-03	4E-02
Sport	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae Faecalibacterium	SportC	CD	-0.0479401	485	475	9E-03	9E-02
Sport	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Blautia	SportB	CD	-0.0139269	485	471	1E-02	9E-02
Sport	Bacteria Bacteroidetes Bacteroidia Bacteroidales [Odoribacteraceae] Odoribacter	SportC	CD	-0.0128997	485	371	1E-02	1E-01
Sport	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae	SportB	CD	-0.0372041	485	473	2E-02	2E-01
Sport	Bacteria Firmicutes Clostridia Clostridiales Other Other	SportB	CD	0.00932813	485	419	3E-02	2E-01
Sport	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	SportC	CD	-0.0276423	485	485	3E-02	2E-01
Sport	Bacteria Bacteroidetes Bacteroidia Bacteroidales Porphyromonadaceae Parabacteroides	SportB	CD	-0.0293424	485	469	3E-02	2E-01
Sport	Bacteria Bacteroidetes Bacteroidia Bacteroidales Prevotellaceae Prevotella	SportB	CD	0.0037696	485	408	3E-02	2E-01
Sport	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae	SportC	CD	0.0507666	485	481	3E-02	2E-01
Sport	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Verrucomicrobiaceae Akkermansia	SportC	CD	0.0105876	485	365	4E-02	2E-01
Sport	Bacteria Bacteroidetes Bacteroidia Bacteroidales Bacteroidaceae Bacteroides	SportC	CD	-0.05984	485	485	1E-01	4E-01
Sport	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae Oscillospira	SportC	CD	-0.0058783	485	462	1E-01	6E-01
Sport	Bacteria Bacteroidetes Bacteroidia Bacteroidales [Odoribacteraceae] Odoribacter	SportB	CD	-0.0083547	485	371	2E-01	6E-01
Sport	Bacteria Bacteroidetes Bacteroidia Bacteroidales Porphyromonadaceae Parabacteroides	SportC	CD	-0.0174291	485	469	2E-01	6E-01
Sport	Bacteria Firmicutes Erysipelotrichi Erysipelotrichales Erysipelotrichaceae	SportB	CD	-0.0058208	485	464	2E-01	7E-01
Sport	Bacteria Bacteroidetes Bacteroidia Bacteroidales Prevotellaceae Prevotella	SportC	CD	0.0018585	485	408	2E-01	7E-01
Sport	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae Oscillospira	SportB	CD	-0.0053209	485	462	2E-01	8E-01
Sport	Bacteria Firmicutes Clostridia Clostridiales Other Other	SportC	CD	0.00455032	485	419	2E-01	8E-01
Sport	Bacteria Firmicutes Clostridia Clostridiales Veillonellaceae Phascolarctobacterium	SportC	CD	0.00705752	485	330	3E-01	1E+00
Sport	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae	SportB	CD	0.02379881	485	481	4E-01	1E+00
Sport	Bacteria Proteobacteria Gammaproteobacteria Pasteurellales Pasteurellaceae Haemophilus	SportB	CD	0.00482418	485	442	4E-01	1E+00
Sport	Bacteria Bacteroidetes Bacteroidia Bacteroidales Bacteroidaceae Bacteroides	SportB	CD	0.0318133	485	485	4E-01	1E+00
Sport	Bacteria Proteobacteria Gammaproteobacteria Pasteurellales Pasteurellaceae Haemophilus	SportC	CD	0.00339113	485	442	5E-01	1E+00
Sport	Bacteria Firmicutes Clostridia Clostridiales Veillonellaceae Veillonella	SportC	CD	0.00180937	485	393	6E-01	1E+00
Sport	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	SportB	CD	-0.0069044	485	485	6E-01	1E+00
Sport	Bacteria Actinobacteria Coriobacteria Coriobacteriales Coriobacteriaceae Collinsella	SportC	CD	-0.0018015	485	373	7E-01	1E+00
Sport	Bacteria Bacteroidetes Bacteroidia Bacteroidales Rikenellaceae	SportB	CD	0.00267418	485	441	8E-01	1E+00
Sport	Bacteria Bacteroidetes Bacteroidia Bacteroidales Rikenellaceae	SportC	CD	-0.0023279	485	441	8E-01	1E+00
Sport	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Verrucomicrobiaceae Akkermansia	SportB	CD	0.00134346	485	365	8E-01	1E+00
Sport	Bacteria Actinobacteria Coriobacteria Coriobacteriales Coriobacteriaceae Collinsella	SportB	CD	0.00132403	485	373	8E-01	1E+00
Sport	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Other	SportB	CD	0.00098614	485	481	9E-01	1E+00
Sport	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Other	SportC	CD	-0.0001998	485	481	1E+00	1E+00
Sport	Bacteria Firmicutes Clostridia Clostridiales Veillonellaceae Phascolarctobacterium	SportB	CD	6.48E-06	485	330	1E+00	1E+00
SmokerAtEnroll	Bacteria Bacteroidetes Bacteroidia Bacteroidales Porphyromonadaceae Parabacteroides	SmokerAtEn	CD	0.03262672	485	469	1E-03	1E-02
SmokerAtEnroll	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Alcaligenaceae Sutterella	SmokerAtEn	CD	-0.029002	485	440	1E-03	1E-02
SmokerAtEnroll	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae [Ruminococcus]	SmokerAtEn	CD	0.01479822	485	484	2E-02	8E-02
SmokerAtEnroll	Bacteria Firmicutes Clostridia Clostridiales Other Other	SmokerAtEn	CD	-0.0073129	485	419	2E-02	8E-02
Alcohol	Bacteria Firmicutes Clostridia Clostridiales	AlcoholC	CD	-0.0400524	485	425	8E-04	2E-02
Alcohol	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Alcaligenaceae Sutterella	AlcoholB	CD	0.04786035	485	440	2E-03	4E-02
Alcohol	Bacteria Bacteroidetes Bacteroidia Bacteroidales Bacteroidaceae Bacteroides	AlcoholB	CD	0.14485765	485	485	3E-03	4E-02
Alcohol	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Roseburia	AlcoholB	CD	-0.0237292	485	458	7E-03	8E-02
Alcohol	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae Faecalibacterium	AlcoholC	CD	-0.0804402	485	475	9E-03	9E-02
Alcohol	Bacteria Bacteroidetes Bacteroidia Bacteroidales Porphyromonadaceae Parabacteroides	AlcoholB	CD	0.03676637	485	469	2E-02	2E-01
Alcohol	Bacteria Bacteroidetes Bacteroidia Bacteroidales Prevotellaceae Prevotella	AlcoholB	CD	-0.0040642	485	408	5E-02	3E-01
Alcohol	Bacteria Bacteroidetes Bacteroidia Bacteroidales [Odoribacteraceae] Odoribacter	AlcoholC	CD	-0.016844	485	371	6E-02	3E-01
Alcohol	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae Faecalibacterium	AlcoholB	CD	-0.045909	485	475	6E-02	3E-01
Alcohol	Bacteria Bacteroidetes Bacteroidia Bacteroidales Porphyromonadaceae Parabacteroides	AlcoholC	CD	0.03544253	485	469	7E-02	4E-01
Alcohol	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Alcaligenaceae Sutterella	AlcoholC	CD	0.03296643	485	440	9E-02	4E-01
Alcohol	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae [Ruminococcus]	AlcoholB	CD	-0.0176877	485	484	9E-02	4E-01
Alcohol	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae	AlcoholB	CD	-0.0327181	485	473	1E-01	4E-01
Alcohol	Bacteria Firmicutes Clostridia Clostridiales Veillonellaceae Phascolarctobacterium	AlcoholC	CD	-0.0175976	485	330	2E-01	6E-01
Alcohol	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Other	AlcoholC	CD	0.01924873	485	481	2E-01	6E-01
Alcohol	Bacteria Bacteroidetes Bacteroidia Bacteroidales Bacteroidaceae Bacteroides	AlcoholC	CD	0.08533995	485	485	2E-01	6E-01
Alcohol	Bacteria Firmicutes Clostridia Clostridiales Veillonellaceae Phascolarctobacterium	AlcoholB	CD	-0.0136013	485	330	2E-01	6E-01
Alcohol	Bacteria Firmicutes Clostridia Clostridiales	AlcoholB	CD	-0.0128372	485	425	2E-01	7E-01
Alcohol	Bacteria Bacteroidetes Bacteroidia Bacteroidales Rikenellaceae	AlcoholC	CD	-0.0202447	485	441	2E-01	7E-01
Alcohol	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae	AlcoholC	CD	-0.0298209	485	473	2E-01	7E-01
Alcohol	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae Oscillospira	AlcoholB	CD	0.00673837	485	462	2E-01	7E-01
Alcohol	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae Oscillospira	AlcoholC	CD	0.00832433	485	462	2E-01	7E-01
Alcohol	Bacteria Bacteroidetes Bacteroidia Bacteroidales [Barnesiellaceae]	AlcoholB	CD	0.01155443	485	401	2E-01	8E-01
Alcohol	Bacteria Bacteroidetes Bacteroidia Bacteroidales [Barnesiellaceae]	AlcoholC	CD	-0.0133326	485	401	3E-01	9E-01
Alcohol	Bacteria Bacteroidetes Bacteroidia Bacteroidales Prevotellaceae Prevotella	AlcoholC	CD	-0.0023599	485	408	4E-01	1E+00
Alcohol	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae	AlcoholB	CD	-0.0280345	485	481	4E-01	1E+00
Alcohol	Bacteria Firmicutes Erysipelotrichi Erysipelotrichales Erysipelotrichaceae	AlcoholB	CD	0.00491947	485	464	4E-01	1E+00
Alcohol	Bacteria Actinobacteria Coriobacteria Coriobacteriales Coriobacteriaceae Collinsella	AlcoholC	CD	-0.0073681	485	373	4E-01	1E+00
Alcohol	Bacteria Firmicutes Erysipelotrichi Erysipelotrichales Erysipelotrichaceae	AlcoholC	CD	0.0055572	485	464	4E-01	1E+00
Alcohol	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Blautia	AlcoholB	CD	-0.0044624	485	471	5E-01	1E+00
Alcohol	Bacteria Proteobacteria Gammaproteobacteria Pasteurellales Pasteurellaceae Haemophilus	AlcoholC	CD	0.00549682	485	442	5E-01	1E+00
Alcohol	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae	AlcoholC	CD	0.01859232	485	481	6E-01	1E+00
Alcohol	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Roseburia	AlcoholC	CD	-0.0042355	485	458	7E-01	1E+00
Alcohol	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Other	AlcoholB	CD	0.00418757	485	481	7E-01	1E+00
Alcohol	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae [Ruminococcus]	AlcoholC	CD	-0.0035736	485	484	8E-01	1E+00
Alcohol	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Blautia	AlcoholC	CD	-0.0018569	485	471	8E-01	1E+00
Alcohol	Bacteria Proteobacteria Gammaproteobacteria Pasteurellales Pasteurellaceae Haemophilus	AlcoholB	CD	0.00116134	485	442	9E-01	1E+00
Alcohol	Bacteria Actinobacteria Coriobacteria Coriobacteriales Coriobacteriaceae Collinsella	AlcoholB	CD	0.00090057	485	373	9E-01	1E+00
Alcohol	Bacteria Bacteroidetes Bacteroidia Bacteroidales [Odoribacteraceae] Odoribacter	AlcoholB	CD	-0.0003908	485	371	1E+00	1E+00
Alcohol	Bacteria Bacteroidetes Bacteroidia Bacteroidales Rikenellaceae	AlcoholB	CD	-0.00029	485	441	1E+00	1E+00
FamilyHist	Bacteria Bacteroidetes Bacteroidia Bacteroidales Porphyromonadaceae Parabacteroides	FamilyHistY4	CD	-0.0351906	485	469	5E-03	4E-02
FamilyHist	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	FamilyHistY4	CD	0.03398379	485	485	1E-02	6E-02
FamilyHist	Bacteria Firmicutes Erysipelotrichi Erysipelotrichales Erysipelotrichaceae	FamilyHistY4	CD	-0.0086798	485	464	4E-02	2E-01
FamilyHist	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae Faecalibacterium	FamilyHistY4	CD	-0.0334045	485	475	9E-02	3E-01
FamilyHist	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae [Ruminococcus]	FamilyHistY4	CD	0.01332179	485	484	1E-01	3E-01
FamilyHist	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae	FamilyHistY4	CD	0.03130832	485	481	2E-01	4E-01
FamilyHist	Bacteria Actinobacteria Coriobacteria Coriobacteriales Coriobacteriaceae Collinsella	FamilyHistY4	CD	-0.0068159	485	373	2E-01	4E-01
FamilyHist	Bacteria Bacteroidetes Bacteroidia Bacteroidales Rikenellaceae	FamilyHistY4	CD	-0.0053538	485	441	6E-01	9E-01
FamilyHist	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Verrucomicrobiaceae Akkermansia	FamilyHistY4	CD	-0.0003039	485	365	1E+00	1E+00
Sport	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Alcaligenaceae Sutterella	SportB	UC	0.03117038	446	419	6E-03	2E-01
Sport	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Verrucomicrobiaceae Akkermansia	SportB	UC	0.01135305	446	327	1E-02	4E-01
Sport	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Other	SportC	UC	0.02351304	446	446	1E-02	4E-01
Sport	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Lachnospira	SportB	UC	0.00957557	446	392	2E-02	4E-01
Sport	Bacteria Firmicutes Clostridia Clostridiales Other Other	SportC	UC	0.00816491	446	384	3E-02	6E-01
Sport	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae Oscillospira	SportB	UC	-0.008403	446	436	6E-02	8E-01
Sport	Bacteria Bacteroidetes Bacteroidia Bacteroidales Prevotellaceae Prevotella	SportB	UC	0.05191087	446	387	7E-02	8E-01
Sport	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	SportB	UC	-0.0293654	446	446	8E-02	9E-01
Sport	Bacteria Bacteroidetes Bacteroidia Bacteroidales Bacteroidaceae Bacteroides	SportC	UC	0.05430019	446	446	1E-01	9E-01
Sport	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae Ruminococcus	SportB	UC	-0.0066274	446	388	1E-01	9E-01
Sport	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae	SportC	UC	-0.0307213	446	429	1E-01	1E+00

Sport	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Ruminococcus	SportC	UC	-0.0056643	446	388	2E-01	1E+00
Sport	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	[Odoribacteraceae]	Odoribacter	SportB	UC	-0.0072548	446	377	2E-01	1E+00
Sport	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae		SportC	UC	0.01966568	446	446	2E-01	1E+00
Sport	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	[Barnesiellaceae]		SportC	UC	0.01007598	446	399	2E-01	1E+00
Sport	Bacteria	Firmicutes	Clostridia	Clostridiales	Veillonellaceae	Phascolarctobacterium	SportC	UC	0.00841704	446	266	2E-01	1E+00
Sport	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae		SportB	UC	-0.0248444	446	429	2E-01	1E+00
Sport	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Blautia	SportB	UC	-0.0070821	446	437	3E-01	1E+00
Sport	Bacteria	Firmicutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae		SportB	UC	0.00494524	446	417	3E-01	1E+00
Sport	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	[Ruminococcus]	SportC	UC	-0.0069095	446	439	4E-01	1E+00
Sport	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Faecalibacterium	SportC	UC	0.01858716	446	446	4E-01	1E+00
Sport	Bacteria	Firmicutes	Clostridia	Clostridiales	Veillonellaceae	Phascolarctobacterium	SportB	UC	0.00605973	446	266	4E-01	1E+00
Sport	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Bacteroidaceae	Bacteroides	SportB	UC	-0.0288677	446	446	4E-01	1E+00
Sport	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	[Ruminococcus]	SportB	UC	-0.0059319	446	439	4E-01	1E+00
Sport	Bacteria	Firmicutes	Clostridia	Clostridiales			SportB	UC	-0.0054398	446	413	5E-01	1E+00
Sport	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	[Barnesiellaceae]		SportB	UC	0.00604964	446	399	5E-01	1E+00
Sport	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Rikenellaceae		SportC	UC	-0.0053494	446	432	5E-01	1E+00
Sport	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Lachnospira	SportC	UC	0.00257144	446	392	5E-01	1E+00
Sport	Bacteria	Firmicutes	Clostridia	Clostridiales	[Other]	Other	SportB	UC	-0.0023028	446	384	5E-01	1E+00
Sport	Bacteria	Actinobacteria	Coriobacteria	Coriobacteriales	Coriobacteriaceae	Collinsella	SportB	UC	-0.0031038	446	372	5E-01	1E+00
Sport	Bacteria	Firmicutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae		SportC	UC	0.00278118	446	417	6E-01	1E+00
Sport	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella	SportC	UC	0.01555666	446	387	6E-01	1E+00
Sport	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae		SportB	UC	-0.0079596	446	446	6E-01	1E+00
Sport	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Faecalibacterium	SportB	UC	0.01129344	446	446	6E-01	1E+00
Sport	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Alcaligenaceae	Sutterella	SportC	UC	0.00466007	446	419	7E-01	1E+00
Sport	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Blautia	SportC	UC	0.00258666	446	437	7E-01	1E+00
Sport	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Rikenellaceae		SportB	UC	-0.0032152	446	432	7E-01	1E+00
Sport	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Roseburia	SportB	UC	-0.0031169	446	436	7E-01	1E+00
Sport	Bacteria	Firmicutes	Clostridia	Clostridiales			SportC	UC	-0.0026822	446	413	7E-01	1E+00
Sport	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae		SportC	UC	-0.0040717	446	446	8E-01	1E+00
Sport	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Roseburia	SportC	UC	0.0019683	446	436	8E-01	1E+00
Sport	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	Parabacteroides	SportB	UC	0.00166022	446	443	9E-01	1E+00
Sport	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	Parabacteroides	SportC	UC	0.00134973	446	443	9E-01	1E+00
Sport	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Other	SportB	UC	0.00088004	446	446	9E-01	1E+00
Sport	Bacteria	Verrucomicrobia	Verrucomicrobiae	Verrucomicrobiales	Verrucomicrobiaceae	Akkermansia	SportC	UC	-0.0003851	446	327	9E-01	1E+00
Sport	Bacteria	Actinobacteria	Coriobacteria	Coriobacteriales	Coriobacteriaceae	Collinsella	SportC	UC	0.00029179	446	372	1E+00	1E+00
Sport	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	[Odoribacteraceae]	Odoribacter	SportC	UC	-0.0002911	446	377	1E+00	1E+00
Sport	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Oscillospira	SportC	UC	-0.0001951	446	436	1E+00	1E+00
SmokerAtEnroll	Bacteria	Firmicutes	Clostridia	Clostridiales			SmokerAtEn	UC	0.02955192	446	413	3E-03	1E-01
SmokerAtEnroll	Bacteria	Verrucomicrobia	Verrucomicrobiae	Verrucomicrobiales	Verrucomicrobiaceae	Akkermansia	SmokerAtEn	UC	0.01531928	446	327	9E-03	2E-01
SmokerAtEnroll	Bacteria	Firmicutes	Clostridia	Clostridiales	[Other]	Other	SmokerAtEn	UC	-0.0103096	446	384	3E-02	4E-01
SmokerAtEnroll	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Roseburia	SmokerAtEn	UC	-0.0191091	446	436	8E-02	6E-01
SmokerAtEnroll	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Other	SmokerAtEn	UC	-0.0171858	446	446	2E-01	9E-01
SmokerAtEnroll	Bacteria	Actinobacteria	Coriobacteria	Coriobacteriales	Coriobacteriaceae	Collinsella	SmokerAtEn	UC	-0.0085002	446	372	2E-01	9E-01
SmokerAtEnroll	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Faecalibacterium	SmokerAtEn	UC	-0.0366414	446	446	2E-01	9E-01
SmokerAtEnroll	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	[Odoribacteraceae]	Odoribacter	SmokerAtEn	UC	0.00896444	446	377	2E-01	9E-01
SmokerAtEnroll	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Alcaligenaceae	Sutterella	SmokerAtEn	UC	0.01618539	446	419	3E-01	9E-01
SmokerAtEnroll	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae		SmokerAtEn	UC	0.00579122	446	429	8E-01	1E+00
Alcohol	Bacteria	Firmicutes	Clostridia	Clostridiales	[Other]	Other	AlcoholC	UC	-0.0192172	446	384	5E-04	1E-01
Alcohol	Bacteria	Verrucomicrobia	Verrucomicrobiae	Verrucomicrobiales	Verrucomicrobiaceae	Akkermansia	AlcoholC	UC	-0.0210771	446	327	1E-03	1E-01
Alcohol	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Lachnospira	AlcoholC	UC	-0.0138955	446	392	1E-02	4E-01
Alcohol	Bacteria	Firmicutes	Clostridia	Clostridiales	Veillonellaceae	Phascolarctobacterium	AlcoholC	UC	-0.0225503	446	266	3E-02	5E-01
Alcohol	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Haemophilus	AlcoholC	UC	-0.01821	446	417	3E-02	6E-01
Alcohol	Bacteria	Firmicutes	Clostridia	Clostridiales	[Other]	Other	AlcoholB	UC	-0.0092068	446	384	6E-02	8E-01
Alcohol	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella	AlcoholB	UC	0.05529015	446	387	1E-01	9E-01
Alcohol	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Ruminococcus	AlcoholB	UC	0.00837956	446	388	1E-01	9E-01
Alcohol	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Blautia	AlcoholB	UC	-0.0125688	446	437	1E-01	9E-01
Alcohol	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	Parabacteroides	AlcoholB	UC	0.01761125	446	443	1E-01	9E-01
Alcohol	Bacteria	Firmicutes	Clostridia	Clostridiales			AlcoholB	UC	0.01491364	446	413	1E-01	9E-01
Alcohol	Bacteria	Firmicutes	Clostridia	Clostridiales			AlcoholC	UC	0.01676383	446	413	1E-01	9E-01
Alcohol	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	[Ruminococcus]	AlcoholB	UC	0.01289149	446	439	2E-01	1E+00
Alcohol	Bacteria	Verrucomicrobia	Verrucomicrobiae	Verrucomicrobiales	Verrucomicrobiaceae	Akkermansia	AlcoholB	UC	-0.0078701	446	327	2E-01	1E+00
Alcohol	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Rikenellaceae		AlcoholC	UC	-0.015318	446	432	2E-01	1E+00
Alcohol	Bacteria	Firmicutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae		AlcoholC	UC	-0.0088454	446	417	2E-01	1E+00
Alcohol	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Other	AlcoholC	UC	-0.0177555	446	446	2E-01	1E+00
Alcohol	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Oscillospira	AlcoholC	UC	-0.0076142	446	436	2E-01	1E+00
Alcohol	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Lachnospira	AlcoholB	UC	-0.0059127	446	392	2E-01	1E+00
Alcohol	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae		AlcoholB	UC	0.02474644	446	446	2E-01	1E+00
Alcohol	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae		AlcoholC	UC	-0.0282874	446	446	2E-01	1E+00
Alcohol	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Haemophilus	AlcoholB	UC	0.00890794	446	417	2E-01	1E+00
Alcohol	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Rikenellaceae		AlcoholB	UC	-0.0116975	446	432	2E-01	1E+00
Alcohol	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	Parabacteroides	AlcoholC	UC	0.0151317	446	443	3E-01	1E+00
Alcohol	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	[Barnesiellaceae]		AlcoholC	UC	-0.0120964	446	399	3E-01	1E+00
Alcohol	Bacteria	Firmicutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae		AlcoholB	UC	-0.0056965	446	417	3E-01	1E+00
Alcohol	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Alcaligenaceae	Sutterella	AlcoholC	UC	-0.0151519	446	419	4E-01	1E+00
Alcohol	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Blautia	AlcoholC	UC	-0.0084653	446	437	4E-01	1E+00
Alcohol	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Other	AlcoholB	UC	-0.0104791	446	446	4E-01	1E+00
Alcohol	Bacteria	Firmicutes	Clostridia	Clostridiales	Veillonellaceae	Phascolarctobacterium	AlcoholB	UC	-0.0070797	446	266	4E-01	1E+00
Alcohol	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	[Barnesiellaceae]		AlcoholB	UC	-0.0083275	446	399	4E-01	1E+00
Alcohol	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Alcaligenaceae	Sutterella	AlcoholB	UC	0.01062983	446	419	5E-01	1E+00
Alcohol	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Faecalibacterium	AlcoholB	UC	0.02016618	446	446	5E-01	1E+00
Alcohol	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae		AlcoholB	UC	0.01130422	446	446	5E-01	1E+00
Alcohol	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	[Ruminococcus]	AlcoholC	UC	0.00636018	446	439	6E-01	1E+00
Alcohol	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	[Odoribacteraceae]	Odoribacter	AlcoholB	UC	0.00385502	446	377	6E-01	1E+00
Alcohol	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Roseburia	AlcoholC	UC	-0.0064028	446	436	6E-01	1E+00
Alcohol	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Bacteroidaceae	Bacteroides	AlcoholB	UC	-0.0197425	446	446	6E-01	1E+00
Alcohol	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	[Odoribacteraceae]	Odoribacter	AlcoholC	UC	-0.0036863	446	377	6E-01	1E+00
Alcohol	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Bacteroidaceae	Bacteroides	AlcoholC	UC	0.02103336	446	446	7E-01	1E+00
Alcohol	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Faecalibacterium	AlcoholC	UC	-0.0128219	446	446	7E-01	1E+00
Alcohol	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae		AlcoholC	UC	-0.0066234	446	446	8E-01	1E+00
Alcohol	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Oscillospira	AlcoholB	UC	-0.0012639	446	436	8E-01	1E+00
Alcohol	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Roseburia	AlcoholB	UC	0.00150366	446	436	9E-01	1E+00
Alcohol	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella	AlcoholC	UC	0.00261711	446	387	9E-01	1E+00
Alcohol	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Ruminococcus	AlcoholC	UC	0.00040153	446	388	9E-01	1E+00
FamilyHist	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Haemophilus	FamilyHistY4	UC	0.02248515	446	417	2E-03	1E-01
FamilyHist	Bacteria	Firmicutes	Clostridia	Clostridiales	Veillonellaceae	Phascolarctobacterium	FamilyHistY4	UC	0.02146103	446	266	1E-02	2E-01
FamilyHist	Bacteria	Firmicutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae		FamilyHistY4	UC	0.00887514	446	417	1E-01	8E-01
FamilyHist	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	[Barnesiellaceae]		FamilyHistY4	UC	0.01267148	446	399	2E-01	9E-01
FamilyHist	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Roseburia	FamilyHistY4	UC	-0.0088623	446	436	4E-01	1E+00
FamilyHist	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Faecalibacterium	FamilyHistY4	UC	0.02062903	446	446	4E	

Suppl. Table 9. Definition used to categorize patients with flares (active) and remission, at yearly follow up evaluations

<u>Remission</u>	
CD	CDAI (Crohn's Disease Activity Index) < 150
UC	MTWAI (Modified Truelove & Witts activity index) < 6
<u>Flares</u>	
CD	≥ 100 CDAI increase or $\text{CDAI} \geq 150$ for patients initially in remission (< 150) at T_0 sampling.
UC	≥ 3 points increase or $\text{MTWAI} \geq 6$ for patients initially in remission (< 6) at T_0 sampling.