

Supplementary Tables

Gut microbiome analysis as a tool towards targeted non-invasive biomarkers for early hepatocellular carcinoma

Running title: Gut microbiome for early hepatocellular carcinoma

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Supplementary Table legends 1-12:

Supplementary table S1. Phenotype information of all Chinese individuals in the discovery phase (N=190), validation phase (N=131) and independent diagnosis phase (N=98).

Supplementary table S2. Taxon annotation of 1296 OTUs from all samples.

Supplementary table S3. The detailed values of fecal microbial diversity index in the discovery cohort (75 healthy controls, 40 liver cirrhosis and 75 early HCC with cirrhosis).

Supplementary table S4. Stool form scale was assessed based on stool routine testing and stool moisture was measured by lyophilization assay on the frozen homogenized faecal material.

Supplementary table S5. The different OTUs and the corresponding annotation among healthy controls (N=75), liver cirrhosis (N=40) and early HCC with cirrhosis (N=75).

Supplementary table S6. The different degree of phylum level (p value) among healthy controls (N=75), liver cirrhosis (N=40) and early HCC with cirrhosis (N=75) in the discovery phase.

Supplementary table S7. The different degree of genera level (p value) between liver cirrhosis cohort and early HCC cohort in the discovery phase.

Supplementary table S8. The different degree of genera level (p value) between the healthy controls and the early HCC cohort in the discovery phase.

Supplementary table S9. The relative abundance of the 30 OTUs markers in each

sample from the discovery cohort.

Supplementary table S10. The corresponding bacterial genera of the selected 30 OTUs markers in the discovery phase.

Supplementary table S11. The corresponding POD value of each patient was calculated in the 75 early HCC and 105 non-HCC samples (40 cirrhosis and 75 controls) in the discovery set.

Supplementary table S12. The corresponding POD value of each patient was calculated among the 56 controls, 30 early HCC samples and 45 advanced HCC samples from the validation phase, and among the 18 Xinjiang HCC samples and 80 Zhengzhou HCC samples from the independent diagnosis phase.

Table S1. Clinical phenotype information of all enrolled individuals

Stage	Sample	Group	BCLC stage (early : 0+A)	Gender	Age (year)	Height (cm)	Weight (kg)	BMI (kg/m ²)	Differentiation (well: 1; moderately: 2-3; poorly: 3-4)	AFP (0.0-20.0 ng/mL)	Tumor size (cm)	ALT (U/L)	AST (U/L)	GGT (U/L)	CTP score	TP (64.0-83.0 g/L)	ALB (35.0-55.0 g/L)
Discovery	H_20	H	M		51	170	74.2	26		2.1		40	29	28		75.1	48.7
Discovery	H_N204	H	F		42	161	55	21		1.7		18	22	13		77.3	45.5
Discovery	H_37	H	M		51	170	62.2	22		2.2		23	32	6		74	50.5
Discovery	H_N68	H	M		53	177	79.6	25		3.2		30	28	15		71.2	50.4
Discovery	H_44	H	M		43	175	79	26		3.1		23	21	40		76.8	50.5
Discovery	H_N105	H	F		47	163	67	25		3.2		20	24	34		76.2	49
Discovery	H_34	H	M		44	182	76.6	23		2.2		16	19	16		72.5	46.9
Discovery	H_N39	H	M		39	172	70	24		2.8		17	27	23		75.2	50.1
Discovery	H_52	H	M		46	175	76	25		9		12	15	19		69.5	49.2
Discovery	H_17	H	M		55	169	52.7	18		2.7		13	21	47		70.8	43.9
Discovery	H_N50	H	M		39	176	79.1	26		1.8		39	19	37		69	47.9
Discovery	H_73	H	M		43	179	70.8	22		3.7		24	22	14		75.9	53.3
Discovery	H_22	H	M		55	166	63.2	23		2.7		14	14	12		70.6	47.5
Discovery	H_8	H	M		48	174	71.9	24		13		27	25	21		71.9	48.3
Discovery	H_71	H	F		47	146	60.2	28		1.6		15	15	18		73.9	49.1
Discovery	H_N91	H	M		51	175	79	26		3.4		15	23	17		72.5	48.7
Discovery	H_24	H	F		49	156	65.7	27		5.6		15	24	14		74.5	48.6
Discovery	H_N76	H	M		38	161	61.9	24		1.9		17	21	18		74.2	48.4
Discovery	H_54	H	M		58	176	67.7	22		2.2		24	21	12		81	50.7
Discovery	H_N181	H	F		54	160	65	25		1.6		18	21	22		69.6	44.8
Discovery	H_N121	H	M		60	173	70	23		2.4		15	18	9		75.5	44.8
Discovery	H_15	H	M		44	166	70.4	26		1.8		29	21	17		76.5	51.4
Discovery	H_46	H	M		45	170	72.7	25		2.2		16	19	15		73.3	50.6
Discovery	H_N132	H	M		58	169	69	24		3.8		24	28	19		70.5	42.6
Discovery	H_N260	H	M		35	168	53.7	19		2.7		12	20	11		78.3	53.3
Discovery	H_70	H	M		43	175	62.2	20		5.1		16	22	22		70.5	47
Discovery	H_27	H	M		60	170	67	23		2.4		15	19	9		75.5	44.8
Discovery	H_N57	H	M		55	169	52.7	18		2.7		13	21	47		70.8	43.9
Discovery	H_N72	H	M		41	168	60.6	21		1.4		14	24	18		76.8	52.5
Discovery	H_77	H	M		43	166	66	24		6.4		14	23	30		75.6	49.3
Discovery	H_N197	H	M		57	168	68.8	24		3.4		25	23	51		72.5	47.2
Discovery	H_6	H	M		44	176	61.6	20		1.9		41	40	27		75.2	50.4
Discovery	H_N55	H	F		50	159	55.7	22		6.6		12	18	7		70.8	47.5
Discovery	H_64	H	M		48	185	76.2	22		4.4		22	30	17		70.3	45
Discovery	H_63	H	F		51	159	55	22		2.1		15	21	17		72.2	44.4
Discovery	H_53	H	M		57	177	79.6	25		4.1		33	27	29		76.7	50.5
Discovery	H_5	H	F		52	158	60	24		1.1		28	25	44		74.7	48.7
Discovery	H_N264	H	M		53	172	63.4	21		2.9		13	18	14		69.9	45.8
Discovery	H_N102	H	F		43	163	52.8	20		2.6		13	18	11		75.4	49
Discovery	H_76	H	M		43	171	56.9	19		4.4		33	25	13		68.5	48.2
Discovery	H_40	H	M		48	173	70	23		3.3		38	31	19		80.9	52
Discovery	H_N145	H	F		43	159	51.7	21		1.6		24	23	14		75.2	46.9
Discovery	H_N258	H	M		34	176	70	23		3.3		40	21	22		74.3	50.3
Discovery	H_14	H	M		42	171	61	21		3.1		18	17	12		83	52.9

Discovery	H_13	H	M	44	176	75	24	2.7	21	25	27	76	48
Discovery	H_55	H	M	51	175	61	20	3.4	15	23	17	72.5	48.7
Discovery	H_25	H	M	58	168	62.8	22	4.5	19	23	16	72.7	46.7
Discovery	H_N109	H	F	49	156	60.7	25	2.5	15	24	14	74.5	48.6
Discovery	H_61	H	F	43	165	58	21	2.6	8	20	14	70.7	43
Discovery	H_28	H	M	59	175	75	24	2.5	15	15	37	78.6	47.9
Discovery	H_N177	H	M	41	173	74.3	25	2.1	22	21	20	77.8	51.6
Discovery	H_9	H	F	54	157	45.3	18	2.3	25	24	75	75.5	49.5
Discovery	H_33	H	M	50	165	70	26	1.8	21	21	37	72.8	46.8
Discovery	H_26	H	F	52	155	60	25	1.6	26	29	68	73.4	47.9
Discovery	H_N40	H	F	48	160	55.9	22	1.2	10	14	9	75	46.6
Discovery	H_N121	H	M	60	171	69	24	2.4	15	17	9	75.5	44.8
Discovery	H_23	H	M	47	168	68	24	3.4	30	24	18	78.3	50.2
Discovery	H_N56	H	M	52	164	51.3	19	2	23	22	25	75.5	52.8
Discovery	H_N164	H	M	41	178	80	25	2	10	18	31	75.9	50.7
Discovery	H_12	H	M	49	172	71.1	24	2.2	18	19	13	75	51
Discovery	H_N75	H	M	41	177	82.2	26	2.1	18	18	28	75	51.9
Discovery	H_47	H	M	42	171	61	21	2.5	18	17	12	83	52.9
Discovery	H_N84	H	M	57	177	79.6	25	4.1	33	27	29	76.7	50.5
Discovery	H_42	H	M	43	166	54.8	20	2.8	14	17	23	83.9	51.9
Discovery	H_N9	H	F	58	158	61	24	3	20	24	20	73.6	45.8
Discovery	H_N52	H	F	52	159	61	24	3.3	15	19	14	71.9	51
Discovery	H_62	H	F	47	160	60	23	4	34	36	13	71	44.8
Discovery	H_1	H	F	58	160	60	23	3	20	21	20	73.6	45.8
Discovery	H_N111	H	M	58	168	62.8	22	4.5	19	23	16	72.7	46.7
Discovery	H_N54	H	M	43	174	75	25	1.9	74	38	64	77.7	48.9
Discovery	H_N102	H	F	43	163	52.8	20	2.6	13	18	11	75.4	49
Discovery	H_4	H	F	56	157	48.1	20	6	10	12	15	69.5	48.5
Discovery	H_36	H	M	57	168	68.8	24	3.4	25	23	51	72.5	47.2
Discovery	H_16	H	M	52	164	51.3	19	1.5	23	22	25	75.5	52.8
Discovery	H_69	H	M	42	180	79.3	24	2.7	16	24	13	74.3	46.6
Discovery	C_82	HCC A	F	59	159	61	24	2 2.3 5.0×4.5×4	56	60	47 A	60.9	41.5
Discovery	C_62	HCC	0 M	52	175	76.5	25	2 272 2×2×1.7	40	31	67 A	70.1	36.1
Discovery	C_60	HCC A	M	51	174	70	23	1 5.1 2.5×2; 1×0	25	26	56 A	75.1	28.1
Discovery	C_32	HCC	0 M	47	163	60.5	23	3 383 2.0×1.9	45	51	227 A	71.2	40.6
Discovery	C_HCC	HCC A	M	58	182	85	26	2 7.2 4.7×4.6	28	18	80 A	64.8	38.2
Discovery	C_11	HCC	0 F	45	160	54	21	3 266 1.8×1.7	7	13	12 A	73.6	44.2
Discovery	C_75	HCC	0 M	41	168	66.5	24	3 8.3 2×2	33	35	92 A	74	46
Discovery	C_61	HCC	0 M	53	168	68	24	1 1.5 2.0×1.7	46	80	21 A	67.6	37.3
Discovery	C_88	HCC	0 M	51	167	60	22	1 2.9 1.9×1.6	21	39	58 A	68.9	36.7
Discovery	C_18	HCC A	M	43	175	70	23	2 3.4 3.1×2.2×2.	22	25	25 A	67.5	41.7
Discovery	C_HCC	HCC A	M	51	165	67	25	4 ### 2.9×2.6	34	44	54 A	58.1	28.3
Discovery	C_HCC	HCC	0 M	58	174	75	25	1 1.3 1.9×1.3×1.	12	14	12 A	60.5	39.2
Discovery	C_94	HCC A	F	44	160	55	21	1 4.5 2.8×2.7	23	42	89 A	70.5	43
Discovery	C_36	HCC A	M	39	175	70	23	2 37 3.2×2.8	26	27	41 A	78.6	47.3
Discovery	C_HCC	HCC A	M	46	168	60	21	2 260 3×2	59	52	92 A	63.8	36
Discovery	C_12	HCC A	M	59	163	66.9	25	4 ### 3.5×3.5	54	61	41 A	60.6	30.2
Discovery	C_101	HCC	0 M	49	170	66	23	2 13 1.9×1.7	18	25	27 A	55.5	31.4
Discovery	C_86	HCC A	M	45	176	76	25	2 10 3.2×2.2	95	64	172 A	64.8	38
Discovery	C_106	HCC A	F	58	155	44.5	19	3 459 2.7×2.6; 1	21	35	40 A	62.8	35.7
Discovery	C_HCC	HCC	0 F	50	156	48	20	2 5.6 1×1	17	28	63 A	67.3	42
Discovery	C_54	HCC A	M	52	165	57.5	21	4 38 2.5×2×3	18	22	18 A	61.2	39.2
Discovery	C_69	HCC	0 M	21	180	79	24	2 282 2×1	33	19	35 A	77.6	45.3
Discovery	C_85	HCC A	M	23	170	70	24	2 ### 3.0×2.6	31	23	38 A	65.3	42.2

Discovery	C_73	HCC A	M	48	181	80.5	25	3	456	2.5×2.3	51	36	34 A	64.6	37.7
Discovery	C_64	HCC A	M	58	162	60	23	3	123	5×4×4	46	46	213 A	74.8	37.9
Discovery	C_HCC:	HCC A	F	57	157	58	24	1	2.6	4.4×3.8	27	49	23 A	70.3	29.3
Discovery	C_HCC:	HCC A	F	59	160	62	24	3	3.6	5×2.8×1.8	40	38	45 A	74	42.1
Discovery	C_28	HCC A	M	44	160	59	23	3	###	4.5×3.2×2.	43	43	80 A	59.7	35.6
Discovery	C_46	HCC	0 M	43	168	58	21	1	15	1.5×1.2	22	21	28 A	69.7	42.3
Discovery	C_HCC:	HCC A	F	45	165	62	23	3	3.1	3.4×3.5	24	41	21 A	67.5	40.1
Discovery	C_89	HCC	0 M	53	169	64	22	2	3.2	1.9×1.6	27	28	101 A	60.6	36.8
Discovery	C_14	HCC	0 F	55	154	46	19	3	139	2×1.8×1.4	22	23	16 A	65.2	43.3
Discovery	C_20	HCC A	M	57	166	62	22	4	35	3.1×2.5	30	24	20 A	70.6	38.2
Discovery	C_90	HCC A	M	51	171	66	23	1	4.7	3.6×3.3	32	33	98 A	62	38.6
Discovery	C_HCC:	HCC	0 M	60	160	64	25	2	50	2×1.8	20	34	138 A	73.4	44
Discovery	C_19	HCC A	M	36	170	65.5	23	2	###	2.5×2.5; 1.	31	25	200 A	66.6	35.2
Discovery	C_7	HCC A	M	45	177	64	20	4	###	4×3	16	25	26 A	74.1	46.1
Discovery	C_HCC:	HCC A	M	59	167	55	20	2	274	1.5×1; 1×1	23	27	22 A	74.2	46.9
Discovery	C_HCC:	HCC A	M	54	175	53	17	1	1.7	2.2×2.1; 1.	23	27	79 A	76.7	48.4
Discovery	C_HCC:	HCC	0 M	35	170	68	24	2	842	1.5×1×1.8	36	23	69 A	67	40.9
Discovery	C_HCC:	HCC A	M	48	163	55	21	1	2.6	2.5×2.2	42	42	150 A	64.4	33.3
Discovery	C_102	HCC A	M	48	182	75	23	1	7	4.5×4.2	23	25	60 A	61.8	35.2
Discovery	C_13	HCC A	F	42	162	77	29	2	105	4.2×2.0×2.	37	55	56 B	63.4	27.3
Discovery	C_83	HCC A	M	43	170	65	22	3	776	3×2.5	16	16	20 A	73.8	44.3
Discovery	C_74	HCC A	M	29	175	75	24	2	147	4.3×3.4	301	158	61 A	69.8	40.9
Discovery	C_38	HCC A	M	56	165	53	19	3	###	3×4	152	151	27 A	74.5	34.5
Discovery	C_109	HCC	0 M	56	163	61	23	1	1.7	1.6×1.3	16	24	30 A	65.8	35.2
Discovery	C_49	HCC A	M	57	178	73.5	23	2	4.9	5.0×4×3.5	14	25	20 A	65.2	40
Discovery	C_47	HCC A	M	56	168	56	20	2	165	3.9×2.2	108	102	27 A	64.2	41.7
Discovery	C_39	HCC	0 M	43	165	60	22	3	530	1.6×1.6	27	26	18 A	65.4	36.9
Discovery	C_44	HCC A	F	57	154	54	23	2	261	3×2.4	99	51	123 A	70.5	43.8
Discovery	C_34	HCC A	M	43	175	77	25	3	5.4	2.5×2×1.2	37	24	181 A	70.5	41.7
Discovery	C_24	HCC A	M	58	168	63.5	22	1	2.8	4.1×3.6	192	177	140 A	68.3	42.8
Discovery	C_10	HCC A	M	37	177	71	23	2	3.4	4×3×3	24	19	28 A	71.8	47.3
Discovery	C_6	HCC A	F	56	160	58	23	2	106	5×5	24	27	32 A	64.4	35.5
Discovery	C_58	HCC A	M	58	173	70	23	1	1.7	3.9×3.6	22	24	21 A	64.7	39.9
Discovery	C_53	HCC A	M	53	175	79	26	3	2.2	3.5×3	314	248	20 A	55.5	32
Discovery	C_68	HCC	0 M	55	170	65	22	1	1.6	1.9×1.7	34	37	26 A	54.5	30.4
Discovery	C_23	HCC A	M	56	165	71	26	2	9.8	2.9×2.7	39	73	71 A	57.3	28
Discovery	C_81	HCC A	M	58	170	70	24	3	611	2.3×1.8	16	15	15 A	62	36.4
Discovery	C_51	HCC	0 F	50	174	62	20	1	4.3	1.5×1×0.5	16	64	40 A	66.6	40.8
Discovery	C_HCC:	HCC	0 M	49	167	69	25	1	3.7	1.6×1.2	111	51	54 A	71.1	40.5
Discovery	C_95	HCC A	M	58	170	59.5	21	2	4	2.7×2.4	18	26	14 A	62.9	37.6
Discovery	C_HCC:	HCC	0 M	51	167	55	20	1	1.9	1.9×1.7	20	40	61 A	70.9	37.7
Discovery	C_HCC:	HCC A	M	57	175	75	24	1	7.5	3.2×2.5	29	30	58 A	61.2	32.9
Discovery	C_27	HCC A	M	50	181	62.5	19	3	14	5cm	24	25	29 A	56.4	35.8
Discovery	C_HCC:	HCC A	M	55	168	69	24	2	93	3.9×3.2	32	33	80 A	76	42.1
Discovery	C_77	HCC A	F	57	163	66	25	1	5.2	2.5×1.7	36	45	36 A	68.4	34.9
Discovery	C_63	HCC A	M	47	171	72.5	25	1	4.5	3.0×2.1	39	26	37 A	75.4	34.6
Discovery	C_105	HCC A	M	46	168	60	21	3	###	5.0×3.7	70	53	31 A	64.3	38.2
Discovery	C_91	HCC A	M	34	165	58	21	2	4.7	3×3	56	57	52 A	75.5	45.5
Discovery	C_29	HCC A	M	60	168	65	23	2	21	2.3×2.0	18	30	44 A	70.4	36.7
Discovery	C_HCC:	HCC A	M	51	172	66	22	1	4.6	3.6×3.5	33	30	128 A	65	40.6
Discovery	C_22	HCC	0 F	58	159	57	23	2	25	1.9×1.3	26	29	25 A	66.5	37.7
Discovery	C_41	HCC A	M	39	170	71	25	2	###	4×3×2.5	23	20	36 A	71.2	47.7
Discovery	ELC_31	ELC	F	50	158	56.6	23		5.5		46	41	14 A	75	52
Discovery	ELC_19	ELC	M	53	165	59	22		1.3		38	35	19 A	71	50

Discovery	ELC_44	ELC	M	48	175	70	23	2.3	28	19	7	A	75.7	46.9
Discovery	ELC_56	ELC	F	50	160	61	24	14	16	26	41	A	73.8	46
Discovery	ELC_63	ELC	M	43	169	65	23	4.3	42	47	12	A	73.3	46.6
Discovery	ELC_47	ELC	M	40	159	50	20	4.9	25	29	17	A	73.4	46
Discovery	ELC_20	ELC	M	60	173	70	23	4.2	22	28	20	A	71	48
Discovery	ELC_43	ELC	M	46	173	69	23	4.9	28	38	64	A	70	45
Discovery	ELC_13	ELC	M	47	175	65.2	21	34	35	21	58	A	75.3	46
Discovery	ELC_33	ELC	F	54	164	51.9	19	8.7	26	39	11	A	71.6	44.8
Discovery	ELC_40	ELC	M	43	176	67.1	22	40	42	47	49	A	70.6	48.5
Discovery	ELC_22	ELC	M	54	172	65.9	22	2.7	38	45	28	A	81.8	50.5
Discovery	ELC_18	ELC	M	33	172	63.7	22	7.8	24	25	29	A	72.9	49
Discovery	ELC_61	ELC	M	46	170	58	20	11	49	33	64	A	76.3	44.5
Discovery	ELC_24	ELC	M	52	175	71.9	23	6.9	19	19	28	A	74.7	51.2
Discovery	ELC_29	ELC	M	49	176	70.8	23	2.6	25	23	13	A	71.8	45
Discovery	ELC_42	ELC	F	52	168	62	22	1.1	25	29	14	A	73.5	47.7
Discovery	ELC_17	ELC	F	39	164	55.6	21	23	21	20	28	A	74.7	50
Discovery	ELC_38	ELC	M	40	175	72.8	24	2.2	34	28	14	A	307	48.6
Discovery	ELC_7A	ELC	F	47	158	58	23	32	22	31	54	A	70.5	48.2
Discovery	ELC_58	ELC	M	40	172	68	23	6.8	34	28	46	A	78.9	44.7
Discovery	ELC_46	ELC	M	47	169	67	23	4.5	40	35	12	A	78.9	51
Discovery	ELC_25	ELC	M	51	176	70.2	23	5.3	33	22	22	A	76.5	50
Discovery	ELC_51	ELC	M	48	180	77	24	1.8	12	16	12	A	70.2	46.9
Discovery	ELC_11	ELC	M	54	172	71	24	42	19	19	42	A	67.8	41.9
Discovery	ELC_21	ELC	M	37	182	76.2	23	3.8	29	30	17	A	73	50
Discovery	ELC_28	ELC	M	40	176	65	21	7.7	30	28	51	A	69.7	49.2
Discovery	ELC_37	ELC	F	50	163	51.8	19	3.9	16	26	12	A	78.5	52.4
Discovery	ELC_11	ELC	M	37	165	58	21	28	21	20	37	A	74.7	52.2
Discovery	ELC_48	ELC	M	47	159	52	21	2.8	28	38	14	A	75.3	51.6
Discovery	ELC_45	ELC	M	52	178	75	24	3.2	18	28	25	A	70.5	46.2
Discovery	ELC_23	ELC	F	45	156	55	23	1.2	45	29	20	A	75.5	51.5
Discovery	ELC_41	ELC	M	49	163	65	24	3.9	14	30	37	A	80.6	48.9
Discovery	ELC_35	ELC	M	48	168	65.3	23	9.4	38	35	25	A	71.2	47.2
Discovery	ELC_8A	ELC	M	45	172	66	22	40	48	22	71	A	74.6	48.3
Discovery	ELC_65	ELC	M	48	170	68	24	22	43	34	25	A	71.3	47.8
Discovery	ELC_52	ELC	F	53	158	56	22	1.8	42	37	26	A	76	49
Discovery	ELC_11	ELC	M	47	173	61	20	1.5	55	38	12	A	66	43
Discovery	ELC_36	ELC	M	45	169	71.3	25	25	37	70	48	A	83.9	51.9
Discovery	ELC_30	ELC	M	49	169	61.3	22	56	38	35	72	A	70.5	47.7
Validation	H_48	H	M	52	169	75	26	3.3	15	19	14		71.9	51
Validation	H_N69	H	F	46	156	50.2	21	1.9	11	14	12		74.5	49.9
Validation	H_N5	H	M	41	176	80.5	26	3.2	40	38	19		74.2	48.2
Validation	H_57	H	M	47	165	55	20	3.2	20	19	34		76.2	49
Validation	H_49	H	M	50	159	55.7	22	6.6	12	18	7		70.8	47.5
Validation	H_43	H	F	44	157	63.4	26	5.3	17	15	16		77.2	49.5
Validation	H_45	H	M	48	160	55.9	22	1.2	10	14	9		75	46.6
Validation	H_N16	H	F	49	159	47	19	1.8	24	24	16		76	52.8
Validation	H_30	H	M	61	172	69.5	23	1.7	19	25	37		69	45
Validation	H_74	H	M	43	165	61.3	23	5.8	11	17	7		73.1	46.6
Validation	H_50	H	M	47	169	69.5	24	1.6	28	19	27		66.2	46.9
Validation	H_75	H	F	47	159	56.6	22	6.1	18	24	10		73	45.3
Validation	H_35	H	M	54	170	69	24	5.4	23	21	19		75.7	45.9
Validation	H_N64	H	M	45	184	84.4	25	2.6	36	23	32		76	50.3
Validation	H_N7	H	M	37	176	71.5	23	2.6	34	32	37		75.1	51.1

Validation	H_60	H	F	43	159	51.7	21	1.6	24	27	14	75.2	46.9
Validation	H_2	H	M	51	171	60.4	21	3	13	15	16	79.3	53.4
Validation	H_68	H	M	43	176	76	25	1.7	19	19	23	78.9	50.2
Validation	H_N259	H	M	53	172	63.4	21	3.9	13	18	14	69.9	45.8
Validation	H_10	H	M	47	171	71.6	25	2.2	26	28	28	71.2	48.2
Validation	H_N261	H	M	40	175	64.7	21	2.2	23	27	25	84.8	55.2
Validation	H_39	H	F	59	162	55.4	21	4.4	28	20	14	74.7	48.7
Validation	H_56	H	F	43	163	52.8	20	2.3	13	18	11	75.4	49
Validation	H_N171	H	M	44	183	77	23	2	33	23	21	71.5	46.5
Validation	H_N58	H	M	36	176	75	24	2	21	28	12	78.9	50.9
Validation	H_18	H	F	52	158	59	24	3.5	25	29	14	75.5	49.6
Validation	H_N49	H	M	36	173	73.3	25	1.9	26	27	14	79.2	49.6
Validation	H_38	H	M	57	175	67	22	1.4	22	21	24	71	48.2
Validation	H_N160	H	M	61	172	69.5	23	1.7	19	23	37	69	45
Validation	H_29	H	M	57	179	77.8	24	3.1	19	23	22	73.5	48.7
Validation	H_66	H	F	51	162	50.8	19	3.1	12	16	18	75.9	44.7
Validation	H_19	H	M	53	177	79.6	25	3.2	30	29	15	71.2	50.4
Validation	H_N86	H	M	46	169	68	24	9	12	15	19	69.5	49.2
Validation	H_N21	H	M	56	169	72	25	2.7	21	25	18	74.7	50.2
Validation	H_51	H	M	45	184	84.4	25	2.6	36	23	32	76	50.3
Validation	H_67	H	F	42	163	60	23	1.7	18	22	13	77.3	45.5
Validation	H_N63	H	M	47	169	69.5	24	1.5	28	19	27	66.2	46.9
Validation	H_7	H	M	48	174	71.9	24	13	27	29	21	71.9	48.3
Validation	H_72	H	F	43	162	55	21	1.8	20	22	11	76.3	49.3
Validation	H_N176	H	F	51	159	55	22	3.1	15	21	27	72.2	44.4
Validation	H_32	H	M	42	180	75	23	2	21	23	8	78.5	50.3
Validation	H_N70	H	M	58	176	67.7	22	2.2	24	21	12	81	50.7
Validation	H_59	H	F	49	165	55.2	20	3.8	15	17	13	73.7	47.2
Validation	H_N47	H	M	42	171	61	21	3.1	18	17	12	83	52.9
Validation	H_58	H	M	59	172	70	24	2.6	23	25	31	71	43.5
Validation	H_N65	H	F	52	160	59	23	3.5	25	24	14	75.5	49.6
Validation	H_31	H	M	56	172	69	23	3.4	28	26	37	72.9	44.9
Validation	H_11	H	F	48	160	55.9	22	0.9	10	14	9	75	46.6
Validation	H_21	H	M	59	177	78	25	4.2	18	25	23	73.5	48.7
Validation	H_N97	H	M	41	177	82.2	26	2.3	18	21	28	75	51.9
Validation	H_65	H	F	44	164	60.9	23	1.5	11	17	7	77.6	44.3
Validation	H_N101	H	M	36	169	71.3	25	5	15	19	15	77.3	51
Validation	H_41	H	M	50	169	66.7	23	3.6	12	12	15	73.6	48.2
Validation	H_3	H	M	56	178	75	24	2.7	21	27	18	74.7	50.2
Validation	H_N122	H	M	59	175	75	24	3	27	29	17	68.1	39.6
Validation	H_N104	H	M	37	176	60.1	20	2.1	20	19	16	71.7	50.5
Validation	C_65	HCC A	M	46	168	60	21	4 ### 5.0×3.7	70	53	31 A	64.3	38.2
Validation	C_31	HCC A	M	47	168	64	23	2 353 2.1×2.0	39	37	58 A	61.7	37.6
Validation	C_99	HCC A	M	49	165	65	24	4 ### 4.3×4.0	62	112	225 B	72.3	28.4
Validation	C_76	HCC A	M	48	175	76.5	25	3 4.4 3×2	24	24	70 A	60.8	39.8
Validation	C_37	HCC A	F	42	152	55	24	2 123 2.5×2.2	46	38	72 A	69.1	41.8
Validation	C_HCC	HCC	0 M	49	170	57.5	20	1 2 1.5×1.1	44	35	61 A	67.1	39.5
Validation	C_66	HCC	0 F	47	163	69	26	3 ### 1.8×1.8×1.	32	26	24 A	66.7	42.2
Validation	C_HCC	HCC	0 M	57	170	60	21	1 2.3 1.1×1	25	22	29 A	71.2	38.9
Validation	C_78	HCC	0 M	51	184	84	25	1 17 1.9×1.5	43	61	258 A	75.7	43.2
Validation	C_107	HCC	0 M	58	170	65	22	1 4.8 1.9×1.7	21	24	26 A	54.5	30.4
Validation	C_35	HCC	0 M	49	168	60.5	21	2 37 1.4×1.3×1	19	23	24 A	58.2	35.4

Validation	C_104	HCC A	M	51	168	64	23	2	4.2	2.1×1.6	28	30	170 A	63.6	39.8
Validation	C_40	HCC A	M	47	171	78	27	2	22	3.7×3.2	51	69	102 A	61.7	40.8
Validation	C_43	HCC A	M	50	180	76	23	2	171	2.6×1.5	54	120	50 A	70.3	41.2
Validation	C_48	HCC A	M	44	159	47	19	3	544	2.5×1.7	10	16	7 A	77.9	49.9
Validation	C_57	HCC A	M	54	173	68	23	2	3.1	4.2×3.7	27	27	113 A	66.4	40.7
Validation	C_67	HCC A	F	57	155	44.5	19	3	459	2.7×2.6	21	35	40 A	62.8	35.7
Validation	C_HCC:	HCC A	F	41	162	58	22	3	###	4×2.2×2	35	36	29 A	72.4	39
Validation	C_HCC:	HCC A	M	54	183	62	19	1	5.5	3.8×4.4	42	32	69 A	74.5	45.2
Validation	C_HCC:	HCC A	M	52	173	65	22	1	2.1	4.7×3.2	24	26	53 A	64	42.6
Validation	C_HCC:	HCC A	M	56	163	53	20	1	4.4	2.2×2	20	22	16 A	67.2	42
Validation	C_15	HCC A	M	60	172	71	24	2	13	2.5×2.5; 1	46	34	46 A	61.2	35
Validation	C_2	HCC	0 M	45	172	65	22	1	3.6	2cm	13	14	34 A	72.5	48.1
Validation	C_80	HCC A	M	54	165	65	24	1	2.6	3.3×2.8	22	25	30 A	71.2	40.7
Validation	C_84	HCC A	M	51	170	65	22	1	1.5	4×5	11	19	11 A	65	37.5
Validation	C_87	HCC A	M	57	172	72	24	3	2.2	3.8×3.8	38	26	72 A	69.7	39.8
Validation	C_93	HCC A	M	54	167	72	26	1	7.8	3.5×2.3	19	23	66 A	64.1	38.6
Validation	C_HCC	HCC	0 F	35	155	44	18	1	3.6	1.6cm	11	19	12 A	74.7	42.7
Validation	C_HCC:	HCC A	M	52	170	58	20	2	55	2.5×2.3×1.	20	20	36 A	67.4	42
Validation	C_HCC:	HCC	0 F	57	160	50	20	2	104	2×1.8×2	8	19	15 A	71.7	44.4
Validation	C_103	HCC B	M	52	168	54	19	2	93	11.3×8.6	38	58	127 A	66.4	34.3
Validation	C_108	HCC B	M	57	160	53	21	1	4.5	6.7×6.0×4.	24	25	92 A	63.1	37.3
Validation	C_110	HCC C	M	58	167	55	20	2	105	9.6×8.2	17	31	124 A	87.8	39.5
Validation	C_21	HCC B	M	49	170	75	26	4	###	3.0×2.2; 5.	33	29	95 A	64	39.6
Validation	C_26	HCC C	M	56	166	71.5	26	3	###	7.8×7.2; 1	109	135	85 A	59.9	37.8
Validation	C_33	HCC B	M	53	168	56	20	3	###	5.5×4.5	20	29	47 A	68.6	45.3
Validation	C_42	HCC C	M	58	158	56	22	TACE	43	8.6×6.4	47	52	318 A	76	39.8
Validation	C_52	HCC C	M	51	171	63	22	ND	>800	11.6×1.06	33	38	163 A	62.3	35.7
Validation	C_55	HCC B	M	48	170	71.5	25	TACE	18	6.0×4.9	68	54	83 A	68.7	38.4
Validation	C_56	HCC B	M	47	160	65	25	3	###	5.9×5.8	20	27	66 A	78	49.1
Validation	C_72	HCC B	M	44	165	54.5	20	1	7.3	4.9×6.2	83	63	242 A	77.7	44.2
Validation	C_8	HCC B	M	52	158	62	25	3	>800	5.5×4.5×4	57	74	84 A	64.1	38.4
Validation	C_98	HCC C	F	57	163	55	21	2	339	10 cm with	145	159	336 A	69.4	33.8
Validation	C_HCC	HCC B	M	58	169	45	16	2	3.5	7×5; 1.5×1	19	31	21 A	69.5	44
Validation	C_HCC	HCC B	M	56	170	58	20	2	19	11×10.4	24	44	126 A	65.9	36.8
Validation	C_HCC	HCC B	M	55	172	66	22	2	###	6.5×5	48	44	240 A	62.7	35.5
Validation	C_HCC	HCC B	M	47	156	51	21	ND	>800	12×14	60	66	485 A	73	43
Validation	C_HCC	HCC B	M	36	186	63.5	18	2	46	15×12×10	33	91	107 A	58.6	36.4
Validation	C_HCC	HCC B	M	51	165	65	24	2	12	5.5×5; 2.1	39	33	78 A	72	43.4
Validation	C_HCC	HCC B	M	51	168	68	24	4	###	12×8×8	38	33	147 A	70.8	45.1
Validation	C_HCC:	HCC B	M	44	170	69	24	ND	>800	11.6×14.1	47	93	238 A	72	46
Validation	C_HCC:	HCC B	M	57	162	50	19	2	###	9×7×5	141	123	588 A	63.4	34.1
Validation	C_HCC:	HCC B	M	49	170	67.5	23	1	3.5	12×11×8	22	84	102 A	62	40.1
Validation	C_HCC:	HCC B	M	45	173	67	22	4	###	6.5×3.2	32	35	87 A	64	38
Validation	C_HCC:	HCC B	M	58	168	52	18	ND	###	7.0×5.2	81	118	501 A	68.4	41.3
Validation	C_HCC:	HCC B	M	50	180	61	19	3	###	11×10	36	59	118 A	70.5	41.3
Validation	C_HCC:	HCC B	M	47	170	52	18	ND	###	11.3×6.8	21	35	109 A	74.8	48.9
Validation	C_HCC:	HCC B	M	48	168	70	25	2	964	14×13×7	23	92	108 A	73.6	42.2
Validation	C_HCC:	HCC B	M	58	156	53	22	2	83	6.5×3.5	23	40	40 A	68.2	33.1
Validation	C_HCC:	HCC B	M	57	164	62	23	ND	###	11.5×8.8×	87	132	205 A	63.3	33.4
Validation	C_16	HCC B	M	43	174	69	23	2	8.9	7×6×7	43	30	64 A	65.9	39.6
Validation	C_17	HCC B	M	47	165	60	22	2	68	6×6×8	11	22	102 A	72.6	40
Validation	C_25	HCC C	M	41	179	77.5	24	ND	###	8.1×8.0	33	46	225 A	64.3	32.8
Validation	C_3	HCC B	M	38	176	79	26	3	9.4	11.2×9.5	80	58	67 A	69	47.6

Validation	C_30	HCC B	M	51	168	67	24	3	16	17×15×4	25	20	17	A	63.4	37
Validation	C_4	HCC B	F	48	157	55	22	2	###	6.4×5.4×4.	17	38	91	A	70.2	44.2
Validation	C_45	HCC B	M	44	170	78	27	TACE	31	15.2×14.9	61	121	416	A	64	33.6
Validation	C_50	HCC B	M	46	170	54	19	TACE	363	6.3×3.9	26	32	73	A	72	42.4
Validation	C_59	HCC B	M	59	169	60	21	2	55	7.1×4.7	36	39	127	A	70.6	38.4
Validation	C_71	HCC B	M	50	170	75	26	3	206	7×6	16	22	77	A	57.9	33.3
Validation	C_79	HCC B	M	44	165	61	22	1	6.6	7.0×6.3	17	27	268	A	78.3	35.8
Validation	C_9	HCC B	M	52	158	62	25	3	###	7×6	85	92	132	A	64.1	38.4
Validation	C_92	HCC B	M	46	168	54	19	3	###	6.9×6.2	65	88	122	A	67.1	36.8
Validation	C_HCC	HCC B	M	54	175	69	23	2	339	6.0×3.9	15	24	52	A	66.8	39
Validation	C_HCC	HCC B	M	55	165	60	22	2	13	7.4×6.5	18	24	31	A	73.3	42.4
Independent diagn	XJ_1	HCC B	M	53	170	64	22	ND	58	6.4×5.2	42.6	60	702	A	68.8	27.5
Independent diagn	XJ_2	HCC A1	F	71	155	55	20	ND	8.1	4.3×3.7	11.8	18	22.6	A	65.9	42.22
Independent diagn	XJ_3	HCC B	M	63	165	68	25	ND	18	7.2×6.1	687	755	173	A	67.5	23.4
Independent diagn	XJ_4	HCC A2	M	57	172	66	20	2	>100	4.5×3.8	30.7	1.1	29.4	A	50.5	28.73
Independent diagn	XJ_5	HCC B	M	59	173	84	20	ND	19	10.9×9.6	40.2	36	51.5	A	75.3	42.4
Independent diagn	XJ_6	HCC A	M	57	165	68	25	ND	>100	3.8×2.7	45.5	0.9	199	A	60.7	32.9
Independent diagn	XJ_7	HCC A1	M	54	170	77	20	1	0.7	3.2×2.4	25.3	23	114	A	72.5	42
Independent diagn	XJ_8	HCC A	M	75	175	82	20	ND	>100	3.1×2.4	111	113	657	B	75.4	36
Independent diagn	XJ_9	HCC A1	M	49	175	60	20	2	6.7	4.1×2.4	551	290	71.9	A	60.6	41.83
Independent diagn	XJ_10	HCC A1	M	71	162	68	26	ND	>100	4.0×2.9	193	125	76	A	74.2	36.2
Independent diagn	XJ_11	HCC A3	F	75	153	56	20	ND	161	3.3×2.0	35.2	82	367	B	74.2	35.7
Independent diagn	XJ_12	HCC B	M	71	168	52	20	ND	35	5.9×5.2	262	162	104	A	66.4	31
Independent diagn	XJ_13	HCC C	M	78	165	69	25	ND	>100	10.4×7.4	52.7	72	378	A	65.4	34
Independent diagn	XJ_14	HCC A3	F	75	150	61	20	ND	102	1.5×1.5	176	158	640	B	73.3	38.6
Independent diagn	XJ_15	HCC B	M	59	173	84	20	ND	29	12.9×10.4	86.4	67	82.3	A	77.6	40.8
Independent diagn	XJ_16	HCC A	F	54	160	57	20	3	>100	1.6×1.5	26.2	24	45.7	A	77.9	49.08
Independent diagn	XJ_17	HCC B	M	47	168	62	22	3	40	9.9×5.7	28	42	151	A	69.9	29.7
Independent diagn	XJ_18	HCC B	M	47	168	62	22	3	40	9.9×5.7	28	42	151	A	69.9	29.7
Independent diagn	ZD_1	HCC A	M	45	160	65	25	1	33	3x3.5x3	298	397	1390	B	60.3	30
Independent diagn	ZD_2	HCC A	M	56	167	69	25	2	35	3.5x3.5x3.	104	98	356	A	58	35
Independent diagn	ZD_3	HCC A	M	30	170	75	26	1	25	3.5x4x2	33	48	57	B	77	41.3
Independent diagn	ZD_4	HCC B	M	65	166	65.5	24	2	6.2	6.6x7.6x8c	11	32	60	A	7.2	32
Independent diagn	ZD_5	HCC B	F	65	168	62	22	2	6.1	6x4x4cm	21	21	43	A	71.5	43.9
Independent diagn	ZD_6	HCC A	M	52	158	56	22	ND	ND	3x3x5cm	71	44	221	A	69.1	42.2
Independent diagn	ZD_7	HCC A	M	63	171	63	22	1	4.6	1x1x0.9cm	35	33	50	A	72	44.7
Independent diagn	ZD_8	HCC A	M	47	170	71.5	25	4	###	3x2.2x4cm	186	388	1089	C	61.9	26.9
Independent diagn	ZD_9	HCC C	M	36	160	65	25	4	###	18x17x16c	11	59	266	A	65.2	30.3
Independent diagn	ZD_10	HCC B	M	51	165	54.5	20	3	205	10.3x6.5x5	55	68	55	A	85	40.5
Independent diagn	ZD_11	HCC B	M	51	158	62	25	3	205	8x6x4cm	55	68	55	A	85	40.5
Independent diagn	ZD_12	HCC A	M	67	163	55	21	1	11	3x3x2.8cm	31	60	45	A	54.3	26.1
Independent diagn	ZD_13	HCC B	F	30	169	65.5	23	2	32	73x62x72r	27	40	45	A	61.9	37
Independent diagn	ZD_14	HCC A	M	46	170	67.5	23	3	325	diameter 5.	301	143	528	A	65.9	42.2
Independent diagn	ZD_51	HCC A	F	48	172	66	22	3	2.4	4x3x2.5cm	77	45	45	B	61.2	37.6
Independent diagn	ZD_16	HCC C	F	52	156	51	21	4	###	8.5x10x8c	125	135	266	B	60	30
Independent diagn	ZD_17	HCC B	M	54	186	73.5	21	4	###	8x7x10cm	82	184	413	B	75.6	35
Independent diagn	ZD_18	HCC A	M	47	165	65	24	3	627	5.0x4.5cm	40	66	87	C	65.3	32.4
Independent diagn	ZD_19	HCC B	M	45	168	68	24	4	###	6x4x5cm	39	48	205	A	53.3	29.6
Independent diagn	ZD_20	HCC A	M	51	170	69	24	1	25	24x19x24r	26	22	28	A	63.3	42.5
Independent diagn	ZD_21	HCC C	M	38	162	60	23	4	###	12x18x11c	82	210	709	A	64.9	41.2

Independent diagn ZD_22	HCC A	F	49	170	67.5	23	1	23	4x2.5x2cm	45	53	125 A	72	35
Independent diagn ZD_23	HCC A	M	48	173	67	22	1	15	3x4x3cm	55	56	130 A	70	35
Independent diagn ZD_24	HCC A	M	53	168	72	26	2	87	5x4x4cm	84	79	96 B	54	30.7
Independent diagn ZD_25	HCC A	M	53	180	71	22	1	8.2	5x4x4cm	35	27	68 A	74.9	44.1
Independent diagn ZD_26	HCC A	M	50	170	72	25	1	7	4x4x4cm	111	94	117 A	74.1	46.5
Independent diagn ZD_27	HCC A	M	53	168	70	25	1	27	19X24mm	37	48	114 B	56.1	32.5
Independent diagn ZD_28	HCC A	M	47	156	73	30	1	43	50x30x47r	20	23	18 A	60.6	41.4
Independent diagn ZD_29	HCC A	M	45	164	62	23	3	>10	3.6x3.9x4.	59	301	406 B	62.1	30
Independent diagn ZD_30	HCC B	M	37	174	69	23	4	###	6x7x8.5cm	111	333	544 B	59.9	34
Independent diagn ZD_32	HCC A	M	57	174	74.5	25	1	1.9	3.6x4x4cm	27	29	31 A	83.9	38.3
Independent diagn ZD_33	HCC B	M	62	160	62	24	2	4.2	7.5x5.4x5c	13	16	61 A	64.2	37
Independent diagn ZD_34	HCC A	M	71	175	85	28	3	339	4.5x4x4cm	14	25	66 A	54.5	31.5
Independent diagn ZD_35	HCC C	F	44	168	75	27	1	8.5	diameter 9	19	39	17 A	60.5	31
Independent diagn ZD_36	HCC A	M	54	163	68	26	4	###	4.8x4.2x4.	53	39	118 A	56.9	35.6
Independent diagn ZD_37	HCC B	M	62	170	66	23	2	216	8.5x7.6x5.	15	24	111 A	62.3	37.2
Independent diagn ZD_38	HCC A	M	53	176	71	23	2	4.3	4x3x2.5cm	34	31	54 A	44.1	28.2
Independent diagn ZD_39	HCC B	F	53	155	63.5	26	2	169	diameter 6	35	57	25 A	71.5	40.6
Independent diagn ZD_40	HCC A	M	47	156	65	27	1	4.4	0.8x0.7x1.	42	39	24 A	82.7	53.3
Independent diagn ZD_41	HCC B	M	62	165	68	25	3	317	4*3;2*3;4*	48	86	197 A	68.7	39.5
Independent diagn ZD_42	HCC C	M	52	180	75	23	1	2.9	12x16x10c	27	376	475 A	85.8	45.5
Independent diagn ZD_43	HCC A	M	64	170	63	22	2	91	16.8x15.5r	12	19	25 A	65.7	46.7
Independent diagn ZD_44	HCC B	M	52	181	71	22	2	41	6.8x6.1x8c	24	32	81 A	57.4	35.3
Independent diagn ZD_45	HCC A	M	68	162	73.5	28	1	7.4	2.3x2.8x2.	104	145	111 A	62.2	34.1
Independent diagn ZD_46	HCC C	M	52	157	56	23	2	21	8x9x12cm	703	450	274 B	62.3	29
Independent diagn ZD_47	HCC A	M	73	160	60	23	2	20	2.4x2.8x3.	26	28	43 A	67.8	39.5
Independent diagn ZD_48	HCC A	F	68	160	54	21	2	72	diameter 1	64	53	26 A	64.2	43.1
Independent diagn ZD_49	HCC A	F	49	168	77	27	1	9.1	2.8x2.5x2c	9	15	11 A	62.6	42.1
Independent diagn ZD_50	HCC A	M	54	171	63.5	22	1	2	2.3x2.2x1.	23	23	27 A	65.6	45.2
Independent diagn ZD_52	HCC A	F	54	164	58	21	1	2.4	0.7x0.7x1.	23	30	34 A	61.1	31.2
Independent diagn ZD_53	HCC B	M	54	178	70	22	1	7.2	9x7.7x7cm	43	56	46 A	69.2	33
Independent diagn ZD_54	HCC A	M	64	172	79	27	1	2.7	4.7x4.8x4c	36	27	47 C	52.9	26.6
Independent diagn ZD_55	HCC B	M	57	177	65	21	2	59	6.5x6x4.5	63	95	129 A	66.2	37.5
Independent diagn ZD_56	HCC B	M	64	171	71	24	4	###	8x9x8cm	61	111	189 A	57.5	34.5
Independent diagn ZD_57	HCC C	M	45	177	81	26	4	###	13x10x9cm	98	157	375 A	76.3	42.3
Independent diagn ZD_58	HCC A	F	53	166	76.5	28	1	1.8	5x3x2.5cm	15	13	22 A	74.1	44.4
Independent diagn ZD_59	HCC A	M	55	182	70	21	3	125	3.4x2.6x3c	59	42	38 A	63.2	35.2
Independent diagn ZD_60	HCC A	M	58	172	60.5	20	1	6.2	4x3x4cm	54	75	85 A	63.5	36
Independent diagn ZD_61	HCC B	F	45	175	85	28	1	4.2	5x6x6cm	11	34	209 A	70.2	38.4
Independent diagn ZD_62	HCC B	M	66	169	74	26	4	###	6x7x8cm	42	33	69 A	59.9	43.1
Independent diagn ZD_63	HCC A	F	66	176	66.5	22	1	1.7	diameter 2	16	29	16 A	63.1	41.9
Independent diagn ZD_64	HCC A	M	77	174	68	22	1	0.6	diameter 4	78	68	361 A	64.6	43.1
Independent diagn ZD_65	HCC B	M	53	163	60	23	3	330	6x5.7x5.4c	38	45	86 A	70.5	42.1
Independent diagn ZD_66	HCC A	M	37	182	70	21	3	1.9	2x1.5x1cm	128	77	784 A	62.1	41.8
Independent diagn ZD_67	HCC A	M	44	160	67	26	4	###	diameter 3	43	45	630 A	70.3	34.3
Independent diagn ZD_68	HCC B	F	52	168	75	27	4	###	6.8x8.8x9c	524	###	456 C	51.2	24.3
Independent diagn ZD_69	HCC A	F	63	168	65	23	1	1.3	diameter 3	13	17	48 A	63.2	41.4
Independent diagn ZD_70	HCC C	M	54	167	70	25	3	>10	13x9x11cm	29	94	300 B	59.3	27.2
Independent diagn ZD_71	HCC B	M	47	175	70	23	2	159	54x37mm	58	35	32 A	62.7	42.9
Independent diagn ZD_31	HCC C	F	46	165	68	25	4	###	13x8x5	17	56	26 A	70.6	42.3
Independent diagn HN_6	HCC A	M	30	174	64	21	2	25	3.5x3.5x3.	33	48	57 B	77	41.3
Independent diagn HN_1	HCC A	F	56	165	65	24	2	15	3.5x4x3	45	56	68 A	65	34
Independent diagn HN_2	HCC C	F	64	175	76.5	25	4	>12	10x11x12c	50	172	559 B	71.2	40.9
Independent diagn HN_3	HCC A	M	39	152	55	24	2	190	2x1x3cm	97	67	61 A	79.3	49.3
Independent diagn HN_4	HCC C	M	40	170	67.5	23	2	9.5	10x9x11cm	111	188	185 B	77.8	51.2

Independent diagn HN_5	HCC C	M	52	163	69	26	1	3.1	11x10x10c	44	54	363	B	71.5	39.1
Independent diagn HN_7	HCC B	F	66	160	63.5	25	2	523	7.5x5x5cr	19	36	29	A	60.6	39.4
Independent diagn HN_8	HCC A	M	62	168	65	23	2	6.5	5x5x3cm	39	33	46	A	71.9	39.5
Independent diagn HN_9	HCC C	M	35	168	68	24	2	19	11x11x7cr	30	69	76	A	73.7	48.3
Independent diagn HN_10	HCC B	M	35	167	65	23	2	12	9x8x7cm	42	73	76	A	72	39.1

Abbreviations: BCLC stage, Barcelona Clinic Liver Cancer staging; BMI, body mass index; AFP, alphafetoprotein; ALT, alanine aminotransferase; AST, aspartate aminotransferase; GGT, glutamyl transpeptidase; CTP score, Child-Turcotte-Pugh score; TP, total protein; ALB, albumin; GLO, globulin; TB, total bilirubin; DB, direct bilirubin; IB, indirect bilirubin; PT, prothrombin time; PLT, platelet; CEA, Carcino-embryonic Antigen; TACE, transarterial chemoembolisation; PVTT, portal vein tumor thrombus; ND, no detection

GLO (20.0- 35.0 g/L)	TB (0-21 μ mol/L) 3.4 ~ 17.1	DB 0-5 μ mol /L	IB 3- 14μ mol/ L	PT (12- 14 s)	D- dime r <200 μg/L	PLT 83- 303 10E9/ L	CEA 0.0- 5.0 ng/mL	CA 199 0.0- 37.0 U/m L	CA 125 0.0- 35.0 U/m L	Ferropr otein M:80- 130;F:3 5-55 ng/mL	CA 153 <28 U/m L	Cirr hotic or N)	HBsAg positiv e (Y or N)	Complic ation (Y or N)	Dietary habit
26.4	14	4	10			255									mixed diet
31.8	5	2	3			242	0.9	2.2	73.2	55.9	11.6				mixed diet
23.5	11	3	8			90	2.5	5.7	13						mixed diet
20.8	17	5	12			142	2.8	50.3	6.8						mixed diet
26.3	8	3	5			311	2.1	17.4	4.7						mixed diet
27.2	13	4	9			257	2.2	24.3	11.5						mixed diet
25.6	8	4	4			220	1.8	4.2	9.6						mixed diet
25.1	16	5	11			212	3.9	11.4	11.5						mixed diet
20.3	16	5	11			213	0.9	7.1	5.8	435.9					mixed diet
26.9	9	4	5			193	4.2	21	8.7	66.5					mixed diet
21.1	9	4	5			268	null	null	null						mixed diet
22.6	17	4	13			206	1.1	5	13	240.1					mixed diet
23.1	14	5	9			294	2.4	2	7.5	77.9					mixed diet
23.6	11	3	8			210	1	4.9	12.8						mixed diet
24.8	12	3	9			220									mixed diet
23.8	13	5	8			227	2.1	2	7.7	40.8					mixed diet
25.9	11	5	6			290									mixed diet
25.8	10	4	6			259	0.9	17.8	7.3						mixed diet
30.3	20	6	14			277	1.4	8.6	9.8	166.6					mixed diet
24.8	16	6	10			157	null	null	null						mixed diet
30.7	14	5	9			224	0.7	11.6	5.6						mixed diet
25.1	14	5	9			193	null	null	null						mixed diet
22.7	29	11	18			153	1.6	2	10.7	null					mixed diet
27.9	12	4	8			198	1.3	12.8	8.9						mixed diet
25	14	5	9			213	1.7	4	5.4						mixed diet
23.5	18	5	13			219	0.9	6.7	6.1	null					mixed diet
30.7	14	5	9			231	0.7	11.6	5.6						mixed diet
26.9	9	4	5			193	4.2	21	8.7	66.5					mixed diet
24.3	41	15	26			177	1.5	4	7.3	235.2					mixed diet
26.3	18	6	12			200	0.5	4.2	2.4	171.9					mixed diet
25.3	12	4	8			236	3.6	2.8	8.7	409.7					mixed diet
24.8	18	4	14			176	2.4	3.7	10.3						mixed diet
23.3	6	3	3			222	1.1	9.1	22	22.5	5.6				mixed diet
25.3	13	5	8			198	0.7	9	6.2	233.1					mixed diet
27.8	8	4	4			177	null	null	null	null					mixed diet
26.2	15	5	10			223	1.9	3.9							mixed diet
26	12	4	8			364	2.9	2	11.5						mixed diet
24.1	11	4	7			215	1.9	6.4	null						mixed diet
26.4	16	5	11			257									mixed diet
20.3	16	5	11			170	0.7	6.2	4.1	142.4					mixed diet
28.9	16	5	11			109	2.1	8.1	13.3	315.7					mixed diet
28.3	10	4	6			166	1.8	36.5	11.9						mixed diet
24	19	5	14			184	0.9	10.8	9.3	240.9					mixed diet
30.1	11	4	7			168	null	null	null						mixed diet

26.9	23	8	15	12	409	105	4.1	15.2	12.8	225.2		Y	Y	portal hyf mixed diet
36.9	11	5	6	13	560	145	4.8	8	17.9	262.3		Y	Y	chronic cl mixed diet
41	28	13	15	14	918	97	6.7	3.2	18.4	19.7		Y	Y	portal hyf mixed diet
31.9	17	6	11	11	264	125	0.9	8.7	10.9	74.2	6.1	Y	Y	hepatic cymixed diet
24.1	24	12	12	13	176	69	2.5	23.6	30.7	290.5		Y	Y	N mixed diet
27.4	18	5	13	13	180	153	1.7	4.8	8.7	130.6		Y	Y	N mixed diet
27.4	13	5	8	12	294	75	1.8	28.2	18.1	192.3	19.8	Y	Y	N mixed diet
23.8	11	5	6	13	106	210	2	4.5	9.2	165		Y	Y	N mixed diet
21.9	10	3	7	13	89	78	1.2	5.8	11.9	42.9	10.3	Y	Y	renal cyst mixed diet
32.4	23	7	14	13	202	119	3.7	<2	9.8	301.6		Y	Y	N mixed diet
23.4	20	10	10	12	109	175	3.4	6	8	183.5		Y	Y	N mixed diet
29.4	17	7	10	13	372	77	5.2	16.2	31.4	36.6		Y	Y	N mixed diet
31.4	26	10	16	12	50	125	2.7	11.3	11.7	277.4		Y	Y	N mixed diet
28	18	7	11	12	30	203	1.2	2.1	4.3	176.5		Y	Y	N mixed diet
27.3	14	7	7	11	220	199	9.2	53.8	8.1	347.3		Y	Y	N mixed diet
28.3	14	5	9	12	130	153	1.5	3.4	10.2	107.8		Y	Y	N mixed diet
26.1	22	9	13	11	208	279	1.7	23.2	9.2	276.6		Y	Y	N mixed diet
31.1	11	7	4	16	1123	56	1.7	5.8	52.8	79.9		Y	Y	portal hyf mixed diet
26.6	11	5	6	13	145	103	1.2	6.2	31	427.2		Y	Y	N mixed diet
36.1	44	11	33	16	1478	41	4.2	9.1	24.4	55.2		Y	Y	portal hyf mixed diet
29.5	24	8	16	12	246	206	3.4	7.4	4.4	257.3		Y	Y	chronic cl mixed diet
28.9	43	21	22	12	242	221	1.3	46.8	7.7	226.3		Y	Y	N mixed diet
40	46	19	27	11	5151	91	0.6	9	34.6	577.4		Y	Y	hepatic cymixed diet
30.6	21	8	13	15	1611	38	3	13.7	14.7	12.5		Y	Y	N mixed diet
25.2	16	6	10	12	139	209	2.5	9.9	10.7	322.1		Y	Y	chronic cl mixed diet
22.5	36	18	18	12	208	125	3	7.5	5.8	89.4		Y	Y	N mixed diet
28.5	9	4	5	12	89	101	7.7	9.7	4.4	166.6		Y	Y	N mixed diet
26.7	13	3	10	13	254	141	1.6	4.9	6.2	517.6		Y	Y	N mixed diet
28.8	8	3	5	11	482	150	2.3	7.7	21.4	503.5		Y	Y	N mixed diet
25.5	23	12	11	12	260	137	2.3	15.6	6.7	475.7		Y	Y	N mixed diet
24.5	13	5	8	11	121	164	1.9	5.3	22.3	208.5		Y	Y	hepatic cymixed diet
28.9	10	2	8	11	358	201	0.9	9.9	10.9	230.8		Y	Y	N mixed diet
24.8	11	4	7	13	191	111	1.6	2	8.4	166.2		Y	Y	N mixed diet
23.5	25	12	13	12	176	116	1.7	12.2	8.1	270.1		Y	Y	chronic cl mixed diet
24.1	33	17	16	14	958	43	2	8.5	7.3	113.9		Y	Y	N mixed diet
29.3	21	7	13	15	236	71	3.8	76.4	29.6	367		Y	Y	hepatic cymixed diet
25.6	13	4	9	13	220	58	2.2	2	7.6	72.4		Y	Y	portal hyf mixed diet
25.8	24	10	14	14	199	138	1.1	2.5	4.1	168.3	10.1	Y	Y	hepatic cymixed diet
30.6	9	4	5	13	46	159	1.1	6.2	4.3	533.7		Y	Y	N mixed diet
25.3	11	5	6	11	380	128	4.6	11.2	4.7	427.3		Y	Y	N mixed diet
33.2	10	5	5	13	28	312	3.8	<2	11.9	1129.2		Y	Y	N mixed diet
28.3	24	9	15	14	572	75	1.8	102	11.2	31.3		Y	Y	N mixed diet
20.6	4	2	2	12	147	147	1.5	<2	10.6	174.2		Y	Y	N mixed diet
33.9	13	5	8	12	391	143	0.8	<2	13.2	76.5		Y	Y	chronic cl mixed diet
33.5	27	10	17	13	470	83	2.8	13.1	17.8	81.9		Y	Y	N mixed diet
40.8	8	3	5	11	1272	201	3.9	26.5	6.7	204.5		Y	Y	N mixed diet
26.1	19	8	11	12	2716	74	1.5	7.4	5.9	190.8		Y	Y	N mixed diet
30	8	4	4	10	96	184	1.5	4.9	7.1	118.1		Y	Y	N mixed diet
33.7	9	3	6	17	980	99	3.8	7.7	15.9	212.3		Y	Y	portal hyf mixed diet
24.4	21	10	11	13	194	45	3.4	6	8	193.5		Y	Y	N mixed diet
28.8	10	4	6	13	594	94	1.9	22.8	15.9	235.9	15.5	Y	Y	N mixed diet
23.5	8	3	5	13	490	128	2.2	19	25.6	145		Y	Y	chronic cl mixed diet
23	12	4	8	14		220	1.8	14.2	19.6	264.1	16	Y	Y	N mixed diet
21	13	5	8	14		197	1.9	22.8	18.9	65		Y	Y	N mixed diet

28.8	16	3	13	13	270	4.3	9.3	20.1	142.3	16	Y	Y	N	mixed diet
27.8	12	3	9	14	257	5.2	4	17.7	30.8		Y	Y	N	mixed diet
26.7	20	7	13	12	294	3.4	5	17.5	87.9		Y	Y	N	mixed diet
27.4	15	4	11	12	213	1.2	6.7	null	62.7		Y	Y	N	mixed diet
23	5	3	2	null	176	1.8	31.5	10.9	176.6	17	Y	Y	N	mixed diet
25	30	11	19	13	268	6.7	11.5	null	201.8		Y	Y	N	mixed diet
29.3	7	3	4	null	235	1.7	31.6	21.6	227.3		Y	Y	chronic cl	mixed diet
26.8	13	6	7	13	190	2.5	15.7	23	182.6		Y	Y	chronic cl	mixed diet
22.1	20	7	13	13	216	2.7	5.5	18.2	249.4		Y	Y	N	mixed diet
31.3	15	8	7	12	329	2.1	6.5	18.1	49		Y	Y	N	mixed diet
23.9	13	5	8	12	189	1.6	16.7	24.9	79	12	Y	Y	N	mixed diet
31.8	8	3	5	12	218	1.8	27.3	20.5	93.4	22	Y	Y	renal cyst	mixed diet
23.5	17	7	10	12	231	1.7	12.6	15.6	122.2	13.5	Y	Y	N	mixed diet
26.8	13	3	10	14	278	4.8	5	17.1	233.7		Y	Y	hepatic cym	mixed diet
25.8	15	4	11	14	361	5.1	16.4	24.7	180.7		Y	Y	N	mixed diet
24.7	15	5	10	13	228	2.7	21.6	15.6	100.4	23	Y	Y	N	mixed diet
258	18	8	10	12	239	1.7	2.9	13.2	104.3		Y	Y	N	mixed diet
22.3	12	7	5	12	251	2.9	8.9	17.9	null		Y	Y	N	mixed diet
34.2	18	8	10	14	259	3.1	23.3	21.5	null		Y	Y	portal hyp	mixed diet
27.9	11	2	9	12	354	2.9	3	15.5	87.8	20.1	Y	Y	N	mixed diet
26.5	19	6	13	14	255	2.5	8.9	17.5	99.5		Y	Y	N	mixed diet
23.3	7	4	3	12	223	9.2	6.9	null	104.1		Y	Y	N	mixed diet
25.9	17	7	10	14	229	2.3	23	15.9	92.9	25	Y	Y	N	mixed diet
23	11	3	8	null	188	1.8	5.9	20.1	191.6	18	Y	Y	N	mixed diet
20.5	21	9	12	13	207	3.2	6.5	22.4	126.7		Y	Y	N	mixed diet
26.1	12	3	9	13	228	1.9	17.9	13.5	81.3	16	Y	Y	renal cyst	mixed diet
22.5	15	5	10	13	277	2.1	22.3	12.5	116		Y	Y	N	mixed diet
23.7	30	11	19	14	233	1.2	7.5	15.8	99		Y	Y	N	mixed diet
24.3	21	4	17	12	252	7.1	9.6	12	132.5		Y	Y	N	mixed diet
24	16	4	12	13	221	2	8.8	29.1	76.6		Y	Y	renal cyst	mixed diet
31.7	25	5	20	null	348	4.6	15.8	15.6	79.3	8	Y	Y	N	mixed diet
24	13	5	8	14	270	1.8	17.3	26.9	153.7	21	Y	Y	N	mixed diet
26.3	10	3	7	13	127	2.5	13.2	24.7	32.9	21	Y	Y	N	mixed diet
23.5	14	3	11	13	319	3.5	3	18.5	null		Y	Y	N	mixed diet
27	14	3	11	null	278	2	8.6	19.8	116.6		Y	Y	chronic cl	mixed diet
23	19	4	15	13	253	2.4	15.1	6.6	103	18	Y	Y	N	mixed diet
32	69	32	37	13	217	2.7	19.3	17.6	99.3		Y	Y	N	mixed diet
22.8	13	5	8	15	239	5.4	6.6	null	241		Y	Y	N	mixed diet
20.9	21	5	16		240	1.3	9.2	10.1						mixed diet
24.6	10	3	7		157	5.3	24.8	13.2						mixed diet
26	10	4	6		234	1.8	2	5.8						mixed diet
27.2	13	4	9		257	2.2	24.3	11.5						mixed diet
23.3	6	3	3		222	1.1	9.1	22	22.5	5.6				mixed diet
27.7	9	3	6		344	0.6	11.8	13.6	54.6	7.3				mixed diet
28.4	12	5	7		215	1.4	27.5	11.6	52.9	16.2				mixed diet
23.2	11	4	7		181	1.3	3.9	10.1						mixed diet
24	16	5	11		161	2	6.9	5.1						mixed diet
26.5	8	2	6		287									mixed diet
19.3	7	3	4		151	null	null	null	null					mixed diet
27.7	7	2	5		377									mixed diet
29.8	11	4	7		158	2.1	13.5	10.1						mixed diet
25.7	22	8	14		203	1.8	6.1	null						mixed diet
24	11	3	8		220	1.7	2.6	8.3						mixed diet

23.8	11	5	6	12	5910	156	2	4.5	10.2	185	N	Y	chronic cl	mixed diet	
20.9	10	2	8	19	180	50	2.6	37.5	18.6	462.1	N	Y	N	mixed diet	
29.1	13	5	8	12	109	159	2	15.7	17	229.6	N	Y	N	mixed diet	
28	27	10	17	11	185	143	1.7	58.5	8.6	87.2	6	N	Y	N	mixed diet
25.7	12	4	8	12	430	181	4.1	9	4.3	472	N	Y	chronic cl	mixed diet	
27.1	11	5	6	12	220	118	1.5	19	92.7	85.9	N	Y	N	mixed diet	
33.4	13	6	7	12	398	217	1.1	23.5	21.5	69.3	14.9	N	Y	N	mixed diet
29.3	8	4	4	11	340	155	5.8	5.5	4	280.7	N	Y	N	mixed diet	
21.4	14	5	9	11	740	186	58.8	6.4	7.1	159	N	Y	chronic cl	mixed diet	
25.2	18	7	11	11	63	327	1.7	6.9	7.6	270.8	N	N	N	mixed diet	
26.2	7	2	5	11	178	169	2.4	15.1	10.2	287.7	N	Y	N	mixed diet	
24.4	9	3	6	12	175	261	1.2	6.3	8.8	86.6	N	N	N	mixed diet	
30.5	20	7	13	11	225	128	3	4.6	29.9	379.2	N	Y	N	mixed diet	
27.5	21	8	13	12	188	150	0.9	5.2	7.3	74.7	N	Y	renal cyst	mixed diet	
29.9	9	4	5	11	553	197	2.6	4.5	35.7	192.8	N	N	N	mixed diet	
25.5	14	7	7	12	264	64	3.9	26.5	4.6	75.2	N	Y	N	mixed diet	
32	13	4	9	11	106	222	1.2	3.3	9.1	187.9	N	N	N	mixed diet	
25.4	20	8	12	11	209	117	3.1	27.9	7.7	129.9	N	Y	N	mixed diet	
27.3	35	12	23	12	360	154	1.8	10.8	5.1	203.1	N	N	N	mixed diet	
32.1	20	11	9	12	121	134	2.4	10	137	825.8	Y	Y	N	mixed diet	
25.8	15	6	9	11	961	177	4.7	37.6	17.8	267.4	Y	Y	N	mixed diet	
48.3	14	6	8	10	1451	208	1.4	1039	15.3	531.4	Y	Y	N	mixed diet	
24.4	5	2	3	12	94	163	1.6	11	14.8	558	Y	Y	N	mixed diet	
22.1	33	17	16	13	520	124	2.7	3.5	53.9	685.3	Y	Y	hepatic cy	mixed diet	
23.3	8	3	5	11	320	215	2.9	9.8	5.7	99.1	Y	Y	chronic cl	mixed diet	
36.2	15	3	12	12	236	195	1.6	8.7	11.1	894.5	Y	Y	N	mixed diet	
26.6	19	10	9	12	444	204	4.3	15	14.5	215.3	Y	Y	Spleen ca	mixed diet	
30.3	16	7	9	14	1726	36	2.8	13.8	24	888.1	Y	Y	kidney stc	mixed diet	
28.9	10	4	6	12	284	270	3.1	2	17.8	103.8	N	Y	N	mixed diet	
33.5	25	11	14	13	46	81	4.6	55.6	67.8	166.7	Y	Y	N	mixed diet	
25.7	23	9	14	12	440	106	1.6	8.4	17.9	280.6	Y	Y	chronic cl	mixed diet	
35.6	8	3	5	12	830	103	6.2	37.7	29	200.4	13.7	Y	Y	chronic cl	mixed diet
25.5	15	6	9	11	399	193	3.3	8.7	108	61.9	Y	Y	hepatic cy	mixed diet	
29.1	15	8	7	13	1353	219	2.1	875	9.5	322.2	Y	Y	renal cyst	mixed diet	
27.2	31	21	10	10	1186	158	1.3	20.2	27.9	459.5	Y	Y	N	mixed diet	
30	24	15	9	13	3091	211	6.3	124	19.8	166.7	Y	Y	portal hy	mixed diet	
22.2	23	10	13	13	573	87	1	5	12.4	141	Y	Y	chronic cl	mixed diet	
28.6	14	6	8	12	1224	217	2	5.3	35.1	464.1	Y	Y	N	mixed diet	
25.7	10	4	6	12	248	129	1.4	5.2	9.8	282.6	N	Y	N	mixed diet	
26	17	8	9	13	1015	159	2	28.4	104	164.3	Y	Y	N	mixed diet	
29.3	355	264	91	17	340	284	3.5	309	29.8	749.4	N	Y	N	mixed diet	
21.9	13	5	8	11	279	486	1.1	<2	15	221.8	N	N	N	mixed diet	
26	27	12	15	13	421	80	4.7	19.3	16.2	32.5	Y	Y	portal hy	mixed diet	
27.1	22	8	14	11	630	100	4	7.4	7.4	262.7	N	Y	N	mixed diet	
29.2	15	6	9	12	400	221	1.6	11.1	10.2	204.1	N	Y	N	mixed diet	
25.9	31	13	19	12	157	49	1.4	<2	11.1	157.7	Y	Y	N	mixed diet	
31.4	19	7	12	11	538	189	1.9	7.7	11.3	175.3	N	Y	chronic cl	mixed diet	
35.1	38	20	18	14	576	61	3.9	4.3	8.5	184.3	Y	Y	portal hy	mixed diet	
29.9	12	4	8	10	2069	326	2.6	4.6	5.8	370	N	N	N	mixed diet	
26.3	7	2	5	11	150	207	1.5	8.3	6.8	345.7	Y	Y	N	mixed diet	
32.6	12	5	7	12	80	138	2.5	3.4	6.8	962.3	Y	Y	N	mixed diet	
31.5	16	7	9	12	3215	181	1.5	27.8	86.9	610.6	Y	Y	N	mixed diet	
21.4	13	4	9	12	270	186	1.4	23	59.6	523.1	N	N	N	mixed diet	

26.4	20	10	10	11	181	100	2.1	2.3	7.9	328.2	Y	Y	portal hy	mixed diet	
26	15	5	10	10	70	271	2.2	15.9	18.6	55	7.5	Y	N	chronic cl	mixed diet
30.4	21	8	13	12	1040	120	2.2	10.6	56.9	818.2	Y	Y	N	mixed diet	
29.6	11	4	7	13	244	61	1.2	2.6	6.6	311.3	Y	Y	N	mixed diet	
32.2	9	4	5	13	815	149	3.3	11.5	6.7	256.5	N	N	N	mixed diet	
24.6	13	5	8	11	690	216	3.3	13.7	8.2	454.1	Y	Y	Multiple	mixed diet	
42.5	9	4	5	13	2202	314	0.9	12.5	20.6	704.6	Y	Y	hepatic dt	mixed diet	
25.7	23	9	14	12	440	106	1.6	8.4	17.9	280.6	Y	Y	N	mixed diet	
30.3	8	3	5	13	426	165	2.1	8.1	9.9	238.1	Y	Y	N	mixed diet	
27.8	8	4	4	10	595	208	3.4	26.2	20.3	257.4	Y	N	N	mixed diet	
30.9	17	9	8	12	2040	166	5.2	14.7	9	242.8	Y	Y	N	mixed diet	
41.3	16.87	5.7	11.2	15	ND	802	>100	548	63.7	ND	ND	N	N	chronic cl	mixed diet
23.64	10.39	1	6.19	13	146	299	0.84	2.37	2.27	ND	12	N	Y	Asthma, l	mixed diet
44.1	11.25	2.3	7.32	15	ND	222	3.16	2.73	98.1	265	ND	Y	N	esophage;	mixed diet
21.81	8.42	7.9	1.53	16	ND	79	1.5	37.3	11.3	79	ND	Y	Y	chronic cl	mixed diet
32.9	8.87	1.2	7.58	11	515	299	>100	6.31	22.3	256	ND	N	N	hypertens	mixed diet
29.68	13.85	8.4	2.26	14	268	134	2.49	28.4	42.4	69	ND	Y	Y	hypertens	mixed diet
30.5	4	2.5	1.5	12	ND	202	1.17	3.57	5.7	116	ND	N	Y	N	mixed diet
39.4	39.16	9.9	29.3	13	ND	214	2.4	24	211	89	ND	Y	N	chronic cl	mixed diet
19.92	14.61	5.3	9.35	13	ND	172	0.59	10.2	10.3	ND	ND	N	Y	chronic cl	mixed diet
38	14.4	7.6	6.8	14	120	90	1.48	26.7	9.4	96	ND	Y	Y	chronic cl	mixed diet
28.2	140.8	92	49.1	13	ND	248	2.08	>700	172	87	16.8	Y	Y	acute cho	mixed diet
35.4	22.43	8.9	13.6	14	ND	260	0.97	20.3	86.3	95	ND	Y	Y	chronic cl	mixed diet
31.4	19.9	14	5.9	13	488	177	1.22	31.8	30.9	89	ND	N	N	chronic cl	mixed diet
34.7	124.8	87	37.6	13	ND	132	0.74	39.8	24.2	68	ND	Y	Y	acute cho	mixed diet
36.8	17.7	3.2	14.5	12	5606	343	>100	9.05	90.2	ND	ND	N	N	hypertens	mixed diet
28.79	8.98	3.5	5.51	11	132	103	ND	ND	ND	ND	ND	Y	Y	N	mixed diet
40.2	19.1	9.4	9.7	14	ND	75	2.15	465	144	76	ND	N	Y	N	mixed diet
40.2	19.1	9.4	9.7	14	ND	75	2.15	465	144	ND	ND	N	Y	N	mixed diet
30.3	290.6	255	35.3	15	1.37	196	4.18	309	40.3	3167	11.3	Y	Y	N	mixed diet
38	112	56	56	13	2	34	23	43	33	ND	ND	Y	Y	N	mixed diet
35.7	18.6	8.8	9.8	25	0.07	295	2.41	11.8	31.4	ND	ND	Y	Y	portal hy	mixed diet
35.2	16.5	10	6.5	14	0.22	35	ND	ND	ND	ND	ND	Y	Y	N	mixed diet
27.6	8.2	4.2	4	10	0.05	181	0.99	14	7.8	ND	ND	Y	N	N	mixed diet
26.9	9.9	5.1	4.8	11	0.08	193	1.4	7.5	9.8	185		N	Y	N	mixed diet
27.3	14.3	6	8.3	11	0.17	111	2	28.4	104	324		Y	Y	N	mixed diet
35	147.8	65	35.8	16	5.21	146	5	65	34	32	112	Y	Y	ascites	mixed diet
34.9	18.1	12	5.8	12	3.65	301	ND	ND	ND	ND	ND	Y	Y	portal hy	mixed diet
44.5	14.3	7.6	6.7	13	0.35	86	ND	88.9	18.6	ND	ND	Y	Y	N	mixed diet
44.5	14.3	7.6	6.7	13	0.35	86	ND	88.9	18.6	ND	ND	Y	Y	N	mixed diet
28.2	24.6	13	12	17	2.48	70	3.4	24	774	35.65	34.9	Y	Y	N	mixed diet
24.9	4.3	2.7	1.6	11	0.09	205	0.63	4.56	19.6	ND	ND	Y	Y	N	mixed diet
23.7	45.5	34	11.7	10	2.02	111	ND	ND	ND	ND	ND	Y	N	N	mixed diet
23.6	3.9	1.5	2.4	10	0.22	168	5.78	989	22	ND	ND	N	Y	N	mixed diet
30	90	35	55	11	0.14	65	2.7	0.6	19.6	ND	ND	N	N	N	mixed diet
40.6	41	26	14.8	12	0.71	102	0.83	24.9	55	ND	ND	Y	Y	ascites	mixed diet
32.9	79.7	55	24.5	15	0.38	177	ND	ND	ND	ND	ND	Y	Y	ascites	mixed diet
23.7	24.2	14	10.7	12	1.22	60	5.17	14.7	39.8	ND	ND	Y	Y	PVTT, pc	mixed diet
20.8	15.2	6.5	8.7	12	0.51	132	ND	ND	ND	ND	ND	Y	Y	N	mixed diet
23.7	13.6	8.6	5	11	0.75	479	1.7	41.4	96.6	ND	ND	N	N	ascites	mixed diet

37	22	11	11	11	0.05	189	ND	ND	ND	ND	ND	N	Y	N	mixed diet
35	24	15	9	13	0.56	67	ND	ND	ND	ND	ND	Y	Y	N	mixed diet
23.3	22	14	8.5	14	0.14	6	ND	ND	ND	ND	ND	Y	N	N	mixed diet
30.8	10.8	5	5.8	10	0.77	188	9.26	4517	42	ND	ND	N	N	N	mixed diet
27.6	15.2	6.2	9	11	0.45	119	3.44	0.6	24.2	ND	ND	Y	Y	portal vei	mixed diet
23.6	15.2	7.7	7.5	14	0.25	38	ND	ND	ND	ND	ND	Y	Y	ascites	mixed diet
19.2	10.8	3.5	7.3	11	0.04	144	ND	ND	ND	ND	ND	Y	Y	ascites	mixed diet
32.1	55.1	34	21.4	1.2	13	116	1.301	30.6	114	ND	ND	Y	N	ascites	mixed diet
25.9	100.9	88	12.5	13	0.79	347	ND	ND	ND	ND	ND	N	Y	ascites	mixed diet
45.6	4.2	1.7	2.5	10	0.16	180	2.121	11.1	30.2	ND	ND	N	N	N	mixed diet
27.2	10	5	5	11	2.19	291	10.9	####	155	ND	ND	N	N	N	mixed diet
23	14	6.6	7.4	12	0.28	148	4.48	24.3	14.2	48.05	7.75	Y	Y	N	mixed diet
29.5	13.6	8.1	5.5	15	0.06	28	4.098	28.3	12.9	ND	7.12	Y	Y	PVTT, pc	mixed diet
21.3	14.7	7.8	6.9	12	0.6	75	3.28	57.5	74.1	ND	ND	Y	Y	ascites	mixed diet
25.1	5.4	3.1	2.3	12	0.35	295	ND	ND	ND	ND	ND	N	N	N	mixed diet
15.9	20.2	11	8.8	14	0.12	33	ND	ND	ND	ND	ND	Y	Y	N	mixed diet
30.9	16.4	8	8.4	10	0.13	52	ND	ND	ND	ND	ND	Y	Y	ascites	mixed diet
29.4	13.3	5.6	7.7	11	0.09	142	2.53	10.8	6.79	60.75	7.12	Y	Y	N	mixed diet
29.2	21.3	18	3.6	11	0.53	198	ND	ND	ND	ND	ND	Y	Y	ascites	mixed diet
40.3	18.1	12	6.1	14	0.32	165	3.14	226	119	ND	ND	Y	Y	ascites	mixed diet
19	9.3	5.4	3.9	12	0.02	117	3.94	13.2	10.4	ND	ND	Y	Y	N	mixed diet
22.1	12	6.3	5.7	9.6	0.11	157	3.77	25.3	11.3	ND	ND	N	Y	N	mixed diet
28.1	8.3	3.8	4.5	10	0.56	52	2.62	85.1	68.1	497.3	12.1	Y	Y	N	mixed diet
33.3	17.5	16	2	14	3.39	115	1.55	21.8	250	ND	ND	Y	Y	ascites	mixed diet
28.3	13.4	6.5	6.9	12	0.1	80	1.49	7.05	5.96	283.8	9.64	Y	Y	N	mixed diet
21.1	14.5	7.9	6.6	11	0.06	109	ND	ND	ND	ND	ND	Y	Y	N	mixed diet
20.5	10.9	4.5	6.4	10	0.1	191	1.34	15.3	6.6	ND	ND	N	N	N	mixed diet
20.4	11.2	5	6.2	10	0.08	178	4.95	23.1	7.74	ND	ND	Y	Y	N	mixed diet
29.9	35.9	17	18.7	13	0.13	48	ND	ND	ND	ND	ND	Y	Y	N	mixed diet
36.2	6.5	2.8	3.7	13	0.15	131	1.15	52.2	13.5	ND	ND	N	Y	N	mixed diet
26.3	46.4	27	19.7	18	1.66	50	ND	ND	ND	ND	ND	Y	Y	ascites	mixed diet
28.7	21.8	13	9	14	0.11	82	1.98	16.9	17.6	ND	ND	Y	Y	N	mixed diet
23	13.7	7.8	5.9	12	0.83	83	ND	ND	ND	ND	ND	Y	Y	PVTT, pc	mixed diet
34	29.9	16	13.6	11	0.26	113	ND	ND	ND	ND	ND	Y	Y	PVTT, pc	mixed diet
29.7	7.3	3.2	4.1	11	0.23	193	1.368	0.97	4.38	ND	ND	N	N	N	mixed diet
28	10.8	4.3	6.5	12	0.19	131	0.792	0.86	12.2	ND	ND	Y	Y	N	mixed diet
27.5	18.1	9.6	8.5	11	0.55	129	1.95	17.8	62.5	ND	ND	Y	Y	PVTT, pc	mixed diet
31.8	8.6	5.6	3	11	0.51	173	ND	ND	ND	ND	ND	Y	N	ascites	mixed diet
16.8	17.5	9.9	7.6	9.9	0.26	70	ND	ND	ND	ND	ND	N	N	N	mixed diet
21.2	10.1	3.4	6.7	11	0.09	225	3.94	67.7	8.9	ND	ND	N	N	N	mixed diet
21.5	397.4	334	63	11	0.35	256	1.401	>10C	9.24	ND	ND	Y	N	N	mixed diet
28.4	7.7	4	3.7	11	0.08	138	ND	ND	ND	ND	ND	N	Y	ascites, P'	mixed diet
20.3	252.8	224	29	13	0.04	276	4.93	1092	6.7	ND	ND	N	N	N	mixed diet
36	25	20	5.3	13	1.16	610	30.24	1.99	91.8	1757	29.9	N	Y	N	mixed diet
26.9	422.2	343	79.5	19	3.63	118	1.76	230	236	ND	ND	Y	N	ascites	mixed diet
21.8	10.7	480	5.9	9.6	0.11	107	0.801	19.8	14.3	ND	ND	N	N	N	mixed diet
32.1	14.1	7.8	6.3	13	0.7	78	0.744	37.9	129	ND	ND	Y	Y	ascites	mixed diet
19.8	10.6	3.9	6.7	12	0.03	203	ND	ND	ND	ND	ND	Y	Y	N	mixed diet
28.3	8.7	2.8	5.9	10	0.76	194	0.9	6.6	103	ND	ND	N	Y	ascites	mixed diet
35.7	18.6	8.8	9.8	25	0.07	295	2.41	11.8	31.4	ND	ND	Y	Y	portal hyf	mixed diet
31	42	21	21	14	3	125	5	5	23	145	ND	Y	Y	N	mixed diet
30.3	92.4	57	35	13	2.8	257	1.94	178	ND	ND	ND	Y	Y	portal hyf	mixed diet
30	6.6	2.8	3.8	12	0.05	179	2.12	11.6	ND	ND	ND	Y	Y	N	mixed diet
26.6	14.8	7.1	7.7	11	1.3	181	1.72	59.3	ND	ND	ND	Y	Y	PVTT, pc	mixed diet

32.4	14	6.6	7.4	12	3.87	179	ND	ND	ND	ND	ND	Y	Y	ascites	mixed diet
21.2	11.6	4.5	7.1	12	3.9	129	0.84	4.08	ND	ND	ND	Y	Y	N	mixed diet
32.4	18	5.9	12.1	13	0.9	69	ND	14.8	ND	109	ND	Y	Y	N	mixed diet
25.4	20.7	6.2	14.5	11	4.2	113	1.32	54.9	ND	ND	ND	Y	Y	N	mixed diet
32.4	20.7	6.2	14.5	11	4.5	113	1.32	54.9	ND	ND	ND	Y	Y	N	mixed diet

Table S2. Taxon annotation of 1296 OTUs from all samples

OTU_1	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_2	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_3	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_4	Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae;Escherichia/Shigella	1
OTU_5	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Acidaminococcaceae;Phascolarctobacterium	1
OTU_6	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Faecalibacterium	1
OTU_7	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Roseburia	0.96
OTU_8	Bacteria;Fusobacteria;Fusobacteria;Fusobacteriales;Fusobacteriaceae;Fusobacterium	0.97
OTU_9	Bacteria;Proteobacteria;Alphaproteobacteria;Rhizobiales;Hyphomicrobiaceae;Gemmiger	0.94
OTU_10	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_11	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_12	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.73
OTU_13	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiraceae_incertae_sedis	0.8
OTU_14	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Rikenellaceae;Alistipes	1
OTU_15	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Roseburia	1
OTU_16	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_17	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_18	Bacteria;Firmicutes	0.79
OTU_19	Bacteria;Firmicutes;Bacilli;Lactobacillales;Streptococcaceae;Streptococcus	1
OTU_20	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiraceae_incertae_sedis	0.94
OTU_21	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_22	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.98
OTU_23	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiraceae_incertae_sedis	0.97
OTU_24	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiraceae_incertae_sedis	0.83
OTU_25	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Parabacteroides	1
OTU_26	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Rikenellaceae;Alistipes	1
OTU_27	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Ruminococcus	0.89
OTU_28	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Dialister	1
OTU_29	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Oscillibacter	0.72
OTU_30	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_31	Bacteria;Firmicutes;Clostridia;Clostridiales;Peptostreptococcaceae;Clostridium XI	1
OTU_32	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_33	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVa	0.53
OTU_34	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Megamonas	1
OTU_35	Bacteria;Actinobacteria;Actinobacteria;Bifidobacteriales;Bifidobacteriaceae;Bifidobacterium	1
OTU_36	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Dialister	1
OTU_37	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Sutterellaceae;Parasutterella	1
OTU_38	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Clostridium XVIII	0.84
OTU_39	Bacteria;Actinobacteria;Actinobacteria;Bifidobacteriales;Bifidobacteriaceae;Bifidobacterium	1
OTU_40	Bacteria;Proteobacteria;Gammaproteobacteria;Pasteurellales;Pasteurellaceae;Haemophilus	0.97
OTU_41	Bacteria;Firmicutes;Clostridia;Clostridiales;Clostridiaceae 1;Clostridium sensu stricto	1
OTU_42	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVa	0.85
OTU_43	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Blautia	1
OTU_44	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.7
OTU_45	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Sutterellaceae;Sutterella	1
OTU_46	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Megasphaera	1
OTU_47	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae	1
OTU_48	Bacteria;Firmicutes	0.82
OTU_49	Bacteria;Verrucomicrobia;Verrucomicrobiae;Verrucomicrobiales;Verrucomicrobiaceae;Akkermansia	1
OTU_50	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Veillonella	1

OTU_51	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Oscillibacter	1
OTU_52	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Coprococcus	0.99
OTU_53	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae	0.82
OTU_54	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Ruminococcus	0.76
OTU_55	Bacteria;Proteobacteria;Deltaproteobacteria;Desulfovibrionales;Desulfovibrionaceae;Bilophila	1
OTU_56	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	1
OTU_57	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.67
OTU_58	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.95
OTU_59	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	1
OTU_60	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Sutterellaceae	0.64
OTU_61	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Flavonifractor	1
OTU_62	Bacteria;Fusobacteria;Fusobacteria;Fusobacteriales;Fusobacteriaceae;Cetobacterium	1
OTU_63	Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae	1
OTU_64	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVa	1
OTU_65	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Erysipelotrichaceae_incert	1
OTU_66	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae	0.87
OTU_67	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Acidaminococcaceae;Phascolarctobacterium	0.9
OTU_68	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Dorea	1
OTU_69	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_70	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Coprococcus	1
OTU_71	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Paraprevotella	1
OTU_72	Bacteria;Proteobacteria;Gammaproteobacteria;Aeromonadales;Succinivibrionaceae;Succinivibrio	1
OTU_73	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_74	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Sporobacter	0.51
OTU_75	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Parabacteroides	1
OTU_76	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_77	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Odoribacter	1
OTU_78	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Sutterellaceae;Sutterella	1
OTU_79	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.61
OTU_80	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Rikenellaceae;Alistipes	1
OTU_81	Bacteria;Spirochaetes;Spirochaetes;Spirochaetales;Spirochaetaceae;Treponema	1
OTU_82	Bacteria;Proteobacteria;Deltaproteobacteria;Desulfovibrionales;Desulfovibrionaceae;Desulfovibrio	1
OTU_83	Bacteria;Firmicutes;Clostridia;Clostridiales	0.75
OTU_84	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Acetanaerobacterium	0.61
OTU_85	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVa	0.53
OTU_86	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiraceae_incertae_sedis	0.55
OTU_87	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Collinsella	1
OTU_88	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiraceae_incertae_sedis	0.86
OTU_89	Bacteria;Firmicutes;Clostridia;Clostridiales	0.89
OTU_90	Bacteria;Proteobacteria;Alphaproteobacteria;Rhodospirillales;Rhodospirillaceae	0.55
OTU_91	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Oscillibacter	1
OTU_92	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Rikenellaceae;Alistipes	0.84
OTU_93	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.59
OTU_94	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.7
OTU_95	Bacteria;Firmicutes;Clostridia;Clostridiales	0.99
OTU_96	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.99
OTU_97	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Blautia	0.99
OTU_98	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Catenibacterium	1
OTU_99	Bacteria;Firmicutes;Clostridia;Clostridiales	0.56
OTU_100	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Anaerostipes	0.93
OTU_101	Bacteria;Firmicutes;Clostridia;Clostridiales;Clostridiaceae 1;Clostridium sensu stricto	1

OTU_102	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.98
OTU_103	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Ruminococcus	1
OTU_104	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	1
OTU_105	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Sutterellaceae;Sutterella	1
OTU_106	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_107	Bacteria;Firmicutes;Bacilli;Lactobacillales;Streptococcaceae;Streptococcus	1
OTU_108	Bacteria;Firmicutes;Bacilli;Lactobacillales;Lactobacillaceae;Lactobacillus	1
OTU_109	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	1
OTU_110	Bacteria;Spirochaetes;Spirochaetes;Spirochaetales;Spirochaetaceae;Treponema	1
OTU_111	Bacteria;Proteobacteria;Deltaproteobacteria;Bdellovibrionales;Bdellovibrionaceae;Vampirovibrio	0.52
OTU_112	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae	0.55
OTU_113	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Ruminococcus	0.78
OTU_114	Bacteria;Proteobacteria;Alphaproteobacteria;Rhodospirillales;Rhodospirillaceae	0.65
OTU_115	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Dialister	0.99
OTU_116	Bacteria;Firmicutes;Clostridia;Clostridiales	0.64
OTU_117	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVb	0.95
OTU_118	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Acidaminococcaceae	0.9
OTU_119	Bacteria;Firmicutes;Clostridia;Clostridiales;Peptostreptococcaceae;Clostridium XI	1
OTU_120	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Clostridium XVIII	1
OTU_121	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVb	1
OTU_122	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Sutterellaceae;Sutterella	0.93
OTU_123	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVa	0.77
OTU_124	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Rikenellaceae;Alistipes	1
OTU_125	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae	0.61
OTU_126	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.9
OTU_127	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.98
OTU_128	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Butyricoccus	0.96
OTU_129	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	1
OTU_130	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.91
OTU_131	Bacteria;Firmicutes;Clostridia	0.51
OTU_132	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVb	1
OTU_133	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Slackia	1
OTU_134	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.62
OTU_135	Bacteria;Firmicutes;Clostridia;Clostridiales	0.82
OTU_136	Bacteria;Firmicutes;Bacilli;Lactobacillales;Lactobacillaceae;Lactobacillus	1
OTU_137	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Butyricoccus	0.9
OTU_138	Bacteria;Firmicutes;Clostridia;Clostridiales	0.52
OTU_139	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Butyricimonas	1
OTU_140	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Dysgonomonas	1
OTU_141	Bacteria;Firmicutes;Clostridia;Clostridiales	0.72
OTU_142	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae	1
OTU_143	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.64
OTU_144	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.8
OTU_145	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Sutterellaceae;Sutterella	1
OTU_146	Bacteria;Tenericutes;Mollicutes;Anaeroplasmatales;Anaeroplasmataceae;Asteroleplasma	0.92
OTU_147	Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae;Citrobacter	0.71
OTU_148	Bacteria;Firmicutes	0.75
OTU_149	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.87
OTU_150	Bacteria;Proteobacteria;Alphaproteobacteria;Rhizobiales;Hyphomicrobiaceae;Gemmiger	0.8
OTU_151	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Flavonifractor	0.79
OTU_152	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.56

OTU_153	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Rikenellaceae;Alistipes	1
OTU_154	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Ruminococcus	0.88
OTU_155	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_156	Bacteria;Firmicutes;Bacilli;Lactobacillales;Lactobacillaceae;Lactobacillus	1
OTU_157	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae	0.85
OTU_158	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Paraprevotella	1
OTU_159	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Ruminococcus	0.72
OTU_160	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.9
OTU_161	Bacteria;Proteobacteria;Deltaproteobacteria;Desulfovibrionales;Desulfovibrionaceae	0.9
OTU_162	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Rikenellaceae;Alistipes	1
OTU_163	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae	1
OTU_164	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Enterorhabdus	0.87
OTU_165	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Acidaminococcaceae;Phascolarctobacterium	0.82
OTU_166	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Olsenella	0.7
OTU_167	Bacteria;Firmicutes;Clostridia;Clostridiales	0.77
OTU_168	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae	0.59
OTU_169	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Hallella	1
OTU_170	Bacteria;TM7;TM7_genera_incertae_sedis;TM7_genera_incertae_sedis;TM7_genera_incertae_sedis;I	1
OTU_171	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.91
OTU_172	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Parabacteroides	1
OTU_173	Bacteria;Proteobacteria;Deltaproteobacteria;Bdellovibrionales;Bdellovibrionaceae;Vampirovibrio	0.64
OTU_174	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVa	0.57
OTU_175	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Sutterellaceae;Sutterella	0.58
OTU_176	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Butyricimonas	1
OTU_177	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Ruminococcus	1
OTU_178	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.65
OTU_179	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_180	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.79
OTU_181	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_182	Bacteria;Firmicutes;Clostridia;Clostridiales	0.84
OTU_183	Bacteria;Firmicutes;Clostridia;Clostridiales	0.93
OTU_184	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Erysipelotrichaceae_incert	1
OTU_185	Bacteria;Firmicutes;Clostridia;Clostridiales	0.77
OTU_186	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	1
OTU_187	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.93
OTU_188	Bacteria;Proteobacteria;Epsilonproteobacteria;Campylobacteriales;Campylobacteraceae;Campylobacter	1
OTU_189	Bacteria;Proteobacteria;Deltaproteobacteria;Bdellovibrionales;Bdellovibrionaceae;Vampirovibrio	0.53
OTU_190	Bacteria;Firmicutes;Bacilli;Lactobacillales;Lactobacillaceae;Lactobacillus	1
OTU_191	Bacteria;Firmicutes	0.73
OTU_192	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.9
OTU_193	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.6
OTU_194	Bacteria;Firmicutes;Bacilli;Lactobacillales;Leuconostocaceae;Weissella	1
OTU_195	Bacteria;Firmicutes;Clostridia;Clostridiales	0.78
OTU_196	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_197	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Rikenellaceae;Alistipes	0.99
OTU_198	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Oscillibacter	0.97
OTU_199	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVa	0.58
OTU_200	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.58
OTU_201	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Flavonifractor	0.85
OTU_202	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae	0.67
OTU_203	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Turicibacter	1

OTU_204	Bacteria;Bacteroidetes	0.99
OTU_205	Bacteria	0.94
OTU_206	Bacteria	1
OTU_207	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Coprococcus	0.99
OTU_208	Bacteria;Fusobacteria;Fusobacteria;Fusobacteriales;Fusobacteriaceae	1
OTU_209	Bacteria;Actinobacteria;Actinobacteria;Bifidobacteriales;Bifidobacteriaceae;Bifidobacterium	1
OTU_210	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	1
OTU_211	Bacteria;Firmicutes;Clostridia	0.52
OTU_212	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.74
OTU_213	Bacteria;Proteobacteria;Alphaproteobacteria;Rhodospirillales;Rhodospirillaceae	0.68
OTU_214	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae	1
OTU_215	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Erysipelotrichaceae_incert	1
OTU_216	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae	0.85
OTU_217	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_218	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Holdemania	1
OTU_219	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Megasphaera	1
OTU_220	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae	0.98
OTU_221	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Howardella	1
OTU_222	Bacteria;Firmicutes;Bacilli;Lactobacillales;Enterococcaceae;Enterococcus	1
OTU_223	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.99
OTU_224	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Allobaculum	0.52
OTU_225	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.91
OTU_226	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Erysipelotrichaceae_incert	1
OTU_227	Bacteria;Spirochaetes;Spirochaetes;Spirochaetales;Spirochaetaceae;Treponema	0.99
OTU_228	Bacteria;Firmicutes;Clostridia;Clostridiales;Clostridiaceae 1;Clostridium sensu stricto	1
OTU_229	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.78
OTU_230	Archaea;Euryarchaeota;Methanobacteria;Methanobacteriales;Methanobacteriaceae;Methanobrevibacte	1
OTU_231	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.77
OTU_232	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	0.95
OTU_233	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.87
OTU_234	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Rikenellaceae;Alistipes	1
OTU_235	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	1
OTU_236	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Collinsella	1
OTU_237	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Coprobacillus	1
OTU_238	Bacteria;Tenericutes;Mollicutes;Anaeroplasmatales;Anaeroplasmataceae;Anaeroplasmata	0.83
OTU_239	Bacteria;Firmicutes;Clostridia;Clostridiales	0.84
OTU_240	Bacteria;Proteobacteria;Deltaproteobacteria;Bdellovibrionales;Bdellovibrionaceae;Vampirovibrio	0.71
OTU_241	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Veillonella	1
OTU_242	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_243	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_244	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Eggerthella	1
OTU_245	Bacteria;Firmicutes;Clostridia;Clostridiales	0.71
OTU_246	Bacteria;Firmicutes;Clostridia;Clostridiales	0.85
OTU_247	Bacteria;Firmicutes;Bacilli;Lactobacillales;Aerococcaceae;Abiotrophia	0.98
OTU_248	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_249	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales	1
OTU_250	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.55
OTU_251	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Dialister	1
OTU_252	Bacteria;Firmicutes;Bacilli;Bacillales;Bacillales_Incertae Sedis XI;Gemella	1
OTU_253	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae	0.98
OTU_254	Bacteria;Firmicutes;Bacilli;Lactobacillales;Carnobacteriaceae;Granulicatella	0.99

OTU_255	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Faecalibacterium	0.8
OTU_256	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_257	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Anaerotruncus	0.55
OTU_258	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Mitsuokella	1
OTU_259	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Marinilabiaceae;Anaerophaga	0.6
OTU_260	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Paraprevotella	1
OTU_261	Bacteria;Lentisphaerae;Lentisphaeria;Victivallales;Victivallaceae;Victivallis	1
OTU_262	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVa	0.78
OTU_263	Bacteria;Firmicutes;Clostridia;Clostridiales	0.62
OTU_264	Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae;Proteus	0.99
OTU_265	Bacteria;Firmicutes	0.66
OTU_266	Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae;Hafnia	0.55
OTU_267	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Dialister	1
OTU_268	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Sutterellaceae;Parasutterella	1
OTU_269	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.95
OTU_270	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_271	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Acetivibrio	0.58
OTU_272	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Ruminococcus	0.97
OTU_273	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Solobacterium	1
OTU_274	Bacteria;Firmicutes;Clostridia;Clostridiales	0.55
OTU_275	Bacteria;Firmicutes;Clostridia;Clostridiales	0.71
OTU_276	Bacteria;Proteobacteria;Epsilonproteobacteria;Campylobacteriales;Campylobacteriaceae;Campylobacter	1
OTU_277	Bacteria;Firmicutes;Clostridia;Clostridiales	0.62
OTU_278	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Veillonella	1
OTU_279	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.81
OTU_280	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae	1
OTU_281	Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae;Providencia	1
OTU_282	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae	0.99
OTU_283	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Pseudoflavonifractor	0.51
OTU_284	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Coprobacillus	0.94
OTU_285	Bacteria;TM7;TM7_genera_incertae_sedis;TM7_genera_incertae_sedis;TM7_genera_incertae_sedis;T	1
OTU_286	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Butyricimonas	1
OTU_287	Bacteria;Firmicutes;Clostridia;Clostridiales	0.63
OTU_288	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae	0.58
OTU_289	Bacteria;Proteobacteria;Alphaproteobacteria;Rhodospirillales;Rhodospirillaceae	0.58
OTU_290	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.98
OTU_291	Bacteria;Firmicutes;Clostridia;Clostridiales	0.9
OTU_292	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Pseudoflavonifractor	0.73
OTU_293	Bacteria;Firmicutes;Bacilli;Lactobacillales;Lactobacillaceae;Lactobacillus	0.99
OTU_294	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae	0.64
OTU_295	Bacteria;Firmicutes;Clostridia;Clostridiales	0.54
OTU_296	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.95
OTU_297	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Butyricimonas	1
OTU_298	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Ruminococcus	1
OTU_299	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae	0.94
OTU_300	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_301	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae	0.92
OTU_302	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Atopobium	1
OTU_303	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Butyricimonas	1
OTU_304	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_305	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Megaspheera	1

OTU_306	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Megasphaera	1
OTU_307	Bacteria;Proteobacteria;Alphaproteobacteria;Rhizobiales;Hyphomicrobiaceae;Gemmiger	0.61
OTU_308	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Oscillibacter	0.98
OTU_309	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVb	0.94
OTU_310	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	1
OTU_311	Bacteria;Firmicutes;Clostridia;Clostridiales;Eubacteriaceae;Eubacterium	0.75
OTU_312	Bacteria;Lentisphaerae;Lentisphaeria;Victivallales;Victivallaceae;Victivallis	1
OTU_313	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Parabacteroides	0.59
OTU_314	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_315	Bacteria;Firmicutes;Clostridia;Clostridiales	0.98
OTU_316	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Anaerotruncus	1
OTU_317	Bacteria;Actinobacteria;Actinobacteria;Actinomycetales;Actinomycetaceae;Actinomyces	1
OTU_318	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Clostridium XVIII	1
OTU_319	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.99
OTU_320	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Collinsella	1
OTU_321	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.92
OTU_322	Bacteria;Firmicutes	0.89
OTU_323	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium III	0.59
OTU_324	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Acidaminococcaceae;Acidaminococcus	1
OTU_325	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.91
OTU_326	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_327	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.94
OTU_328	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae	0.89
OTU_329	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Megasphaera	1
OTU_330	Bacteria;Firmicutes;Bacilli;Lactobacillales;Lactobacillaceae;Lactobacillus	1
OTU_331	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Dialister	0.97
OTU_332	Bacteria;Firmicutes;Clostridia;Clostridiales	0.99
OTU_333	Bacteria	1
OTU_334	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Allisonella	1
OTU_335	Bacteria;Proteobacteria;Alphaproteobacteria	0.89
OTU_336	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Erysipelotrichaceae_incert	1
OTU_337	Bacteria;Firmicutes;Clostridia;Clostridiales	0.78
OTU_338	Bacteria;Proteobacteria;Alphaproteobacteria;Rhodospirillales;Rhodospirillaceae	0.64
OTU_339	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	0.97
OTU_340	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Papillibacter	0.52
OTU_341	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Holdemania	0.62
OTU_342	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_343	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Olsenella	0.89
OTU_344	Bacteria;Firmicutes;Clostridia;Clostridiales;Clostridiales_Incertae Sedis XIII	0.59
OTU_345	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae	0.98
OTU_346	Bacteria;Firmicutes;Bacilli;Lactobacillales;Streptococcaceae;Streptococcus	1
OTU_347	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Anaerotruncus	0.68
OTU_348	Bacteria;Firmicutes;Clostridia;Clostridiales	0.93
OTU_349	Bacteria;Firmicutes;Clostridia;Clostridiales;Clostridiales_Incertae Sedis XIII;Mogibacterium	1
OTU_350	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae	0.96
OTU_351	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.98
OTU_352	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.85
OTU_353	Bacteria;Firmicutes;Clostridia;Clostridiales	0.71
OTU_354	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Paraprevotella	0.59
OTU_355	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.78
OTU_356	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVa	0.78

OTU_357	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Adlercreutzia	0.56
OTU_358	Bacteria;Proteobacteria;Deltaproteobacteria	0.7
OTU_359	Bacteria	1
OTU_360	Bacteria;Actinobacteria;Actinobacteria;Bifidobacteriales;Bifidobacteriaceae;Bifidobacterium	1
OTU_361	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae	0.99
OTU_362	Bacteria	0.9
OTU_363	Bacteria;Firmicutes;Clostridia;Clostridiales	0.82
OTU_364	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.88
OTU_365	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Comamonadaceae;Comamonas	0.99
OTU_366	Bacteria;Proteobacteria;Deltaproteobacteria;Desulfovibrionales;Desulfomicrobiaceae;Desulfomicrobiu	0.56
OTU_367	Bacteria;Verrucomicrobia;Verrucomicrobiae;Verrucomicrobiales;Verrucomicrobiaceae;Akkermansia	0.96
OTU_368	Bacteria;Firmicutes;Clostridia;Clostridiales	1
OTU_369	Unclassified	
OTU_370	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.85
OTU_371	Bacteria;Lentisphaerae;Lentisphaeria;Victivallales;Victivallaceae;Victivallis	0.53
OTU_372	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Acidaminococcaceae;Acidaminococcus	1
OTU_373	Bacteria;Fusobacteria;Fusobacteria;Fusobacteriales;Fusobacteriaceae;Fusobacterium	1
OTU_374	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.63
OTU_375	Bacteria;Elusimicrobia;Elusimicrobia;Elusimicrobiales;Elusimicrobiaceae;Elusimicrobium	1
OTU_376	Bacteria;Deinococcus-Thermus;Deinococci;Thermales;Thermaceae;Thermus	1
OTU_377	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.77
OTU_378	Bacteria;Firmicutes	0.8
OTU_379	Bacteria;Firmicutes;Clostridia;Clostridiales;Peptococcaceae 1;Peptococcus	0.55
OTU_380	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.97
OTU_381	Bacteria;Firmicutes	0.82
OTU_382	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Paraprevotella	0.79
OTU_383	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.77
OTU_384	Bacteria;Synergistetes;Synergistia;Synergistales;Synergistaceae;Pyramidobacter	1
OTU_385	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	1
OTU_386	Bacteria;Firmicutes	0.69
OTU_387	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Acetivibrio	0.53
OTU_388	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	0.99
OTU_389	Bacteria;Firmicutes;Bacilli;Lactobacillales;Lactobacillaceae;Lactobacillus	1
OTU_390	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae	1
OTU_391	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae	0.93
OTU_392	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Pseudobutyrvibrio	0.53
OTU_393	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Butyricimonas	1
OTU_394	Bacteria;Lentisphaerae;Lentisphaeria;Victivallales;Victivallaceae;Victivallis	1
OTU_395	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae	1
OTU_396	Bacteria;Firmicutes;Clostridia;Clostridiales	0.83
OTU_397	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	1
OTU_398	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Butyricoccus	1
OTU_399	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae	0.82
OTU_400	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.94
OTU_401	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Bulleidia	0.75
OTU_402	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVb	1
OTU_403	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.9
OTU_404	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Anaerorhabdus	0.63
OTU_405	Bacteria;Firmicutes;Clostridia	0.51
OTU_406	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVa	0.55
OTU_407	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.97

OTU_408	Bacteria;Bacteroidetes	0.99
OTU_409	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_410	Bacteria;Firmicutes	0.77
OTU_411	Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae	1
OTU_412	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Oxalobacteraceae	0.98
OTU_413	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_414	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_415	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Sutterellaceae;Parasutterella	0.85
OTU_416	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.99
OTU_417	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Erysipelotrichaceae_incert	0.98
OTU_418	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Flavonifractor	0.52
OTU_419	Bacteria;Firmicutes;Clostridia;Clostridiales	0.73
OTU_420	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Cellulosilyticum	0.99
OTU_421	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Gordonibacter	1
OTU_422	Bacteria;Firmicutes;Clostridia;Clostridiales	0.62
OTU_423	Bacteria;Firmicutes;Clostridia;Clostridiales	0.6
OTU_424	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Sporobacter	0.56
OTU_425	Bacteria;Proteobacteria;Gammaproteobacteria;Pasteurellales;Pasteurellaceae;Haemophilus	0.55
OTU_426	Bacteria;Firmicutes;Clostridia;Clostridiales;Peptostreptococcaceae;Clostridium XI	1
OTU_427	Bacteria;Proteobacteria;Gammaproteobacteria;Pasteurellales;Pasteurellaceae;Aggregatibacter	0.97
OTU_428	Bacteria;Firmicutes;Bacilli;Lactobacillales;Streptococcaceae;Streptococcus	1
OTU_429	Bacteria;Firmicutes;Clostridia;Clostridiales	0.82
OTU_430	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.85
OTU_431	Bacteria;Firmicutes;Bacilli;Lactobacillales;Lactobacillaceae;Lactobacillus	1
OTU_432	Bacteria;TM7;TM7_genera_incertae_sedis;TM7_genera_incertae_sedis;TM7_genera_incertae_sedis;T	1
OTU_433	Bacteria	0.88
OTU_434	Bacteria;Firmicutes	0.78
OTU_435	Bacteria;Proteobacteria;Gammaproteobacteria;Pseudomonadales;Pseudomonadaceae;Pseudomonas	1
OTU_436	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.75
OTU_437	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Dialister	1
OTU_438	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Gordonibacter	0.51
OTU_439	Bacteria;TM7;TM7_genera_incertae_sedis;TM7_genera_incertae_sedis;TM7_genera_incertae_sedis;T	0.71
OTU_440	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Parabacteroides	1
OTU_441	Bacteria;Cyanobacteria/Chloroplast;Chloroplast;Chloroplast;Chloroplast;Streptophyta	1
OTU_442	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.66
OTU_443	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.99
OTU_444	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae	1
OTU_445	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Anaerostipes	0.66
OTU_446	Bacteria;Proteobacteria;Epsilonproteobacteria;Campylobacteriales;Campylobacteraceae;Campylobacter	1
OTU_447	Bacteria;Firmicutes;Clostridia;Clostridiales;Clostridiales_Incertae_Sedis XIII;Mogibacterium	0.98
OTU_448	Bacteria;Firmicutes;Clostridia;Clostridiales	0.6
OTU_449	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales	0.95
OTU_450	Bacteria;Proteobacteria;Alphaproteobacteria	0.69
OTU_451	Bacteria;Actinobacteria;Actinobacteria;Actinomycetales;Micrococcaceae;Rothia	1
OTU_452	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Tannerella	0.54
OTU_453	Bacteria;Firmicutes;Bacilli;Lactobacillales;Lactobacillaceae;Lactobacillus	1
OTU_454	Bacteria;Proteobacteria;Alphaproteobacteria;Rhodospirillales;Rhodospirillaceae	0.68
OTU_455	Bacteria;Firmicutes;Bacilli;Lactobacillales;Enterococcaceae;Vagococcus	0.97
OTU_456	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_457	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Collinsella	1
OTU_458	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1

OTU_459	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Acetivibrio	0.77
OTU_460	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Olsenella	0.84
OTU_461	Bacteria;Firmicutes;Bacilli;Lactobacillales;Leuconostocaceae;Leuconostoc	1
OTU_462	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Flavonifractor	0.53
OTU_463	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	0.89
OTU_464	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVa	0.55
OTU_465	Bacteria;Bacteroidetes;Sphingobacteria;Sphingobacteriales;Chitinophagaceae;Sediminibacterium	1
OTU_466	Bacteria;Firmicutes;Clostridia;Clostridiales	0.88
OTU_467	Bacteria;Firmicutes	0.84
OTU_468	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae	0.75
OTU_469	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Parabacteroides	1
OTU_470	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Mitsuokella	1
OTU_471	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.52
OTU_472	Bacteria;Firmicutes;Clostridia;Clostridiales;Eubacteriaceae;Eubacterium	0.55
OTU_473	Bacteria;Firmicutes;Bacilli;Lactobacillales;Streptococcaceae;Streptococcus	1
OTU_474	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae	0.61
OTU_475	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae	0.88
OTU_476	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Blautia	1
OTU_477	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	0.89
OTU_478	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Acidaminococcaceae;Phascolarctobacterium	0.85
OTU_479	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_480	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.85
OTU_481	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Anaeroglobus	1
OTU_482	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	1
OTU_483	Bacteria;Proteobacteria;Gammaproteobacteria;Xanthomonadales;Xanthomonadaceae;Stenotrophomon	1
OTU_484	Bacteria;Bacteroidetes;Flavobacteria;Flavobacteriales	0.63
OTU_485	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Hallella	0.61
OTU_486	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVb	1
OTU_487	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Parabacteroides	1
OTU_488	Bacteria;Bacteroidetes	1
OTU_489	Bacteria	0.83
OTU_490	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae	0.79
OTU_491	Bacteria;Proteobacteria;Gammaproteobacteria;Pseudomonadales;Moraxellaceae;Acinetobacter	1
OTU_492	Bacteria;Firmicutes;Bacilli;Lactobacillales;Streptococcaceae;Lactococcus	1
OTU_493	Bacteria;Firmicutes;Clostridia;Clostridiales	0.74
OTU_494	Bacteria;Firmicutes;Bacilli;Lactobacillales;Streptococcaceae;Streptococcus	1
OTU_495	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Flavonifractor	0.78
OTU_496	Bacteria	1
OTU_497	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Oscillibacter	1
OTU_498	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.71
OTU_499	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Parasporobacterium	0.54
OTU_500	Bacteria;Proteobacteria;Gammaproteobacteria;Pasteurellales;Pasteurellaceae;Aggregatibacter	0.82
OTU_501	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae	0.98
OTU_502	Bacteria;Firmicutes	0.69
OTU_503	Bacteria;Bacteroidetes;Flavobacteria;Flavobacteriales;Flavobacteriaceae;Chryseobacterium	1
OTU_504	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.99
OTU_505	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.6
OTU_506	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Flavonifractor	0.55
OTU_507	Bacteria;Proteobacteria;Deltaproteobacteria;Desulfovibrionales;Desulfovibrionaceae	0.79
OTU_508	Bacteria;Firmicutes;Clostridia;Clostridiales	0.83
OTU_509	Bacteria;Firmicutes;Clostridia;Clostridiales;Peptococcaceae 1;Peptococcus	0.61

OTU_510	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Faecalibacterium	0.68
OTU_511	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_512	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Megasphaera	1
OTU_513	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Anaerotruncus	0.87
OTU_514	Bacteria;Firmicutes	0.7
OTU_515	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Ruminococcus	0.55
OTU_516	Bacteria;Proteobacteria;Gammaproteobacteria;Vibrionales;Vibrionaceae;Vibrio	1
OTU_517	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Sutterellaceae;Parasutterella	0.96
OTU_518	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.9
OTU_519	Bacteria;Firmicutes;Clostridia;Clostridiales;Clostridiales_Incertae Sedis XI;Parvimonas	1
OTU_520	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_521	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Anaerostipes	1
OTU_522	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Anaerofilum	0.96
OTU_523	Bacteria;Proteobacteria;Alphaproteobacteria;Rhodospirillales;Rhodospirillaceae	0.69
OTU_524	Bacteria;Firmicutes;Clostridia;Clostridiales	0.84
OTU_525	Bacteria;Firmicutes;Clostridia;Clostridiales	0.69
OTU_526	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.52
OTU_527	Bacteria	0.94
OTU_528	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.89
OTU_529	Bacteria;Proteobacteria;Gammaproteobacteria;Aeromonadales;Aeromonadaceae;Aeromonas	1
OTU_530	Bacteria;Verrucomicrobia;Opitutae;Puniceococcales;Puniceococcaceae;Cerasicoccus	0.66
OTU_531	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_532	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae	1
OTU_533	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae	0.81
OTU_534	Bacteria;Firmicutes;Clostridia;Clostridiales	0.84
OTU_535	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Rikenellaceae;Alistipes	1
OTU_536	Bacteria	0.95
OTU_537	Bacteria;Firmicutes;Clostridia;Clostridiales	0.96
OTU_538	Bacteria;Firmicutes;Clostridia;Clostridiales;Eubacteriaceae;Eubacterium	1
OTU_539	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.75
OTU_540	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.97
OTU_541	Bacteria;Firmicutes	0.74
OTU_542	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Rikenellaceae;Alistipes	1
OTU_543	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Paraprevotella	0.8
OTU_544	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Oscillibacter	0.88
OTU_545	Bacteria;Firmicutes;Bacilli;Lactobacillales;Lactobacillaceae;Lactobacillus	1
OTU_546	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_547	Bacteria;Proteobacteria;Deltaproteobacteria	0.7
OTU_548	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Dialister	0.99
OTU_549	Bacteria;Firmicutes	0.69
OTU_550	Bacteria;Firmicutes;Clostridia;Clostridiales;Clostridiaceae 1;Clostridium sensu stricto	1
OTU_551	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Butyricimonas	1
OTU_552	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_553	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Ruminococcus	1
OTU_554	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.99
OTU_555	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.79
OTU_556	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.96
OTU_557	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.82
OTU_558	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Butyrivibrio	0.72
OTU_559	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Veillonella	1
OTU_560	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Gordonibacter	0.84

OTU_561	Bacteria;Firmicutes;Clostridia;Clostridiales;Peptococcaceae 1;Peptococcus	0.9
OTU_562	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	1
OTU_563	Bacteria;Firmicutes;Clostridia;Clostridiales;Clostridiales_Incertae Sedis XI	0.58
OTU_564	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.59
OTU_565	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Turicibacter	0.63
OTU_566	Bacteria;Firmicutes;Clostridia;Clostridiales	0.52
OTU_567	Bacteria;Proteobacteria;Deltaproteobacteria;Desulfovibrionales;Desulfovibrionaceae;Desulfovibrio	0.92
OTU_568	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.92
OTU_569	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.57
OTU_570	Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae;Plesiomonas	0.82
OTU_571	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.94
OTU_572	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.92
OTU_573	Bacteria;Firmicutes;Clostridia;Clostridiales	0.99
OTU_574	Bacteria;Firmicutes	0.79
OTU_575	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_576	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.89
OTU_577	Bacteria;Firmicutes	0.92
OTU_578	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Anaerofilum	0.51
OTU_579	Bacteria;Verrucomicrobia;Opitutae;Puniceococcales;Puniceococcaceae	0.72
OTU_580	Bacteria;Firmicutes;Clostridia;Clostridiales	0.81
OTU_581	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.79
OTU_582	Bacteria;Proteobacteria;Deltaproteobacteria;Desulfovibrionales;Desulfovibrionaceae	0.87
OTU_583	Bacteria;Lentisphaerae;Lentisphaeria;Victivallales;Victivallaceae;Victivallis	0.79
OTU_584	Bacteria;Verrucomicrobia;Opitutae;Puniceococcales;Puniceococcaceae;Cerasicoccus	0.54
OTU_585	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_586	Bacteria;Firmicutes;Clostridia;Clostridiales	0.72
OTU_587	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.76
OTU_588	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae	1
OTU_589	Bacteria;Proteobacteria;Betaproteobacteria;Neisseriales;Neisseriaceae;Neisseria	1
OTU_590	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Erysipelotrichaceae_incert	1
OTU_591	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Cellulosilyticum	0.67
OTU_592	Bacteria;Proteobacteria;Gammaproteobacteria;Aeromonadales;Succinivibrionaceae;Succinivibrio	0.99
OTU_593	Bacteria;Firmicutes;Clostridia	0.53
OTU_594	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium III	0.51
OTU_595	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.62
OTU_596	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.57
OTU_597	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Acidaminococcaceae;Acidaminococcus	1
OTU_598	Bacteria;Fusobacteria;Fusobacteria;Fusobacteriales;Leptotrichiaceae;Leptotrichia	1
OTU_599	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.57
OTU_600	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Oribacterium	1
OTU_601	Bacteria;Actinobacteria;Actinobacteria;Bifidobacteriales;Bifidobacteriaceae;Scardovia	1
OTU_602	Bacteria;Firmicutes;Clostridia;Clostridiales	0.87
OTU_603	Bacteria;Fusobacteria;Fusobacteria;Fusobacteriales;Leptotrichiaceae;Leptotrichia	0.98
OTU_604	Bacteria	0.84
OTU_605	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Marinilabiaceae;Anaerophaga	0.58
OTU_606	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.91
OTU_607	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVa	0.56
OTU_608	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Sutterellaceae	0.71
OTU_609	Bacteria;Synergistetes;Synergistia;Synergistales;Synergistaceae;Pyramidobacter	0.76
OTU_610	Bacteria;Firmicutes;Clostridia;Clostridiales	0.73
OTU_611	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1

OTU_612	Bacteria;Firmicutes;Clostridia;Clostridiales	0.7
OTU_613	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.64
OTU_614	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.67
OTU_615	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.73
OTU_616	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.72
OTU_617	Bacteria;Firmicutes;Clostridia;Clostridiales;Eubacteriaceae;Eubacterium	0.56
OTU_618	Bacteria;Bacteroidetes;Flavobacteria;Flavobacteriales	0.64
OTU_619	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.72
OTU_620	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae	0.73
OTU_621	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.51
OTU_622	Bacteria;Bacteroidetes;Flavobacteria;Flavobacteriales;Flavobacteriaceae	0.52
OTU_623	Bacteria;Synergistetes;Synergistia;Synergistales;Synergistaceae;Cloacibacillus	1
OTU_624	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Rikenellaceae;Alistipes	1
OTU_625	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Clostridium XVIII	0.86
OTU_626	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Sutterellaceae;Parasutterella	0.97
OTU_627	Bacteria;Firmicutes;Clostridia;Clostridiales	0.58
OTU_628	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Odoribacter	0.98
OTU_629	Bacteria;Firmicutes	1
OTU_630	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Oxalobacteraceae;Janthinobacterium	0.97
OTU_631	Bacteria;Verrucomicrobia;Verrucomicrobiae;Verrucomicrobiales;Verrucomicrobiaceae;Akkermansia	1
OTU_632	Bacteria;Firmicutes;Clostridia;Clostridiales	0.52
OTU_633	Bacteria;Proteobacteria;Alphaproteobacteria;Rhizobiales;Rhizobiaceae;Rhizobium	1
OTU_634	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Butyricoccus	1
OTU_635	Bacteria;TM7;TM7_genera_incertae_sedis;TM7_genera_incertae_sedis;TM7_genera_incertae_sedis;T	1
OTU_636	Bacteria;Firmicutes;Clostridia;Clostridiales;Clostridiales_Incertae_Sedis XI;Finegoldia	1
OTU_637	Bacteria;Synergistetes;Synergistia;Synergistales;Synergistaceae;Cloacibacillus	1
OTU_638	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Hydrogenoanaerobacterium	0.68
OTU_639	Bacteria	1
OTU_640	Bacteria;Firmicutes;Bacilli;Lactobacillales;Streptococcaceae;Lactococcus	1
OTU_641	Bacteria;Verrucomicrobia;Opitutae;Puniceococcales;Puniceococcaceae;Cerasicoccus	0.57
OTU_642	Bacteria;Firmicutes;Clostridia;Clostridiales;Eubacteriaceae;Eubacterium	0.81
OTU_643	Bacteria;Proteobacteria;Epsilonproteobacteria;Campylobacteriales;Campylobacteraceae;Campylobacter	1
OTU_644	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Acetivibrio	0.58
OTU_645	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.83
OTU_646	Bacteria;Firmicutes	0.77
OTU_647	Bacteria;Firmicutes;Clostridia;Clostridiales	1
OTU_648	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Sporobacter	0.61
OTU_649	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.98
OTU_650	Bacteria	0.99
OTU_651	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.93
OTU_652	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Coriobacterium	0.65
OTU_653	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.55
OTU_654	Bacteria;Firmicutes;Clostridia;Clostridiales;Clostridiales_Incertae_Sedis XI;Peptoniphilus	1
OTU_655	Bacteria;Firmicutes;Clostridia;Clostridiales	0.97
OTU_656	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Oribacterium	0.81
OTU_657	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.94
OTU_658	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Olsenella	1
OTU_659	Bacteria;Proteobacteria;Gammaproteobacteria;Xanthomonadales;Xanthomonadaceae;Lysobacter	0.69
OTU_660	Bacteria;Firmicutes;Clostridia;Clostridiales	0.9
OTU_661	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Porphyromonas	1
OTU_662	Bacteria;Actinobacteria;Actinobacteria;Actinomycetales;Corynebacteriaceae;Corynebacterium	1

OTU_663	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.7
OTU_664	Bacteria;Proteobacteria;Alphaproteobacteria;Caulobacterales;Caulobacteraceae;Brevundimonas	1
OTU_665	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae	1
OTU_666	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_667	Bacteria;Proteobacteria;Alphaproteobacteria;Rhodospirillales;Rhodospirillaceae	0.6
OTU_668	Bacteria;Proteobacteria;Alphaproteobacteria;Rhizobiales;Bradyrhizobiaceae	0.54
OTU_669	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.91
OTU_670	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.82
OTU_671	Bacteria;Firmicutes;Bacilli;Bacillales;Staphylococcaceae;Staphylococcus	1
OTU_672	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae	0.99
OTU_673	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Saccharofermentans	0.54
OTU_674	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.99
OTU_675	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Pseudoflavonifractor	0.85
OTU_676	Bacteria;Bacteroidetes	1
OTU_677	Bacteria;Proteobacteria;Epsilonproteobacteria;Campylobacterales;Campylobacteraceae;Campylobacter	1
OTU_678	Bacteria;Firmicutes;Clostridia;Clostridiales	0.94
OTU_679	Bacteria;Firmicutes;Clostridia;Clostridiales	0.67
OTU_680	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Ruminococcus	1
OTU_681	Bacteria;Fusobacteria;Fusobacteria;Fusobacteriales;Fusobacteriaceae;Fusobacterium	1
OTU_682	Bacteria;Proteobacteria;Gammaproteobacteria;Pseudomonadales;Moraxellaceae;Enhydrobacter	1
OTU_683	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Selenomonas	1
OTU_684	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Mitsuokella	1
OTU_685	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	1
OTU_686	Bacteria;Firmicutes;Clostridia;Clostridiales	0.95
OTU_687	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Howardella	0.98
OTU_688	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Hydrogenoanaerobacterium	0.64
OTU_689	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Ruminococcus	0.51
OTU_690	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_691	Bacteria;Proteobacteria;Gammaproteobacteria;Pasteurellales;Pasteurellaceae;Haemophilus	0.99
OTU_692	Bacteria;Actinobacteria;Actinobacteria;Bifidobacteriales;Bifidobacteriaceae;Alloscardovia	1
OTU_693	Bacteria;Proteobacteria;Epsilonproteobacteria;Campylobacterales;Helicobacteraceae;Helicobacter	1
OTU_694	Bacteria;Firmicutes;Clostridia;Clostridiales	0.79
OTU_695	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_696	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Erysipelotrichaceae_incert	1
OTU_697	Bacteria;Firmicutes;Clostridia;Clostridiales	0.96
OTU_698	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Slackia	1
OTU_699	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_700	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Acetivibrio	0.72
OTU_701	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_702	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.75
OTU_703	Bacteria;Verrucomicrobia;Opitutae;Puniceicoccales;Puniceicoccaceae;Coralimargarita	0.72
OTU_704	Bacteria;Firmicutes;Clostridia;Clostridiales	0.68
OTU_705	Bacteria;Firmicutes;Clostridia;Clostridiales;Clostridiales_Incertae Sedis XI;Peptoniphilus	0.88
OTU_706	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.98
OTU_707	Bacteria	0.94
OTU_708	Bacteria;Firmicutes;Clostridia;Clostridiales;Peptostreptococcaceae;Peptostreptococcus	1
OTU_709	Bacteria;Firmicutes;Clostridia;Clostridiales	0.82
OTU_710	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.54
OTU_711	Unclassified	
OTU_712	Bacteria;Proteobacteria;Alphaproteobacteria;Rhizobiales;Brucellaceae;Brucella	0.95
OTU_713	Bacteria;Firmicutes;Clostridia;Clostridiales;Eubacteriaceae;Eubacterium	0.61

OTU_714	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Centipeda	0.62
OTU_715	Bacteria;Proteobacteria;Deltaproteobacteria;Desulfovibrionales;Desulfovibrionaceae;Desulfovibrio	0.96
OTU_716	Bacteria;Firmicutes;Clostridia;Clostridiales	0.99
OTU_717	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae	0.79
OTU_718	Bacteria;Firmicutes;Clostridia;Clostridiales	0.62
OTU_719	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Erysipelotrichaceae_incert	0.96
OTU_720	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Shuttleworthia	1
OTU_721	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVa	0.78
OTU_722	Bacteria;Proteobacteria;Alphaproteobacteria;Rhizobiales;Bradyrhizobiaceae;Bradyrhizobium	1
OTU_723	Bacteria;Firmicutes;Clostridia;Clostridiales;Peptococcaceae 1;Peptococcus	1
OTU_724	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae	0.76
OTU_725	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Anaerovibrio	0.52
OTU_726	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Allobaculum	0.54
OTU_727	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Erysipelotrichaceae_incert	1
OTU_728	Bacteria	1
OTU_729	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium III	0.57
OTU_730	Bacteria	1
OTU_731	Bacteria;Proteobacteria;Gammaproteobacteria;Pseudomonadales;Pseudomonadaceae;Pseudomonas	1
OTU_732	Bacteria	0.99
OTU_733	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Hydrogenoanaerobacterium	1
OTU_734	Bacteria;Firmicutes;Clostridia;Clostridiales;Eubacteriaceae;Eubacterium	0.73
OTU_735	Bacteria	1
OTU_736	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.91
OTU_737	Bacteria;Bacteroidetes;Sphingobacteria;Sphingobacteriales	0.52
OTU_738	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.59
OTU_739	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.92
OTU_740	Bacteria;TM7;TM7_genera_incertae_sedis;TM7_genera_incertae_sedis;TM7_genera_incertae_sedis;I	1
OTU_741	Bacteria;Firmicutes;Clostridia;Clostridiales	0.56
OTU_742	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.62
OTU_743	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Anaerotruncus	0.59
OTU_744	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Sporobacter	0.57
OTU_745	Bacteria;Proteobacteria;Gammaproteobacteria;Pseudomonadales;Moraxellaceae;Acinetobacter	1
OTU_746	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.72
OTU_747	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVb	0.97
OTU_748	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Megamonas	1
OTU_749	Bacteria;Actinobacteria;Actinobacteria;Bifidobacteriales;Bifidobacteriaceae;Bifidobacterium	1
OTU_750	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Parabacteroides	1
OTU_751	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.99
OTU_752	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Oscillibacter	0.61
OTU_753	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Clostridium XVIII	0.96
OTU_754	Bacteria;Actinobacteria;Actinobacteria;Actinomycetales;Actinomycetaceae;Actinomyces	1
OTU_755	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Sporobacter	0.7
OTU_756	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Odoribacter	1
OTU_757	Bacteria	1
OTU_758	Bacteria;Firmicutes;Clostridia;Clostridiales;Eubacteriaceae;Eubacterium	0.77
OTU_759	Bacteria	0.85
OTU_760	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	0.65
OTU_761	Bacteria;Proteobacteria;Gammaproteobacteria;Pseudomonadales;Pseudomonadaceae;Pseudomonas	1
OTU_762	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Dialister	1
OTU_763	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Acetanaerobacterium	0.68
OTU_764	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.86

OTU_765	Bacteria;Proteobacteria;Alphaproteobacteria;Sphingomonadales;Sphingomonadaceae;Sphingomonas	0.6
OTU_766	Bacteria;Firmicutes;Clostridia;Clostridiales	0.87
OTU_767	Bacteria;Proteobacteria;Alphaproteobacteria;Caulobacterales;Caulobacteraceae;Brevundimonas	1
OTU_768	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae	0.6
OTU_769	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Paraeggerthella	1
OTU_770	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVb	1
OTU_771	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_772	Bacteria;Firmicutes;Clostridia;Clostridiales;Clostridiales_Incertae Sedis XIII;Mogibacterium	0.98
OTU_773	Bacteria;Firmicutes;Clostridia;Clostridiales	0.98
OTU_774	Bacteria;Firmicutes;Clostridia;Clostridiales	0.82
OTU_775	Bacteria;Firmicutes;Clostridia;Clostridiales	0.98
OTU_776	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiraceae_incertae_sedis	0.95
OTU_777	Bacteria;Deinococcus-Thermus;Deinococci;Thermales;Thermaceae;Thermus	1
OTU_778	Bacteria;Lentisphaerae;Lentisphaeria;Victivallales;Victivallaceae;Victivallis	1
OTU_779	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVa	0.51
OTU_780	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.92
OTU_781	Bacteria;Firmicutes;Clostridia;Clostridiales	0.77
OTU_782	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.79
OTU_783	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Oscillibacter	0.99
OTU_784	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae	1
OTU_785	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	1
OTU_786	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae	0.99
OTU_787	Bacteria;Firmicutes;Clostridia;Clostridiales	0.75
OTU_788	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.78
OTU_789	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Anaerotruncus	0.85
OTU_790	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiraceae_incertae_sedis	0.76
OTU_791	Bacteria;Fusobacteria;Fusobacteria;Fusobacteriales;Leptotrichiaceae;Sneathia	0.97
OTU_792	Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae;Serratia	0.91
OTU_793	Bacteria;Proteobacteria;Gammaproteobacteria;Aeromonadales;Succinivibrionaceae;Succinatimonas	1
OTU_794	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVa	0.81
OTU_795	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Megasphaera	1
OTU_796	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_797	Bacteria;Bacteroidetes	1
OTU_798	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae	0.58
OTU_799	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Erysipelotrichaceae_incert	1
OTU_800	Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae;Morganella	1
OTU_801	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.98
OTU_802	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Oscillibacter	0.52
OTU_803	Bacteria;Firmicutes	0.93
OTU_804	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Paraprevotella	1
OTU_805	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae	1
OTU_806	Bacteria;Firmicutes;Clostridia;Clostridiales	0.74
OTU_807	Bacteria;Firmicutes;Bacilli;Lactobacillales;Lactobacillaceae;Lactobacillus	1
OTU_808	Bacteria;Proteobacteria;Gammaproteobacteria;Vibrionales;Vibrionaceae;Vibrio	0.98
OTU_809	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae	0.79
OTU_810	Bacteria	1
OTU_811	Bacteria;Synergistetes;Synergistia;Synergistales;Synergistaceae;Pyramidobacter	1
OTU_812	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_813	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Butyricimonas	0.99
OTU_814	Bacteria	1
OTU_815	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.81

OTU_816	Bacteria;Firmicutes	0.86
OTU_817	Bacteria	1
OTU_818	Bacteria;Actinobacteria;Actinobacteria;Actinomycetales;Micrococcaceae;Rothia	1
OTU_819	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Erysipelotrichaceae_incert	1
OTU_820	Bacteria;Firmicutes;Clostridia;Clostridiales	0.6
OTU_821	Bacteria;Proteobacteria;Deltaproteobacteria;Desulfovibrionales;Desulfovibrionaceae	0.79
OTU_822	Bacteria;Firmicutes;Clostridia	0.67
OTU_823	Bacteria;Cyanobacteria/Chloroplast;Chloroplast;Chloroplast;Chloroplast;Streptophyta	1
OTU_824	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.57
OTU_825	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.78
OTU_826	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.94
OTU_827	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Dialister	0.99
OTU_828	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Erysipelotrichaceae_incert	1
OTU_829	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.55
OTU_830	Bacteria;Firmicutes;Clostridia;Clostridiales	0.92
OTU_831	Bacteria;Firmicutes	0.73
OTU_832	Bacteria	0.9
OTU_833	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.89
OTU_834	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Pseudoflavonifractor	0.84
OTU_835	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	0.99
OTU_836	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.88
OTU_837	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	1
OTU_838	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Burkholderiales_incertae_sedis;Aquabacte	1
OTU_839	Bacteria	1
OTU_840	Bacteria;Firmicutes;Clostridia;Clostridiales;Clostridiales_Incertae Sedis XI;Peptoniphilus	1
OTU_841	Bacteria;Firmicutes;Clostridia	0.67
OTU_842	Bacteria	0.93
OTU_843	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.98
OTU_844	Bacteria;Synergistetes;Synergistia;Synergistales;Synergistaceae;Aminobacterium	1
OTU_845	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Porphyromonas	1
OTU_846	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.63
OTU_847	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Flavonifractor	0.53
OTU_848	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.76
OTU_849	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.68
OTU_850	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.86
OTU_851	Bacteria;Firmicutes;Clostridia;Clostridiales;Eubacteriaceae;Eubacterium	0.98
OTU_852	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Rikenellaceae;Alistipes	1
OTU_853	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.78
OTU_854	Bacteria;Firmicutes;Clostridia;Clostridiales	0.83
OTU_855	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	1
OTU_856	Bacteria;Proteobacteria;Alphaproteobacteria;Rhodobacterales;Rhodobacteraceae;Paracoccus	1
OTU_857	Bacteria;Firmicutes;Clostridia;Clostridiales	0.9
OTU_858	Bacteria;Actinobacteria;Actinobacteria;Actinomycetales;Micrococcaceae;Micrococcus	1
OTU_859	Bacteria;Proteobacteria;Gammaproteobacteria	0.94
OTU_860	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Flavonifractor	0.95
OTU_861	Bacteria;Firmicutes;Bacilli;Lactobacillales;Lactobacillaceae;Lactobacillus	0.97
OTU_862	Bacteria;Firmicutes;Bacilli;Lactobacillales;Leuconostocaceae;Weissella	1
OTU_863	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Comamonadaceae;Diaphorobacter	0.68
OTU_864	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.95
OTU_865	Bacteria	0.94
OTU_866	Bacteria;Firmicutes;Clostridia;Clostridiales;Clostridiales_Incertae Sedis XI;Anaerococcus	1

OTU_867	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.6
OTU_868	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales	0.97
OTU_869	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.81
OTU_870	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.67
OTU_871	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae	0.99
OTU_872	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Flavonifractor	0.89
OTU_873	Bacteria;Proteobacteria	0.57
OTU_874	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Hydrogenoanaerobacterium	0.54
OTU_875	Bacteria;Firmicutes;Clostridia;Clostridiales	0.95
OTU_876	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Parabacteroides	0.98
OTU_877	Bacteria;Firmicutes;Clostridia;Clostridiales	0.87
OTU_878	Bacteria;Cyanobacteria/Chloroplast;Chloroplast;Chloroplast;Chloroplast;Streptophyta	1
OTU_879	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae	1
OTU_880	Bacteria;Actinobacteria;Actinobacteria;Actinomycetales;Intrasporangiaceae;Janibacter	0.98
OTU_881	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	1
OTU_882	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Acetivibrio	0.53
OTU_883	Unclassified	
OTU_884	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVa	0.54
OTU_885	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.67
OTU_886	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_887	Bacteria;Bacteroidetes;Sphingobacteria;Sphingobacteriales	0.52
OTU_888	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.6
OTU_889	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Pseudoflavonifractor	0.79
OTU_890	Bacteria	0.99
OTU_891	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_892	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae	0.98
OTU_893	Bacteria;Firmicutes	0.92
OTU_894	Bacteria;Actinobacteria;Actinobacteria;Actinomycetales;Actinomycetaceae;Actinomyces	1
OTU_895	Bacteria;Firmicutes;Clostridia;Clostridiales;Peptococcaceae 1;Peptococcus	0.96
OTU_896	Bacteria	0.93
OTU_897	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	1
OTU_898	Bacteria;Firmicutes;Clostridia;Clostridiales;Clostridiaceae 1;Anaerospobacter	0.74
OTU_899	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Oscillibacter	1
OTU_900	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.66
OTU_901	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.99
OTU_902	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.95
OTU_903	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Olsenella	0.88
OTU_904	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Porphyromonas	0.98
OTU_905	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.91
OTU_906	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Acetanaerobacterium	0.56
OTU_907	Bacteria;Firmicutes;Clostridia;Clostridiales;Incertae Sedis XI;Murdochiella	0.94
OTU_908	Bacteria;Proteobacteria;Deltaproteobacteria;Desulfovibrionales;Desulfovibrionaceae;Desulfovibrio	1
OTU_909	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_910	Bacteria;Proteobacteria;Epsilonproteobacteria;Campylobacteriales;Campylobacteraceae;Campylobacter	1
OTU_911	Bacteria;Actinobacteria;Actinobacteria;Actinomycetales;Actinomycetaceae;Actinomyces	1
OTU_912	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.9
OTU_913	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.76
OTU_914	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Slackia	0.7
OTU_915	Bacteria;Firmicutes;Clostridia;Clostridiales	0.87
OTU_916	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Comamonadaceae;Variovorax	0.99
OTU_917	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Rikenellaceae;Alistipes	0.99

OTU_918	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Collinsella	0.98
OTU_919	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Clostridium XVIII	0.92
OTU_920	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.54
OTU_921	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_922	Bacteria;Proteobacteria;Alphaproteobacteria;Sphingomonadales;Sphingomonadaceae;Sphingobium	0.74
OTU_923	Bacteria;Firmicutes;Clostridia;Clostridiales	0.54
OTU_924	Bacteria;Verrucomicrobia;Subdivision3;Subdivision3_genera_incertae_sedis;Subdivision3_genera_in	0.72
OTU_925	Bacteria;Firmicutes	0.53
OTU_926	Bacteria;Proteobacteria;Deltaproteobacteria;Desulfovibrionales;Desulfovibrionaceae;Desulfovibrio	0.88
OTU_927	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.99
OTU_928	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.95
OTU_929	Bacteria;Proteobacteria;Betaproteobacteria;Neisseriales;Neisseriaceae;Neisseria	1
OTU_930	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVa	0.99
OTU_931	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.82
OTU_932	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_933	Bacteria;Firmicutes;Clostridia;Clostridiales	0.63
OTU_934	Bacteria	0.97
OTU_935	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Parabacteroides	1
OTU_936	Unclassified	
OTU_937	Bacteria;Firmicutes;Clostridia;Clostridiales	0.76
OTU_938	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_939	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Rikenellaceae;Alistipes	0.89
OTU_940	Bacteria;Firmicutes;Bacilli;Lactobacillales;Streptococcaceae;Streptococcus	1
OTU_941	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae	0.98
OTU_942	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Oscillibacter	1
OTU_943	Bacteria;Bacteroidetes;Flavobacteria;Flavobacteriales;Flavobacteriaceae;Cloacibacterium	1
OTU_944	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.97
OTU_945	Bacteria;Proteobacteria;Alphaproteobacteria;Rhizobiales;Methylobacteriaceae;Methylobacterium	1
OTU_946	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Faecalibacterium	0.69
OTU_947	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.68
OTU_948	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_949	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Comamonadaceae;Delftia	0.96
OTU_950	Bacteria;Actinobacteria;Actinobacteria;Actinomycetales;Actinomycetaceae;Actinomyces	0.98
OTU_951	Bacteria;TM7;TM7_genera_incertae_sedis;TM7_genera_incertae_sedis;TM7_genera_incertae_sedis;T	1
OTU_952	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.88
OTU_953	Bacteria	0.89
OTU_954	Bacteria	0.81
OTU_955	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Acetitomaculum	0.52
OTU_956	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.96
OTU_957	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.92
OTU_958	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Oscillibacter	0.65
OTU_959	Bacteria;Actinobacteria;Actinobacteria;Bifidobacteriales;Bifidobacteriaceae;Gardnerella	0.99
OTU_960	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Butyricoccus	0.97
OTU_961	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae	0.59
OTU_962	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae	1
OTU_963	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVb	0.84
OTU_964	Bacteria;Firmicutes;Clostridia;Clostridiales;Gracilibacteraceae	0.55
OTU_965	Bacteria;Firmicutes	1
OTU_966	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_967	Bacteria	0.88
OTU_968	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1

OTU_969	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_970	Bacteria;Firmicutes;Bacilli;Lactobacillales;Streptococcaceae;Streptococcus	1
OTU_971	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	0.53
OTU_972	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Sutterellaceae;Parasutterella	0.66
OTU_973	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_974	Archaea;Euryarchaeota;Methanomicrobia;Methanosarcinales;Methanosarcinaceae;Methanosarcina	1
OTU_975	Bacteria;Proteobacteria;Deltaproteobacteria;Desulfovibrionales;Desulfovibrionaceae;Desulfovibrio	0.89
OTU_976	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Paraprevotella	0.54
OTU_977	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.94
OTU_978	Bacteria;Proteobacteria;Betaproteobacteria;Neisseriales;Neisseriaceae;Neisseria	0.89
OTU_979	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.55
OTU_980	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales	0.55
OTU_981	Bacteria;Proteobacteria;Deltaproteobacteria;Desulfovibrionales;Desulfovibrionaceae;Desulfovibrio	1
OTU_982	Bacteria;Proteobacteria;Alphaproteobacteria;Rhizobiales;Methylobacteriaceae;Methylobacterium	1
OTU_983	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Ruminococcus	0.97
OTU_984	Bacteria;Firmicutes	0.56
OTU_985	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Hydrogenoanaerobacterium	0.62
OTU_986	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.76
OTU_987	Bacteria;Bacteroidetes;Sphingobacteria;Sphingobacteriales;Sphingobacteriaceae;Sphingobacterium	1
OTU_988	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae	1
OTU_989	Bacteria	0.84
OTU_990	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.95
OTU_991	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae	0.91
OTU_992	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.53
OTU_993	Bacteria;Firmicutes;Bacilli;Bacillales;Bacillales_Incertae Sedis XII;Exiguobacterium	1
OTU_994	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae	1
OTU_995	Bacteria;Firmicutes;Clostridia;Clostridiales;Syntrophomonadaceae;Syntrophomonas	0.92
OTU_996	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	1
OTU_997	Bacteria;Proteobacteria;Betaproteobacteria;Neisseriales;Neisseriaceae;Eikenella	0.69
OTU_998	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_999	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Comamonadaceae;Brachymonas	0.65
OTU_1000	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Parabacteroides	0.72
OTU_1001	Bacteria;Proteobacteria;Betaproteobacteria;Neisseriales;Neisseriaceae;Kingella	1
OTU_1002	Bacteria;Firmicutes;Clostridia;Clostridiales	0.51
OTU_1003	Bacteria;Firmicutes;Clostridia;Clostridiales	0.87
OTU_1004	Unclassified	
OTU_1005	Bacteria;Firmicutes;Clostridia;Clostridiales;Incertae Sedis XI;Murdochiella	1
OTU_1006	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Rikenellaceae;Alistipes	0.82
OTU_1007	Bacteria;Proteobacteria;Gammaproteobacteria;Gammaproteobacteria_incertae_sedis	0.57
OTU_1008	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.68
OTU_1009	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Negativicoccus	1
OTU_1010	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Parabacteroides	1
OTU_1011	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Anaerofilum	0.65
OTU_1012	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Anaerotruncus	0.71
OTU_1013	Bacteria;Firmicutes;Bacilli;Lactobacillales;Carnobacteriaceae;Atopostipes	1
OTU_1014	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Clostridium XVIII	1
OTU_1015	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.94
OTU_1016	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiraceae_incertae_sedis	0.72
OTU_1017	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	0.8
OTU_1018	Bacteria;Proteobacteria;Alphaproteobacteria;Rhizobiales;Hyphomicrobiaceae;Gemmiger	0.57
OTU_1019	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1

OTU_1020	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Parabacteroides	1
OTU_1021	Bacteria;Proteobacteria;Gammaproteobacteria;Legionellales;Legionellaceae;Legionella	1
OTU_1022	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.69
OTU_1023	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Paraeggerthella	0.52
OTU_1024	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Bulleidia	1
OTU_1025	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.52
OTU_1026	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.75
OTU_1027	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.73
OTU_1028	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae	0.94
OTU_1029	Bacteria;Firmicutes;Clostridia;Clostridiales	0.96
OTU_1030	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.66
OTU_1031	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Gordonibacter	0.93
OTU_1032	Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae;Klebsiella	0.68
OTU_1033	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Marinilabiaceae;Anaerophaga	0.52
OTU_1034	Bacteria;Fusobacteria;Fusobacteria;Fusobacteriales;Leptotrichiaceae;Leptotrichia	1
OTU_1035	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	1
OTU_1036	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.99
OTU_1037	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Selenomonas	1
OTU_1038	Bacteria;Proteobacteria;Alphaproteobacteria;Sphingomonadales;Sphingomonadaceae;Sphingomonas	1
OTU_1039	Bacteria;Firmicutes	0.6
OTU_1040	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.88
OTU_1041	Bacteria;Firmicutes;Clostridia;Clostridiales	0.97
OTU_1042	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Burkholderiaceae;Cupriavidus	1
OTU_1043	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Porphyromonas	1
OTU_1044	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.53
OTU_1045	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Parabacteroides	0.96
OTU_1046	Bacteria	1
OTU_1047	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.54
OTU_1048	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Roseburia	1
OTU_1049	Bacteria;Firmicutes;Clostridia;Clostridiales	0.65
OTU_1050	Bacteria;Firmicutes	0.8
OTU_1051	Bacteria	0.93
OTU_1052	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.61
OTU_1053	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Anaerofilum	0.53
OTU_1054	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.95
OTU_1055	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Olsenella	0.64
OTU_1056	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.94
OTU_1057	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.51
OTU_1058	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.72
OTU_1059	Bacteria;Firmicutes;Clostridia	0.52
OTU_1060	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVb	1
OTU_1061	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_1062	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae	0.86
OTU_1063	Bacteria;Proteobacteria;Gammaproteobacteria;Chromatiales;Chromatiaceae;Rheinheimera	1
OTU_1064	Bacteria;Proteobacteria;Betaproteobacteria;Neisseriales;Neisseriaceae	1
OTU_1065	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Olsenella	0.75
OTU_1066	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.99
OTU_1067	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Roseburia	0.97
OTU_1068	Bacteria;Firmicutes;Clostridia;Clostridiales;Clostridiales_Incertae_Sedis XI;Tissierella	0.92
OTU_1069	Bacteria	0.9
OTU_1070	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae	0.52

OTU_1071	Bacteria;Firmicutes;Bacilli;Lactobacillales;Lactobacillaceae;Lactobacillus	1
OTU_1072	Bacteria;Firmicutes	0.81
OTU_1073	Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae;Escherichia/Shige	0.74
OTU_1074	Bacteria;Firmicutes;Clostridia	0.64
OTU_1075	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.56
OTU_1076	Bacteria;Bacteroidetes;Sphingobacteria;Sphingobacteriales;Sphingobacteriaceae;Pedobacter	1
OTU_1077	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Moryella	1
OTU_1078	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	1
OTU_1079	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Anaerotruncus	0.88
OTU_1080	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Hydrogenoanaerobacterium	0.61
OTU_1081	Bacteria;Proteobacteria;Deltaproteobacteria;Desulfovibrionales	0.92
OTU_1082	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Pseudobutyrvibrio	0.65
OTU_1083	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVa	0.67
OTU_1084	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Allobaculum	1
OTU_1085	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.71
OTU_1086	Bacteria;Proteobacteria;Deltaproteobacteria;Desulfovibrionales;Desulfovibrionaceae;Bilophila	0.99
OTU_1087	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae	1
OTU_1088	Bacteria;Actinobacteria;Actinobacteria;Actinomycetales;Corynebacteriaceae;Corynebacterium	1
OTU_1089	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	1
OTU_1090	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_1091	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.93
OTU_1092	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVb	0.91
OTU_1093	Bacteria;Firmicutes;Clostridia;Clostridiales	0.83
OTU_1094	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.93
OTU_1095	Bacteria;Actinobacteria;Actinobacteria;Actinomycetales;Cellulomonadaceae;Tropheryma	1
OTU_1096	Bacteria	0.81
OTU_1097	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_1098	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Enterorhabdus	0.84
OTU_1099	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.85
OTU_1100	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.82
OTU_1101	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales	1
OTU_1102	Bacteria;Cyanobacteria/Chloroplast;Chloroplast;Chloroplast;Chloroplast;Streptophyta	0.99
OTU_1103	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.98
OTU_1104	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.97
OTU_1105	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Acidaminococcaceae;Phascolarctobacterium	1
OTU_1106	Bacteria;Bacteroidetes	1
OTU_1107	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.68
OTU_1108	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_1109	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Rikenellaceae;Alistipes	1
OTU_1110	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Parabacteroides	1
OTU_1111	Bacteria;Firmicutes;Clostridia;Clostridiales	1
OTU_1112	Bacteria	0.98
OTU_1113	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Blautia	0.99
OTU_1114	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_1115	Bacteria;Proteobacteria;Alphaproteobacteria;Rhodospirillales;Acetobacteraceae;Roseomonas	0.88
OTU_1116	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	0.85
OTU_1117	Bacteria;Actinobacteria;Actinobacteria;Actinomycetales;Corynebacteriaceae;Corynebacterium	1
OTU_1118	Bacteria;Firmicutes;Bacilli;Lactobacillales	0.92
OTU_1119	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.95
OTU_1120	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Burkholderiales_incertae_sedis;Tepidimoi	0.98
OTU_1121	Bacteria;Actinobacteria;Actinobacteria;Actinomycetales;Nocardiaceae;Rhodococcus	1

OTU_1122	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.82
OTU_1123	Unclassified	
OTU_1124	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.8
OTU_1125	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Roseburia	0.55
OTU_1126	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.99
OTU_1127	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Faecalibacterium	0.96
OTU_1128	Bacteria;Proteobacteria;Alphaproteobacteria;Rhodospirillales;Rhodospirillaceae;Desertibacter	0.64
OTU_1129	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.99
OTU_1130	Bacteria;Firmicutes;Bacilli;Lactobacillales;Carnobacteriaceae;Dolosigranulum	1
OTU_1131	Bacteria	0.98
OTU_1132	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_1133	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.55
OTU_1134	Bacteria;Proteobacteria;Deltaproteobacteria;Desulfovibrionales;Desulfovibrionaceae;Bilophila	0.6
OTU_1135	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Roseburia	0.64
OTU_1136	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Turicibacter	1
OTU_1137	Bacteria;Bacteroidetes;Flavobacteria;Flavobacteriales;Flavobacteriaceae;Chryseobacterium	1
OTU_1138	Bacteria;Actinobacteria;Actinobacteria;Actinomycetales;Micrococcaceae;Kocuria	1
OTU_1139	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae	0.51
OTU_1140	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Megasphaera	0.97
OTU_1141	Bacteria;Proteobacteria;Gammaproteobacteria;Oceanospirillales;Halomonadaceae;Halomonas	0.99
OTU_1142	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_1143	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_1144	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Dialister	1
OTU_1145	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	0.98
OTU_1146	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.99
OTU_1147	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Porphyromonas	0.91
OTU_1148	Bacteria;Firmicutes;Bacilli;Bacillales;Bacillaceae 1;Bacillus	0.96
OTU_1149	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiraceae_incertae_sedis	0.55
OTU_1150	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVa	0.65
OTU_1151	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Cryptobacterium	1
OTU_1152	Bacteria;Proteobacteria;Gammaproteobacteria;Pasteurellales;Pasteurellaceae;Haemophilus	0.76
OTU_1153	Bacteria	0.95
OTU_1154	Bacteria;Firmicutes;Clostridia;Clostridiales;Clostridiaceae 1;Clostridium sensu stricto	0.67
OTU_1155	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.98
OTU_1156	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	1
OTU_1157	Bacteria;Firmicutes;Clostridia;Clostridiales;Syntrophomonadaceae;Syntrophomonas	0.99
OTU_1158	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVa	0.98
OTU_1159	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae	0.83
OTU_1160	Bacteria;Proteobacteria;Alphaproteobacteria;Alphaproteobacteria_incertae_sedis;Geminicoccus;Gemini	0.95
OTU_1161	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.99
OTU_1162	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Butyrivibrio	1
OTU_1163	Bacteria;Firmicutes;Clostridia;Clostridiales	0.84
OTU_1164	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae	0.75
OTU_1165	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.98
OTU_1166	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae	0.68
OTU_1167	Bacteria;Actinobacteria;Actinobacteria;Actinomycetales;Actinomycetaceae;Mobiluncus	1
OTU_1168	Bacteria	0.93
OTU_1169	Bacteria	0.99
OTU_1170	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.73
OTU_1171	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_1172	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Megamonas	1

OTU_1173	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.93
OTU_1174	Bacteria	1
OTU_1175	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.92
OTU_1176	Bacteria;Firmicutes;Clostridia;Clostridiales	0.58
OTU_1177	Bacteria;Firmicutes;Clostridia;Clostridiales	0.77
OTU_1178	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae	0.51
OTU_1179	Bacteria;Firmicutes;Bacilli;Lactobacillales;Lactobacillaceae;Pediococcus	1
OTU_1180	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.64
OTU_1181	Bacteria;Firmicutes;Clostridia;Clostridiales	0.99
OTU_1182	Bacteria	0.91
OTU_1183	Bacteria;Bacteroidetes;Sphingobacteria;Sphingobacteriales;Sphingobacteriaceae;Sphingobacterium	0.93
OTU_1184	Bacteria;Fusobacteria;Fusobacteria;Fusobacteriales;Fusobacteriaceae;Fusobacterium	1
OTU_1185	Bacteria;Aquificae;Aquificae;Aquificales;Aquificaceae;Hydrogenobacter	1
OTU_1186	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Butyricimonas	1
OTU_1187	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.75
OTU_1188	Bacteria;Firmicutes;Clostridia;Clostridiales;Clostridiaceae 1;Clostridium sensu stricto	0.89
OTU_1189	Bacteria	0.92
OTU_1190	Bacteria	1
OTU_1191	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Faecalibacterium	1
OTU_1192	Bacteria;Bacteroidetes;Flavobacteria;Flavobacteriales;Flavobacteriaceae;Planobacterium	0.65
OTU_1193	Bacteria;Bacteroidetes	1
OTU_1194	Bacteria;Firmicutes;Bacilli;Bacillales;Bacillales_Incertae Sedis XII;Exiguobacterium	1
OTU_1195	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_1196	Bacteria;Actinobacteria;Actinobacteria;Actinomycetales;Micrococcaceae;Arthrobacter	0.88
OTU_1197	Bacteria;Firmicutes;Bacilli;Lactobacillales;Lactobacillaceae;Lactobacillus	0.96
OTU_1198	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.83
OTU_1199	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae	1
OTU_1200	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_1201	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_1202	Bacteria;Actinobacteria;Actinobacteria;Actinomycetales;Actinomycetaceae;Actinomyces	1
OTU_1203	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Saccharofermentans	0.8
OTU_1204	Bacteria;Firmicutes;Clostridia;Clostridiales	0.77
OTU_1205	Bacteria;Firmicutes	0.95
OTU_1206	Bacteria;Firmicutes;Clostridia;Clostridiales;Eubacteriaceae;Anaerofustis	1
OTU_1207	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Oscillibacter	0.64
OTU_1208	Bacteria;Actinobacteria;Actinobacteria;Actinomycetales;Corynebacteriaceae;Corynebacterium	1
OTU_1209	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.89
OTU_1210	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	0.91
OTU_1211	Bacteria;Firmicutes;Clostridia;Clostridiales	0.81
OTU_1212	Bacteria;Proteobacteria;Alphaproteobacteria;Rhodobacterales;Rhodobacteraceae;Paracoccus	1
OTU_1213	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Ruminococcus	0.87
OTU_1214	Bacteria	0.84
OTU_1215	Bacteria;Spirochaetes;Spirochaetes;Spirochaetales;Spirochaetaceae;Treponema	1
OTU_1216	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_1217	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_1218	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	1
OTU_1219	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Butyricimonas	1
OTU_1220	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Bulleidia	0.75
OTU_1221	Bacteria;Firmicutes;Clostridia;Clostridiales	0.89
OTU_1222	Bacteria;Firmicutes;Clostridia;Clostridiales	1
OTU_1223	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Hydrogenoanaerobacterium	0.78

OTU_1224	Bacteria	0.96
OTU_1225	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae	0.95
OTU_1226	Bacteria;Actinobacteria;Actinobacteria;Rubrobacterales;Rubrobacteraceae;Rubrobacter	1
OTU_1227	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVa	0.94
OTU_1228	Bacteria;TM7;TM7_genera_incertae_sedis;TM7_genera_incertae_sedis;TM7_genera_incertae_sedis;T	1
OTU_1229	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_1230	Bacteria	0.93
OTU_1231	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.54
OTU_1232	Bacteria;Proteobacteria;Deltaproteobacteria;Myxococcales	0.99
OTU_1233	Bacteria;Firmicutes;Clostridia;Clostridiales;Clostridiales_Incertae_Sedis_XI;Tepidimicrobium	0.67
OTU_1234	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.96
OTU_1235	Bacteria;Bacteroidetes;Flavobacteria;Flavobacteriales;Flavobacteriaceae;Capnocytophaga	1
OTU_1236	Bacteria	0.9
OTU_1237	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Burkholderiaceae;Limnobacter	1
OTU_1238	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.58
OTU_1239	Unclassified	
OTU_1240	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.98
OTU_1241	Bacteria	0.94
OTU_1242	Bacteria;Synergistetes;Synergistia;Synergistales;Synergistaceae;Cloacibacillus	0.67
OTU_1243	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Dorea	0.99
OTU_1244	Bacteria;Proteobacteria	0.58
OTU_1245	Bacteria	1
OTU_1246	Bacteria;Firmicutes;Clostridia;Clostridiales;Peptococcaceae 1;Peptococcus	0.99
OTU_1247	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae	1
OTU_1248	Bacteria	0.99
OTU_1249	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae	0.74
OTU_1250	Bacteria;Firmicutes	0.74
OTU_1251	Bacteria;Lentisphaerae;Lentisphaeria;Victivallales;Victivallaceae;Victivallis	0.87
OTU_1252	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.61
OTU_1253	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.77
OTU_1254	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Selenomonas	0.54
OTU_1255	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.6
OTU_1256	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.59
OTU_1257	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae	0.99
OTU_1258	Bacteria	0.85
OTU_1259	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Coprococcus	0.56
OTU_1260	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Oscillibacter	0.82
OTU_1261	Bacteria;Fusobacteria;Fusobacteria;Fusobacteriales;Leptotrichiaceae;Leptotrichia	1
OTU_1262	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Hydrogenoanaerobacterium	0.6
OTU_1263	Bacteria	0.85
OTU_1264	Bacteria;Firmicutes;Clostridia;Clostridiales	0.59
OTU_1265	Bacteria;Gemmatimonadetes;Gemmatimonadetes;Gemmatimonadales;Gemmatimonadaceae;Gemmatir	0.56
OTU_1266	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.75
OTU_1267	Bacteria;Firmicutes;Clostridia;Clostridiales;Clostridiales_Incertae_Sedis_XIII;Mogibacterium	0.95
OTU_1268	Bacteria;Proteobacteria;Gammaproteobacteria;Pseudomonadales;Moraxellaceae;Acinetobacter	1
OTU_1269	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Anaerorhabdus	0.57
OTU_1270	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Faecalibacterium	0.7
OTU_1271	Bacteria;Actinobacteria;Actinobacteria;Actinomycetales;Geodermatophilaceae;Blastococcus	1
OTU_1272	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Megamonas	0.94
OTU_1273	Bacteria	0.96
OTU_1274	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.8

OTU_1275	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Coprococcus	0.54
OTU_1276	Bacteria	0.86
OTU_1277	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.78
OTU_1278	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae	1
OTU_1279	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.77
OTU_1280	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.75
OTU_1281	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Oscillibacter	0.51
OTU_1282	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.69
OTU_1283	Bacteria;Proteobacteria;Deltaproteobacteria;Bdellovibrionales;Bdellovibrionaceae;Vampirovibrio	0.78
OTU_1284	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.89
OTU_1285	Bacteria;Proteobacteria;Deltaproteobacteria	0.74
OTU_1286	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Sporobacter	0.78
OTU_1287	Bacteria;Firmicutes	0.86
OTU_1288	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_1289	Bacteria;Proteobacteria;Gammaproteobacteria;Pseudomonadales;Moraxellaceae;Acinetobacter	1
OTU_1290	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Allobaculum	0.88
OTU_1291	Bacteria;Proteobacteria;Gammaproteobacteria;Alteromonadales;Shewanellaceae;Shewanella	1
OTU_1292	Bacteria;Fusobacteria;Fusobacteria;Fusobacteriales;Leptotrichiaceae;Leptotrichia	1
OTU_1293	Bacteria;Firmicutes;Bacilli;Lactobacillales;Aerococcaceae;Aerococcus	1
OTU_1294	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Faecalibacterium	0.98
OTU_1295	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_1296	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Dialister	1

Table S3. Fecal microbial diversity index in the discovery cohort

Cohort	Sample	Available	Shannon	simpson	invsimpson	obs	chao1	ice
Discovery	H_20	39455	3.56767009	0.94695516	18.8519746	130	165.63636	140.6667
Discovery	H_N204	26843	2.94193029	0.90952488	11.0527624	118	179.25	131.8542
Discovery	H_37	28671	2.50096143	0.79459224	4.86836532	114	142.40909	121.9268
Discovery	H_N68	30098	3.22566498	0.8924345	9.29666098	174	222.65789	191.6203
Discovery	H_44	66600	3.56505714	0.95230725	20.9675456	141	163.15385	149.3478
Discovery	H_N105	23149	3.39483177	0.93580182	15.5767648	142	191.5	153.4286
Discovery	H_34	31640	3.99789576	0.95719789	23.3633368	231	257.72727	245.1061
Discovery	H_N39	32278	2.83596493	0.87355073	7.90830967	154	174.02381	162.3796
Discovery	H_52	39632	3.25289492	0.92676225	13.654161	143	197	156.9559
Discovery	H_17	31106	2.66912981	0.8576248	7.02369518	75	93.75	82.17391
Discovery	H_N50	20621	2.84323498	0.90520608	10.5491998	99	107.90909	103.0314
Discovery	H_73	66937	3.30775259	0.94380328	17.7946325	100	108.45	103.9157
Discovery	H_22	31497	3.31219643	0.92173095	12.7764417	165	179.58	174
Discovery	H_8	30475	3.33595319	0.932546	14.8249169	131	155.04545	138.1577
Discovery	H_71	68619	3.34310973	0.94216432	17.290366	116	142.88889	123.5059
Discovery	H_N91	28970	3.26398746	0.8887694	8.99033211	170	244.46154	186.5414
Discovery	H_24	36175	3.59144526	0.93844859	16.2465817	175	196.125	182.1118
Discovery	H_N76	24145	3.16775556	0.91208925	11.3751737	146	186.90909	155.1
Discovery	H_54	43246	2.87883117	0.89522559	9.54431551	96	121	103.0199
Discovery	H_N181	26388	2.83052132	0.86884507	7.62457057	129	159.375	138.0391
Discovery	H_N1212	21852	3.28277946	0.92343564	13.0609064	136	175.2	146.2535
Discovery	H_15	67672	3.78552757	0.95774021	23.6631586	190	207.30769	199.1011
Discovery	H_46	68195	4.12630567	0.97099825	34.4806751	235	308.84091	256.3183
Discovery	H_N132	30667	3.05222878	0.89342514	9.38307548	157	191.32143	166.3463
Discovery	H_N260	24804	2.91894133	0.88574547	8.75238802	126	150.14286	134.5872
Discovery	H_70	57602	3.12637943	0.92161309	12.7572325	129	165.96154	140.2066
Discovery	H_27	40646	3.83792859	0.96658695	29.9284252	160	186.28125	169.0377
Discovery	H_N57	25168	2.15414836	0.81205482	5.32070029	62	76.222222	69.38462
Discovery	H_N72	33053	1.86989645	0.72144581	3.5899658	90	112.04167	98.30556
Discovery	H_77	62817	2.20666753	0.78980054	4.7573861	74	105.5	83.30928
Discovery	H_N197	26534	2.94235988	0.91518497	11.7903635	128	166.11765	141.2245
Discovery	H_6	39675	4.15711123	0.97282794	36.8025093	225	252.84091	236.0385
Discovery	H_N55	24669	3.71008455	0.95597721	22.7155048	198	249.36111	212.1745
Discovery	H_64	66966	2.29139431	0.73531351	3.77805457	174	237.3913	196.7647
Discovery	H_63	56513	3.64876318	0.93988189	16.6339226	212	265.77778	225.6143
Discovery	H_53	68666	2.53603364	0.83154543	5.93631871	112	144.14286	124.5862
Discovery	H_5	36721	3.22009185	0.9332672	14.9851342	99	109.28571	102.375
Discovery	H_N264	27461	3.31005993	0.94290779	17.5155257	113	128.75	120.3443
Discovery	H_N1022	30159	2.70490428	0.86953158	7.66468993	160	222.5	180.5455
Discovery	H_76	59251	3.25568796	0.92632967	13.5739852	129	143.23529	137.1436
Discovery	H_40	38630	2.32784043	0.83597582	6.09666222	74	110.75	83.25806
Discovery	H_N145	24908	2.89376592	0.89209118	9.26708318	122	160.22727	132.4518
Discovery	H_N258	33935	2.44143215	0.84740408	6.553255	78	109.5	86.25641
Discovery	H_14	29789	2.56625543	0.83563276	6.08393749	153	208.125	167.6863
Discovery	H_13	61844	3.86633124	0.96216244	26.4287626	184	205.12069	197.7072
Discovery	H_55	66239	3.3167054	0.909432	11.0414279	168	231.28125	184.521
Discovery	H_25	31203	3.65848261	0.93226971	14.7644432	177	225.89286	190.5472
Discovery	H_N109	25953	3.08615119	0.90338924	10.3508134	173	197.5	184.7018
Discovery	H_61	71081	2.83350238	0.85796501	7.04051877	169	223.85714	185.9075

Discovery	H_28	39982	3.29941355	0.9243102	13.2118204	137	160.05882	149.3636
Discovery	H_N177	24976	2.6470732	0.83453937	6.04373368	131	149.38235	139.3678
Discovery	H_9	30088	2.3619995	0.80496132	5.127188	54	56.909091	57.40984
Discovery	H_33	30030	2.8380346	0.88924176	9.02867362	135	161	143.2913
Discovery	H_26	27635	3.93800268	0.9344439	15.2541096	236	296.75	255.2656
Discovery	H_N40	34330	4.26931546	0.9729939	37.0286661	279	385.96296	308.4728
Discovery	H_N121	22789	3.43977661	0.93653927	15.7577769	150	188.28125	163.1818
Discovery	H_23	38269	3.85974787	0.95835651	24.0133561	193	271.125	213.1107
Discovery	H_N56	31417	1.62449468	0.64598707	2.8247556	89	114	95.02871
Discovery	H_N164	24447	2.35333378	0.83882891	6.2045868	77	110.33333	86.07216
Discovery	H_12	36065	2.91929904	0.88597032	8.76964681	136	162.03571	143.6899
Discovery	H_N75	25749	4.05395948	0.96695977	30.2661309	231	291.63158	246.9214
Discovery	H_47	67479	2.24178256	0.78040318	4.55379996	125	173.13333	139.7149
Discovery	H_N84	21680	2.74894257	0.86236895	7.26580213	114	138.14286	122.7081
Discovery	H_42	54843	2.62972669	0.82833657	5.82535266	83	127.1	92.12121
Discovery	H_N9	33551	2.24625011	0.83722501	6.14344997	88	108.34615	97.51724
Discovery	H_N52	24743	3.20392682	0.89665811	9.67661814	145	197.54545	156.4251
Discovery	H_62	77508	3.33637441	0.93898275	16.3888091	158	190.59524	171
Discovery	H_1	30213	2.17596489	0.79084432	4.78112766	86	110.5	93.72258
Discovery	H_N111	25088	3.43458061	0.92225407	12.8624101	169	201.03333	178.6623
Discovery	H_N54	26476	2.02821809	0.74483478	3.91902941	73	98	80.9646
Discovery	H_N102	34215	2.61102697	0.85624372	6.95621784	146	226.18182	160.8322
Discovery	H_4	31771	3.0231761	0.87622082	8.07890335	137	155.77778	146.4095
Discovery	H_36	28601	3.01188927	0.91542542	11.8238842	119	158.0625	127.6735
Discovery	H_16	32313	3.15088841	0.92374456	13.1138187	117	137.05556	122.89
Discovery	H_69	58354	3.44762628	0.94543735	18.3275543	154	201.11538	166.8287
Discovery	C_82	33629	2.48132594	0.82346904	5.66472877	104	152.05	116.9006
Discovery	C_62	33973	3.04647199	0.88743721	8.88393013	155	193	169.1624
Discovery	C_60	28086	3.84363746	0.95614773	22.8038368	185	221.02632	198.7737
Discovery	C_32	55348	3.69353928	0.94947294	19.7913752	184	218.225	196.4121
Discovery	C_HCC20:	19446	2.17092229	0.80999572	5.26303944	68	98.083333	74.15108
Discovery	C_11	38922	3.21290814	0.93442451	15.2495995	110	134.2	117.6629
Discovery	C_75	32580	3.16667636	0.92766732	13.8250091	113	124.57143	118.7635
Discovery	C_61	29320	2.30978475	0.82718866	5.7866574	131	191.5	147.6442
Discovery	C_88	68464	2.40925841	0.7846427	4.64344596	148	212.65385	161.8408
Discovery	C_18	29724	3.49579631	0.9487462	19.5107493	142	164.53333	150.3982
Discovery	C_HCC17:	28195	2.76344331	0.90268795	10.2762194	75	129	81.77228
Discovery	C_HCC17:	23202	1.61798586	0.71790213	3.54486903	44	65.125	51.22222
Discovery	C_94	27501	2.73154026	0.83324623	5.99686584	163	225.23529	180.6307
Discovery	C_36	60261	2.1408141	0.78486326	4.64820656	103	133.15385	115.7436
Discovery	C_HCC22:	26073	2.4020065	0.77198313	4.38564038	109	131.15385	117.8571
Discovery	C_12	42792	2.75770366	0.86539757	7.42928632	115	133	119.7711
Discovery	C_101	27199	2.98939362	0.89575718	9.592987	163	190.225	173.6552
Discovery	C_86	75015	3.47306614	0.93122507	14.5401812	223	279	242.1931
Discovery	C_106	23313	3.37306677	0.92038127	12.5598584	171	235.97059	189.5572
Discovery	C_HCC20:	29252	2.90535204	0.89666603	9.67682295	117	149.34615	129.0683
Discovery	C_54	40343	3.18998368	0.91522332	11.795696	155	196.88462	165.1786
Discovery	C_69	31301	2.8161942	0.88666713	8.82356571	99	127.57143	105.413
Discovery	C_85	62024	2.73244579	0.83981448	6.24276169	136	172.125	148.3008
Discovery	C_73	29475	3.01642407	0.88595977	8.76883499	133	146.78125	139.2698
Discovery	C_64	28560	4.08328669	0.96886705	32.1203147	244	310.44643	266.0911

Discovery	C_HCC23:	27516	2.63263744	0.83033147	5.89384505	98	150.08333	106.8608
Discovery	C_HCC16:	30314	2.74160279	0.88052658	8.37006271	117	168.2	130.037
Discovery	C_28	26844	3.30610684	0.94110347	16.9789302	123	160.5	133
Discovery	C_46	61509	2.70397093	0.85340643	6.82158148	161	187.27273	172.5836
Discovery	C_HCC22:	26973	2.81852217	0.89703847	9.71236585	125	168.2	139.0282
Discovery	C_89	62092	2.11175705	0.82366832	5.67113055	49	59.285714	54.7931
Discovery	C_14	62487	2.33818096	0.80346348	5.08811283	109	143.61538	121.1978
Discovery	C_20	31402	3.69274991	0.95512668	22.284955	182	276.53125	203.25
Discovery	C_90	62355	2.63062191	0.87487977	7.99231281	99	199	122.5088
Discovery	C_HCC17:	22789	3.09974296	0.88651678	8.81187554	130	141.57143	135.2351
Discovery	C_19	37210	3.26913688	0.93582389	15.5821214	122	146.03846	130.3333
Discovery	C_7	36169	3.25383513	0.92530737	13.3882013	155	181.13333	162.9772
Discovery	C_HCC21:	26876	3.02916705	0.9146779	11.7202927	119	149.03125	132.2601
Discovery	C_HCC22:	24799	2.33808317	0.86657275	7.49472109	60	92	65.80392
Discovery	C_HCC16:	29725	2.96922976	0.91003822	11.1158319	99	121.22222	105.4327
Discovery	C_HCC23:	28351	3.08719201	0.8963286	9.64586152	123	159.45	132.6528
Discovery	C_102	36002	2.18521759	0.72656863	3.65722489	82	100.375	90.64706
Discovery	C_13	29164	2.49408321	0.83752367	6.15474277	68	96.166667	72.85714
Discovery	C_83	38856	3.00427145	0.91566821	11.8579247	106	136.15385	118.3121
Discovery	C_74	31370	3.43925404	0.94787909	19.186156	131	167.96154	143.858
Discovery	C_38	55080	2.41239208	0.84906757	6.62548151	77	93.055556	84.59574
Discovery	C_109	26289	2.77349182	0.88436551	8.64793922	75	87.5	80.55556
Discovery	C_49	38713	3.46269138	0.94536891	18.304597	140	164.03846	148.7004
Discovery	C_47	42908	3.85303791	0.96512073	28.6703214	177	222.125	189.465
Discovery	C_39	30907	3.49076217	0.92785473	13.8609218	179	213.13333	189.5
Discovery	C_44	54317	2.86665232	0.88740969	8.88175929	158	187.16667	170.2039
Discovery	C_34	25506	2.41469721	0.82310064	5.65293173	122	143.42857	133.5487
Discovery	C_24	56950	3.52750373	0.94182415	17.1892638	207	259.15517	227.6065
Discovery	C_10	74505	2.4732133	0.85530559	6.91111714	127	159.02941	140.4389
Discovery	C_6	36428	2.98626485	0.90941661	11.0395516	135	165.11765	148.0909
Discovery	C_58	39454	3.30894284	0.90405351	10.4224766	158	192.03125	170.543
Discovery	C_53	36418	3.53424905	0.94329021	17.6336403	194	222.88	206.6667
Discovery	C_68	29594	3.23799871	0.93623886	15.6835344	116	126.22727	120.35
Discovery	C_23	31889	2.30350662	0.76927522	4.33416809	65	81.333333	70.40909
Discovery	C_81	35172	3.2113062	0.90625807	10.6675853	212	252.32258	229.2811
Discovery	C_51	33873	2.5389927	0.85200869	6.75715346	75	97.5	80.125
Discovery	C_HCC18:	22250	2.73562548	0.84965414	6.65133034	104	116.04167	108.8571
Discovery	C_95	37003	2.39966893	0.80040213	5.01007342	158	187.45455	169.2438
Discovery	C_HCC17:	32155	1.95367078	0.70938971	3.44103443	134	162.65789	146.3253
Discovery	C_HCC20:	26984	4.10864262	0.97140091	34.9661423	200	245.125	212.9126
Discovery	C_27	31679	3.18049784	0.92973535	14.2319075	110	180.08333	121.5232
Discovery	C_HCC17:	21788	2.89387242	0.83637739	6.11162465	169	201.59524	181.95
Discovery	C_77	37382	2.18276313	0.82597488	5.74629669	53	69.333333	60.48276
Discovery	C_63	33013	3.46701627	0.94113207	16.9871775	136	149.78125	142.7395
Discovery	C_105	24204	3.42585459	0.94006676	16.6852309	137	175.22727	146.29
Discovery	C_91	66149	2.73493798	0.86944965	7.65987984	127	147.63158	139.069
Discovery	C_29	37331	3.8012224	0.95190746	20.7932456	193	245.53125	209.023
Discovery	C_HCC23:	26370	2.99454648	0.92323608	13.0269525	99	128.38889	108.4706
Discovery	C_22	28368	3.95840143	0.96004393	25.0274892	268	365.78571	297.7416
Discovery	C_41	52534	3.14350177	0.92484503	13.3058405	141	239	157.275
Discovery	ELC_31	15523	3.04802158	0.93220565	14.7504915	82	102	90.33333

Discovery	ELC_19	17196	1.88529778	0.66133587	2.95277803	104	132.16667	113.8571
Discovery	ELC_44	15705	3.35297845	0.89818307	9.82154974	215	291.32692	239.1209
Discovery	ELC_56	15523	2.81217374	0.88813953	8.93970849	138	168.25	148.6868
Discovery	ELC_63	13507	2.9652819	0.92001499	12.5023425	111	137.18182	118.9234
Discovery	ELC_47	16026	3.2309004	0.90866343	10.9485167	169	214.125	182.6201
Discovery	ELC_20	13236	2.86598833	0.88925342	9.029624	165	198.62	180.8317
Discovery	ELC_43	17873	2.76772781	0.88151251	8.43970957	98	150.07143	110.2521
Discovery	ELC_13A	11044	2.83460346	0.8338738	6.01952002	123	156.8	132.0435
Discovery	ELC_33	18463	1.78447744	0.61589908	2.60348245	113	147.03125	124.3222
Discovery	ELC_40	18315	2.85771487	0.88271861	8.52650214	177	212.28	192.9053
Discovery	ELC_22	15576	3.25416342	0.92843578	13.9734641	126	167.14286	134.3316
Discovery	ELC_18	16295	2.93292703	0.9024887	10.2552216	93	109.05556	98.47651
Discovery	ELC_61	17139	3.21698152	0.91742733	12.1105446	139	199.16667	154.0146
Discovery	ELC_24	17022	1.97693146	0.78105713	4.56740156	52	116	58.66667
Discovery	ELC_29	12519	3.62409601	0.95079879	20.3247035	169	221.65385	181.1369
Discovery	ELC_42	18821	3.13321586	0.90887061	10.9734077	176	211.28	193.1818
Discovery	ELC_17	14654	2.479672	0.8182074	5.50077402	110	148.22727	120.3775
Discovery	ELC_38	13783	1.38397523	0.59527584	2.47081867	53	62.388889	57.6699
Discovery	ELC_7A	16114	2.38570229	0.73779047	3.81374387	121	201.08333	133.3652
Discovery	ELC_58	16154	3.00636752	0.91603904	11.9102969	115	133.61538	122.2222
Discovery	ELC_46	20053	3.69693834	0.94916494	19.6714613	201	245.1	215.9728
Discovery	ELC_25	16059	2.33649718	0.77125689	4.37171647	97	113.40909	103.1149
Discovery	ELC_51	16657	2.22469936	0.79890465	4.97276545	72	98.888889	80.94915
Discovery	ELC_117A	15338	3.03031537	0.90270808	10.2783458	139	184.125	153.1048
Discovery	ELC_21	18852	2.44673571	0.84814056	6.58503698	106	179.14286	118.2404
Discovery	ELC_28	13012	2.77991033	0.88448334	8.65675968	116	130.28571	122.0829
Discovery	ELC_37	11043	2.98129118	0.80658081	5.17011792	205	287.88095	227.4602
Discovery	ELC_115A	11676	3.35490773	0.92200503	12.8213389	187	244.6	203.9581
Discovery	ELC_48	16897	2.48543114	0.75045779	4.00733805	147	167.45455	156.604
Discovery	ELC_45	20135	2.77685929	0.89455361	9.48349209	107	219.5	118.105
Discovery	ELC_23	18514	3.08961092	0.90319989	10.3305671	169	247.02778	190.3893
Discovery	ELC_41	19883	2.53914975	0.88140137	8.43180083	66	98.4	72.99029
Discovery	ELC_35	17692	2.41317816	0.83360466	6.00978378	81	89.166667	86.81132
Discovery	ELC_8A	17573	2.31674692	0.82900694	5.84819057	77	99.222222	84.40741
Discovery	ELC_65A	16375	1.24862216	0.45024475	1.81899125	62	80.0625	69.01031
Discovery	ELC_52	21236	2.31275076	0.7702962	4.35343247	125	210.5625	139.9762
Discovery	ELC_11	16073	2.10072831	0.7928953	4.82847561	60	79.6	65.15789
Discovery	ELC_36	16013	2.98176959	0.83672607	6.12467654	207	245.20455	219.4545
Discovery	ELC_30	16993	2.75878901	0.86365704	7.33444539	134	149.68	144.5
Validation	H_48	65698						
Validation	H_N69	27642						
Validation	H_N5	27181						
Validation	H_57	77587						
Validation	H_49	69888						
Validation	H_43	58724						
Validation	H_45	61465						
Validation	H_N16	35747						
Validation	H_30	34944						
Validation	H_74	58996						
Validation	H_50	53444						
Validation	C_65	34728						

Validation	C_31	38955
Validation	C_99	33557
Validation	C_76	31221
Validation	C_37	28351
Validation	C_HCC20	26398
Validation	C_66	27448
Validation	C_HCC17:	27226
Validation	C_78	31762
Validation	C_107	30408
Validation	C_35	60454
Independent diagnosis 1	C_104	24238
Independent diagnosis 1	C_40	53297
Independent diagnosis 1	C_43	59174
Independent diagnosis 1	C_48	27393
Independent diagnosis 1	C_57	36804
Independent diagnosis 1	C_67	27051
Independent diagnosis 1	C_HCC21:	35908
Independent diagnosis 1	C_HCC21:	24383
Independent diagnosis 1	C_HCC22:	30643
Independent diagnosis 1	C_HCC23:	31685
Independent diagnosis 1	C_15	50627
Independent diagnosis 1	C_2	47705
Independent diagnosis 1	C_80	34443
Independent diagnosis 1	C_84	30682
Independent diagnosis 1	C_87	63127
Independent diagnosis 1	C_93	58106
Independent diagnosis 1	C_HCC19:	26113
Independent diagnosis 1	C_HCC23'	31914
Independent diagnosis 1	C_HCC23:	26386
Independent diagnosis 1	H_75	57624
Independent diagnosis 1	H_35	32963
Independent diagnosis 1	H_N64	26367
Independent diagnosis 1	H_N7	30612
Independent diagnosis 1	H_60	63797
Independent diagnosis 1	H_2	29343
Independent diagnosis 1	H_68	66889
Independent diagnosis 1	H_N259	24107
Independent diagnosis 1	H_10	28647
Independent diagnosis 1	H_N261	34119
Independent diagnosis 1	H_39	36406
Independent diagnosis 1	H_56	64960
Independent diagnosis 1	H_N171	21217
Independent diagnosis 1	H_N58	34269
Independent diagnosis 1	H_18	38057
Independent diagnosis 1	H_N49	32881
Independent diagnosis 1	H_38	40641
Independent diagnosis 1	H_N160	21482
Independent diagnosis 1	H_29	38046
Independent diagnosis 1	H_66	61599
Independent diagnosis 1	H_19	29769
Independent diagnosis 1	H_N86	22029

Independent diagnosis 1 H_N21	26304
Independent diagnosis 1 H_51	74358
Independent diagnosis 1 H_67	67768
Independent diagnosis 1 H_N63	28910
Independent diagnosis 1 H_7	26442
Independent diagnosis 1 H_72	53554
Independent diagnosis 1 H_N176	21016
Independent diagnosis 1 H_32	35520
Independent diagnosis 1 H_N70	27332
Independent diagnosis 1 H_59	72149
Independent diagnosis 1 H_N47	33285
Independent diagnosis 1 H_58	66359
Independent diagnosis 1 H_N65	29810
Independent diagnosis 1 H_31	33303
Independent diagnosis 1 H_11	28475
Independent diagnosis 1 H_21	36469
Independent diagnosis 1 H_N97	28934
Independent diagnosis 1 H_65	71987
Independent diagnosis 1 H_N101	25128
Independent diagnosis 1 H_41	65878
Independent diagnosis 1 H_3	33514
Independent diagnosis 1 H_N12231	27139
Independent diagnosis 1 H_N104	21790
Independent diagnosis 2 C_103	21736
Independent diagnosis 2 C_108	35982
Independent diagnosis 2 C_110	40650
Independent diagnosis 2 C_21	26496
Independent diagnosis 2 C_26	29048
Independent diagnosis 2 C_33	41734
Independent diagnosis 2 C_42	49917
Independent diagnosis 2 C_52	34835
Independent diagnosis 2 C_55	34008
Independent diagnosis 2 C_56	41137
Independent diagnosis 2 C_72	28673
Independent diagnosis 2 C_8	27445
Independent diagnosis 2 C_98	32909
Independent diagnosis 2 C_HCC16:	26727
Independent diagnosis 2 C_HCC17'	29569
Independent diagnosis 2 C_HCC18:	27811
Independent diagnosis 2 C_HCC18:	28885
Independent diagnosis 2 C_HCC19	22291
Independent diagnosis 2 C_HCC19:	19316
Independent diagnosis 2 C_HCC19:	34291
Independent diagnosis 2 C_HCC21	26146
Independent diagnosis 2 C_HCC21:	27912
Independent diagnosis 2 C_HCC21'	30981
Independent diagnosis 2 C_HCC22:	27031
Independent diagnosis 2 C_HCC22'	26198
Independent diagnosis 2 C_HCC22'	25984
Independent diagnosis 2 C_HCC23:	30487
Independent diagnosis 2 C_HCC24:	25872

Independent diagnosis 2 C_HCC24	24370
Independent diagnosis 2 C_HCC27	24824
Independent diagnosis 2 C_16	31120
Independent diagnosis 2 C_17	23516
Independent diagnosis 2 C_25	32689
Independent diagnosis 2 C_3	30143
Independent diagnosis 2 C_30	26654
Independent diagnosis 2 C_4	35007
Independent diagnosis 2 C_45	27215
Independent diagnosis 2 C_50	41450
Independent diagnosis 2 C_59	63172
Independent diagnosis 2 C_71	36864
Independent diagnosis 2 C_79	42832
Independent diagnosis 2 C_9	37671
Independent diagnosis 2 C_92	55931
Independent diagnosis 2 C_HCC17	26582
Independent diagnosis 2 C_HCC23	30392

Table S4. Stool form scale and stool moisture in all samples

Stage	Sample	Group	Stool character	Stool colour	Stool moisture
Discovery	H_20	H	Soft	yellow	0.6908176
Discovery	H_N204	H	Soft	yellow	0.7094017
Discovery	H_37	H	Soft	yellow	0.7262326
Discovery	H_N68	H	Soft	yellow	0.7757906
Discovery	H_44	H	Soft	yellow	0.669587
Discovery	H_N105	H	Soft	yellow	0.692843
Discovery	H_34	H	Soft	yellow	0.6787747
Discovery	H_N39	H	Soft	yellowish-brown	0.7443627
Discovery	H_52	H	Soft	yellow	0.7046929
Discovery	H_17	H	Soft	yellow	0.7313084
Discovery	H_N50	H	Soft	yellow	0.8018927
Discovery	H_73	H	Soft	yellow	0.774048
Discovery	H_22	H	Soft	yellow	0.8075428
Discovery	H_8	H	Soft	yellow	0.7525916
Discovery	H_71	H	Soft	yellowish-brown	0.7181088
Discovery	H_N91	H	Soft	yellow	0.7842633
Discovery	H_24	H	Soft	yellow	0.6892294
Discovery	H_N76	H	Soft	yellow	0.7370536
Discovery	H_54	H	Soft	yellow	0.6806004
Discovery	H_N181	H	Soft	yellow	0.7603774
Discovery	H_N1212	H	Soft	yellow	0.6954582
Discovery	H_15	H	Soft	yellow	0.7828631
Discovery	H_46	H	Soft	yellow	0.6853843
Discovery	H_N132	H	Soft	yellowish-brown	0.7458127
Discovery	H_N260	H	Soft	yellow	0.7230494
Discovery	H_70	H	Soft	yellow	0.7764464
Discovery	H_27	H	Soft	yellow	0.7314158
Discovery	H_N57	H	Soft	yellow	0.7454455
Discovery	H_N72	H	Soft	yellow	0.7644062
Discovery	H_77	H	Soft	yellow	0.7310055
Discovery	H_N197	H	Soft	yellow	0.7432719
Discovery	H_6	H	Soft	yellow	0.8180589
Discovery	H_N55	H	Soft	yellow	0.7456116
Discovery	H_64	H	Soft	yellowish-brown	0.7207494
Discovery	H_63	H	Soft	yellow	0.812577
Discovery	H_53	H	Soft	yellow	0.7456701
Discovery	H_5	H	Soft	yellow	0.8239762
Discovery	H_N264	H	Soft	yellow	0.7442554
Discovery	H_N1022	H	Soft	yellow	0.7422028
Discovery	H_76	H	Soft	yellow	0.6816307
Discovery	H_40	H	Soft	yellow	0.7738431
Discovery	H_N145	H	Soft	yellow	0.8181268
Discovery	H_N258	H	Soft	yellow	0.7120494
Discovery	H_14	H	Soft	yellow	0.7854464
Discovery	H_13	H	Soft	yellow	0.7214158
Discovery	H_55	H	Soft	yellowish-brown	0.7364455
Discovery	H_25	H	Soft	yellow	0.7324062
Discovery	H_N109	H	Soft	yellow	0.7250055
Discovery	H_61	H	Soft	yellow	0.7342719
Discovery	H_28	H	Soft	yellow	0.7233589
Discovery	H_N177	H	Soft	yellow	0.7336116
Discovery	H_9	H	Soft	yellow	0.7842999
Discovery	H_33	H	Soft	yellow	0.7577474
Discovery	H_26	H	Soft	yellow	0.6564363
Discovery	H_N40	H	Soft	yellow	0.7369287

Discovery	H_N121	H	Soft	yellowish-brown	0.7553084
Discovery	H_23	H	Soft	yellow	0.7628927
Discovery	H_N56	H	Soft	yellow	0.7404795
Discovery	H_N164	H	Soft	yellow	0.7275428
Discovery	H_12	H	Soft	yellow	0.7685916
Discovery	H_N75	H	Soft	yellow	0.7241088
Discovery	H_47	H	Soft	yellow	0.6772633
Discovery	H_N84	H	Soft	yellow	0.7762294
Discovery	H_42	H	Soft	yellow	0.7770536
Discovery	H_N9	H	Soft	yellowish-brown	0.6796004
Discovery	H_N52	H	Soft	yellow	0.6853774
Discovery	H_62	H	Soft	yellow	0.6884582
Discovery	H_1	H	Soft	yellow	0.7779305
Discovery	H_N111	H	Soft	yellow	0.786524
Discovery	H_N54	H	Soft	yellow	0.7798688
Discovery	H_N102	H	Soft	yellow	0.7436464
Discovery	H_4	H	Soft	yellow	0.7211794
Discovery	H_36	H	Soft	yellow	0.8211475
Discovery	H_16	H	Soft	yellowish-brown	0.7644441
Discovery	H_69	H	Soft	yellow	0.732281
Discovery	C_82	HCC	Soft	yellow	0.8120259
Discovery	C_62	HCC	Soft	yellow	0.7547085
Discovery	C_60	HCC	Soft	yellow	0.8120414
Discovery	C_32	HCC	Soft	yellow	0.7123464
Discovery	C_HCC20	HCC	Soft	yellow	0.7340009
Discovery	C_11	HCC	Soft	yellow	0.7921305
Discovery	C_75	HCC	Soft	yellow	0.753224
Discovery	C_61	HCC	Soft	yellow	0.7658688
Discovery	C_88	HCC	Soft	yellow	0.7436464
Discovery	C_18	HCC	Soft	yellowish-brown	0.7179414
Discovery	C_HCC17	HCC	Soft	yellow	0.8147545
Discovery	C_HCC17	HCC	Soft	yellow	0.7444062
Discovery	C_94	HCC	Soft	yellow	0.7281006
Discovery	C_36	HCC	Soft	yellow	0.7502719
Discovery	C_HCC22	HCC	Soft	yellow	0.7266681
Discovery	C_12	HCC	Soft	yellow	0.7495561
Discovery	C_101	HCC	Soft	yellowish-brown	0.7163075
Discovery	C_86	HCC	Soft	yellow	0.7262258
Discovery	C_106	HCC	Soft	yellow	0.8184567
Discovery	C_HCC20	HCC	Soft	yellow	0.7401598
Discovery	C_54	HCC	Soft	yellow	0.8157843
Discovery	C_69	HCC	Soft	yellow	0.7812203
Discovery	C_85	HCC	Soft	yellow	0.7576259
Discovery	C_73	HCC	Soft	yellow	0.7566197
Discovery	C_64	HCC	Soft	yellow	0.732717
Discovery	C_HCC23	HCC	Soft	yellow	0.733129
Discovery	C_HCC16	HCC	Soft	yellow	0.7749642
Discovery	C_28	HCC	Soft	yellow	0.7647502
Discovery	C_46	HCC	Soft	yellowish-brown	0.7581508
Discovery	C_HCC22	HCC	Soft	yellow	0.8077914
Discovery	C_89	HCC	Soft	yellow	0.7205357
Discovery	C_14	HCC	Soft	yellow	0.6960038
Discovery	C_20	HCC	Soft	yellow	0.7503774
Discovery	C_90	HCC	Soft	yellow	0.7581673
Discovery	C_HCC17	HCC	Soft	yellow	0.6630705
Discovery	C_19	HCC	Soft	yellow	0.7538431
Discovery	C_7	HCC	Soft	yellow	0.7412679

Discovery	C_HCC21	HCC	Soft	yellow	0.7258904
Discovery	C_HCC22	HCC	Soft	yellowish-brown	0.7768535
Discovery	C_HCC16	HCC	Soft	yellow	0.8140898
Discovery	C_HCC23	HCC	Soft	yellow	0.7264126
Discovery	C_102	HCC	Soft	yellow	0.8028647
Discovery	C_13	HCC	Soft	yellow	0.795372
Discovery	C_83	HCC	Soft	yellow	0.7240275
Discovery	C_74	HCC	Soft	yellow	0.7687987
Discovery	C_38	HCC	Soft	yellow	0.7464464
Discovery	C_109	HCC	Soft	yellow	0.8141416
Discovery	C_49	HCC	Soft	yellow	0.7475445
Discovery	C_47	HCC	Soft	yellow	0.743062
Discovery	C_39	HCC	Soft	yellowish-brown	0.7100551
Discovery	C_44	HCC	Soft	yellow	0.7502719
Discovery	C_34	HCC	Soft	yellow	0.7246681
Discovery	C_24	HCC	Soft	yellow	0.7456116
Discovery	C_10	HCC	Soft	yellow	0.7130494
Discovery	C_6	HCC	Soft	yellow	0.6946446
Discovery	C_58	HCC	Soft	yellow	0.7414158
Discovery	C_53	HCC	Soft	yellow	0.7375445
Discovery	C_68	HCC	Soft	yellowish-brown	0.7244062
Discovery	C_23	HCC	Soft	yellow	0.7210055
Discovery	C_81	HCC	Soft	yellow	0.7532719
Discovery	C_51	HCC	Soft	yellow	0.7380589
Discovery	C_HCC18	HCC	Soft	yellow	0.7556116
Discovery	C_95	HCC	Soft	yellow	0.7307494
Discovery	C_HCC17	HCC	Soft	yellow	0.682577
Discovery	C_HCC20	HCC	Soft	yellow	0.724567
Discovery	C_27	HCC	Soft	yellow	0.7159762
Discovery	C_HCC17	HCC	Soft	yellow	0.8184255
Discovery	C_77	HCC	Soft	yellow	0.7122028
Discovery	C_63	HCC	Soft	yellow	0.7327705
Discovery	C_105	HCC	Soft	yellowish-brown	0.674296
Discovery	C_91	HCC	Soft	yellow	0.6812538
Discovery	C_29	HCC	Soft	yellow	0.7678846
Discovery	C_HCC23	HCC	Soft	yellow	0.7217793
Discovery	C_22	HCC	Soft	yellow	0.7678652
Discovery	C_41	HCC	Soft	yellow	0.7757987
Discovery	ELC_31	ELC	Soft	yellow	0.7564365
Discovery	ELC_19	ELC	Soft	yellow	0.7312118
Discovery	ELC_44	ELC	Soft	yellow	0.8222115
Discovery	ELC_56	ELC	Soft	yellowish-brown	0.7566444
Discovery	ELC_63	ELC	Soft	yellow	0.7563228
Discovery	ELC_47	ELC	Soft	yellow	0.7231203
Discovery	ELC_20	ELC	Soft	yellow	0.7645471
Discovery	ELC_43	ELC	Soft	yellow	0.7321204
Discovery	ELC_13A	ELC	Soft	yellow	0.8135235
Discovery	ELC_33	ELC	Soft	yellow	0.82634
Discovery	ELC_40	ELC	Soft	yellowish-brown	0.7234158
Discovery	ELC_22	ELC	Soft	yellow	0.8125445
Discovery	ELC_18	ELC	Soft	yellow	0.7134062
Discovery	ELC_61	ELC	Soft	yellow	0.7350055
Discovery	ELC_24	ELC	Soft	yellow	0.7422272
Discovery	ELC_29	ELC	Soft	yellow	0.8213059
Discovery	ELC_42	ELC	Soft	yellow	0.7462612
Discovery	ELC_17	ELC	Soft	yellow	0.7215749
Discovery	ELC_38	ELC	Soft	yellow	0.7341577

Discovery	ELC_7A	ELC	Soft	yellow	0.8124567
Discovery	ELC_58	ELC	Soft	yellow	0.7125976
Discovery	ELC_46	ELC	Soft	yellow	0.8214255
Discovery	ELC_25	ELC	Soft	yellow	0.7312203
Discovery	ELC_51	ELC	Soft	yellowish-brown	0.7215771
Discovery	ELC_117A	ELC	Soft	yellow	0.7635296
Discovery	ELC_21	ELC	Soft	yellow	0.6789254
Discovery	ELC_28	ELC	Soft	yellow	0.6813885
Discovery	ELC_37	ELC	Soft	yellow	0.7121779
Discovery	ELC_115A	ELC	Soft	yellow	0.7324612
Discovery	ELC_48	ELC	Soft	yellow	0.7325494
Discovery	ELC_45	ELC	Soft	yellow	0.8214377
Discovery	ELC_23	ELC	Soft	yellowish-brown	0.7215567
Discovery	ELC_41	ELC	Soft	yellow	0.7316976
Discovery	ELC_35	ELC	Soft	yellow	0.8215426
Discovery	ELC_8A	ELC	Soft	yellow	0.7222203
Discovery	ELC_65A	ELC	Soft	yellow	0.7142771
Discovery	ELC_52	ELC	Soft	yellow	0.689296
Discovery	ELC_11	ELC	Soft	yellow	0.7352538
Discovery	ELC_36	ELC	Soft	yellow	0.6698846
Discovery	ELC_30	ELC	Soft	yellow	0.7413779
Validation	H_48	H	Soft	yellow	0.7791799
Validation	H_N69	H	Soft	yellow	0.7724436
Validation	H_N5	H	Soft	yellowish-brown	0.8214212
Validation	H_57	H	Soft	yellow	0.6826211
Validation	H_49	H	Soft	yellow	0.8162843
Validation	H_43	H	Soft	yellow	0.795722
Validation	H_45	H	Soft	yellow	0.7738626
Validation	H_N16	H	Soft	yellow	0.772362
Validation	H_30	H	Soft	yellow	0.815717
Validation	H_74	H	Soft	yellowish-brown	0.7215129
Validation	H_50	H	Soft	yellow	0.7628964
Validation	H_75	H	Soft	yellow	0.758275
Validation	H_35	H	Soft	yellow	0.6724151
Validation	H_N64	H	Soft	yellow	0.7231791
Validation	H_N7	H	Soft	yellow	0.7145536
Validation	H_60	H	Soft	yellow	0.6889038
Validation	H_2	H	Soft	yellow	0.6623774
Validation	H_68	H	Soft	yellow	0.6812167
Validation	H_N259	H	Soft	yellow	0.6723071
Validation	H_10	H	Soft	yellow	0.7312178
Validation	H_N261	H	Soft	yellow	0.7245461
Validation	H_39	H	Soft	yellowish-brown	0.7675494
Validation	H_56	H	Soft	yellow	0.7314377
Validation	H_N171	H	Soft	yellow	0.8245567
Validation	H_N58	H	Soft	yellow	0.7326976
Validation	H_18	H	Soft	yellow	0.7475426
Validation	H_N49	H	Soft	yellow	0.745622
Validation	H_38	H	Soft	yellow	0.7234277
Validation	H_N160	H	Soft	yellow	0.69296
Validation	H_29	H	Soft	yellow	0.6525377
Validation	H_66	H	Soft	yellow	0.6701458
Validation	H_19	H	Soft	yellow	0.7351378
Validation	H_N86	H	Soft	yellow	0.7217378
Validation	H_N21	H	Soft	yellowish-brown	0.7681799
Validation	H_51	H	Soft	yellow	0.7687244
Validation	H_67	H	Soft	yellow	0.8314212

Validation	H_N63	H	Soft	yellow	0.7476211
Validation	H_7	H	Soft	yellow	0.7312284
Validation	H_72	H	Soft	yellow	0.788722
Validation	H_N176	H	Soft	yellow	0.7698626
Validation	H_32	H	Soft	yellowish-brown	0.7682362
Validation	H_N70	H	Soft	yellow	0.8211317
Validation	H_59	H	Soft	yellow	0.7214151
Validation	H_N47	H	Soft	yellow	0.7695865
Validation	H_58	H	Soft	yellow	0.7889799
Validation	H_N65	H	Soft	yellow	0.7712436
Validation	H_31	H	Soft	yellow	0.8256212
Validation	H_11	H	Soft	yellow	0.7346211
Validation	H_21	H	Soft	yellow	0.7687644
Validation	H_N97	H	Soft	yellow	0.7456323
Validation	H_65	H	Soft	yellow	0.822112
Validation	H_N101	H	Soft	yellowish-brown	0.7785547
Validation	H_41	H	Soft	yellow	0.682512
Validation	H_3	H	Soft	yellow	0.8214523
Validation	H_N12231	H	Soft	yellow	0.697534
Validation	H_N104	H	Soft	yellow	0.7414158
Validation	C_65	HCC	Soft	yellow	0.7215406
Validation	C_31	HCC	Soft	yellow	0.7426006
Validation	C_99	HCC	Soft	yellow	0.7226227
Validation	C_76	HCC	Soft	yellow	0.6715306
Validation	C_37	HCC	Soft	yellow	0.8312268
Validation	C_HCC20	HCC	Soft	yellow	0.741689
Validation	C_66	HCC	Soft	yellow	0.7863853
Validation	C_HCC17	HCC	Soft	yellowish-brown	0.791209
Validation	C_78	HCC	Soft	yellow	0.7317413
Validation	C_107	HCC	Soft	yellow	0.7312865
Validation	C_35	HCC	Soft	yellow	0.7887372
Validation	C_104	HCC	Soft	yellow	0.7526799
Validation	C_40	HCC	Soft	yellow	0.7662446
Validation	C_43	HCC	Soft	yellow	0.8215142
Validation	C_48	HCC	Soft	yellow	0.7796545
Validation	C_57	HCC	Soft	yellowish-brown	0.7552062
Validation	C_67	HCC	Soft	yellow	0.7327055
Validation	C_HCC21	HCC	Soft	yellow	0.7635272
Validation	C_HCC21	HCC	Soft	yellow	0.8331668
Validation	C_HCC22	HCC	Soft	yellow	0.7227612
Validation	C_HCC23	HCC	Soft	yellow	0.7227049
Validation	C_15	HCC	Soft	yellow	0.6725645
Validation	C_2	HCC	Soft	yellow	0.6925416
Validation	C_80	HCC	Soft	yellow	0.7369545
Validation	C_84	HCC	Soft	yellowish-brown	0.7325261
Validation	C_87	HCC	Soft	yellow	0.7314575
Validation	C_93	HCC	Soft	yellow	0.6916158
Validation	C_HCC19	HCC	Soft	yellow	0.8225457
Validation	C_HCC23	HCC	Soft	yellow	0.6816598
Validation	C_HCC23	HCC	Soft	yellow	0.7311426
Validation	C_103	HCC	Soft	yellow	0.7336577
Validation	C_108	HCC	Soft	yellowish-brown	0.6752635
Validation	C_110	HCC	Soft	yellow	0.6684925
Validation	C_21	HCC	Soft	yellow	0.7759388
Validation	C_26	HCC	Soft	yellow	0.7311178
Validation	C_33	HCC	Soft	yellow	0.7538461
Validation	C_42	HCC	Soft	yellow	0.7481549

Validation	C_52	HCC	Soft	yellow	0.8001438
Validation	C_55	HCC	Soft	yellow	0.6667818
Validation	C_56	HCC	Soft	yellow	0.7213402
Validation	C_72	HCC	Soft	yellow	0.7228233
Validation	C_8	HCC	Soft	yellowish-brown	0.7821791
Validation	C_98	HCC	Soft	yellow	0.758587
Validation	C_HCC16	HCC	Soft	yellow	0.6813843
Validation	C_HCC17	HCC	Soft	yellow	0.6801775
Validation	C_HCC18	HCC	Soft	yellow	0.6583363
Validation	C_HCC18	HCC	Soft	yellow	0.7231693
Validation	C_HCC19	HCC	Soft	yellow	0.7401308
Validation	C_HCC19	HCC	Soft	yellow	0.7611893
Validation	C_HCC19	HCC	Soft	yellow	0.7801048
Validation	C_HCC21	HCC	Soft	yellow	0.8112543
Validation	C_HCC21	HCC	Soft	yellowish-brown	0.7612526
Validation	C_HCC21	HCC	Soft	yellow	0.7203088
Validation	C_HCC22	HCC	Soft	yellow	0.8227717
Validation	C_HCC22	HCC	Soft	yellow	0.7335129
Validation	C_HCC22	HCC	Soft	yellow	0.7582896
Validation	C_HCC23	HCC	Soft	yellow	0.7612275
Validation	C_HCC24	HCC	Soft	yellow	0.6668415
Validation	C_HCC24	HCC	Soft	yellow	0.7412179
Validation	C_HCC27	HCC	Soft	yellow	0.7201554
Validation	C_16	HCC	Soft	yellow	0.6799038
Validation	C_17	HCC	Soft	yellow	0.7637377
Validation	C_25	HCC	Soft	yellow	0.6779167
Validation	C_3	HCC	Soft	yellowish-brown	0.6803071
Validation	C_30	HCC	Soft	yellow	0.7294178
Validation	C_4	HCC	Soft	yellow	0.7302461
Validation	C_45	HCC	Soft	yellow	0.7723494
Validation	C_50	HCC	Soft	yellow	0.8297377
Validation	C_59	HCC	Soft	yellow	0.8306567
Validation	C_71	HCC	Soft	yellow	0.8289976
Validation	C_79	HCC	Soft	yellow	0.8399426
Validation	C_9	HCC	Soft	yellowish-brown	0.752122
Validation	C_92	HCC	Soft	yellow	0.7310277
Validation	C_HCC17	HCC	Soft	yellow	0.68946
Validation	C_HCC23	HCC	Soft	yellow	0.7633377
Independent	XJ_1	HCC	Soft	yellow	0.737822
Independent	XJ_2	HCC	Soft	yellow	0.7522277
Independent	XJ_3	HCC	Soft	yellow	0.68766
Independent	XJ_4	HCC	Soft	yellow	0.6663377
Independent	XJ_5	HCC	Soft	yellow	0.6696458
Independent	XJ_6	HCC	Soft	yellow	0.7402378
Independent	XJ_7	HCC	Soft	yellowish-brown	0.7194378
Independent	XJ_8	HCC	Soft	yellow	0.7714799
Independent	XJ_9	HCC	Soft	yellow	0.7731244
Independent	XJ_10	HCC	Soft	yellow	0.8296212
Independent	XJ_11	HCC	Soft	yellow	0.6503211
Independent	XJ_12	HCC	Soft	yellow	0.7286284
Independent	XJ_13	HCC	Soft	yellow	0.790422
Independent	XJ_14	HCC	Soft	yellow	0.7702626
Independent	XJ_15	HCC	Soft	yellowish-brown	0.7703362
Independent	XJ_16	HCC	Soft	yellow	0.7188317
Independent	XJ_17	HCC	Soft	yellow	0.8179151
Independent	XJ_18	HCC	Soft	yellow	0.7703865
Independent	ZD_1	HCC	Soft	yellow	0.7683436

Independent (ZD_2	HCC	Soft	yellow	0.7307212
Independent (ZD_3	HCC	Soft	yellow	0.8298211
Independent (ZD_4	HCC	Soft	yellow	0.7714644
Independent (ZD_5	HCC	Soft	yellow	0.7501323
Independent (ZD_6	HCC	Soft	yellow	0.8112428
Independent (ZD_7	HCC	Soft	yellow	0.6535626
Independent (ZD_8	HCC	Soft	yellow	0.7207088
Independent (ZD_9	HCC	Soft	yellow	0.6953633
Independent (ZD_10	HCC	Soft	yellow	0.6885294
Independent (ZD_11	HCC	Soft	yellowish-brown	0.7419536
Independent (ZD_12	HCC	Soft	yellow	0.6799004
Independent (ZD_13	HCC	Soft	yellow	0.6583774
Independent (ZD_14	HCC	Soft	yellow	0.6983582
Independent (ZD_16	HCC	Soft	yellow	0.6900843
Independent (ZD_17	HCC	Soft	yellow	0.7521127
Independent (ZD_18	HCC	Soft	yellow	0.7189494
Independent (ZD_19	HCC	Soft	yellow	0.6803464
Independent (ZD_20	HCC	Soft	yellowish-brown	0.7296158
Independent (ZD_21	HCC	Soft	yellow	0.7503455
Independent (ZD_22	HCC	Soft	yellow	0.7597062
Independent (ZD_23	HCC	Soft	yellow	0.780062
Independent (ZD_24	HCC	Soft	yellow	0.823117
Independent (ZD_25	HCC	Soft	yellow	0.8197129
Independent (ZD_26	HCC	Soft	yellow	0.7589964
Independent (ZD_27	HCC	Soft	yellowish-brown	0.761175
Independent (ZD_28	HCC	Soft	yellow	0.6697151
Independent (ZD_29	HCC	Soft	yellow	0.8199791
Independent (ZD_30	HCC	Soft	yellow	0.7099536
Independent (ZD_31	HCC	Soft	yellow	0.6905631
Independent (ZD_32	HCC	Soft	yellow	0.6913038
Independent (ZD_33	HCC	Soft	yellow	0.7589774
Independent (ZD_34	HCC	Soft	yellow	0.6789167
Independent (ZD_35	HCC	Soft	yellow	0.6697071
Independent (ZD_36	HCC	Soft	yellowish-brown	0.7288178
Independent (ZD_37	HCC	Soft	yellow	0.7199461
Independent (ZD_38	HCC	Soft	yellow	0.7704494
Independent (ZD_39	HCC	Soft	yellow	0.8289377
Independent (ZD_40	HCC	Soft	yellow	0.8301567
Independent (ZD_41	HCC	Soft	yellow	0.8289976
Independent (ZD_42	HCC	Soft	yellow	0.7503426
Independent (ZD_43	HCC	Soft	yellow	0.751022
Independent (ZD_44	HCC	Soft	yellow	0.7197277
Independent (ZD_45	HCC	Soft	yellow	0.69036
Independent (ZD_46	HCC	Soft	yellow	0.6489377
Independent (ZD_47	HCC	Soft	yellow	0.6658458
Independent (ZD_48	HCC	Soft	yellow	0.7403378
Independent (ZD_49	HCC	Soft	yellowish-brown	0.7188378
Independent (ZD_50	HCC	Soft	yellow	0.7711799
Independent (ZD_51	HCC	Soft	yellow	0.760375
Independent (ZD_52	HCC	Soft	yellow	0.7521632
Independent (ZD_53	HCC	Soft	yellow	0.8212312
Independent (ZD_54	HCC	Soft	yellow	0.7631455
Independent (ZD_55	HCC	Soft	yellow	0.8288204
Independent (ZD_56	HCC	Soft	yellow	0.8099235
Independent (ZD_57	HCC	Soft	yellow	0.73124
Independent (ZD_58	HCC	Soft	yellow	0.8310158
Independent (ZD_59	HCC	Soft	yellow	0.8099445

Independent (ZD_60	HCC	Soft	yellowish-brown	0.7099062
Independent (ZD_61	HCC	Soft	yellow	0.7401055
Independent (ZD_62	HCC	Soft	yellow	0.7388272
Independent (ZD_63	HCC	Soft	yellow	0.8188059
Independent (ZD_64	HCC	Soft	yellow	0.7501612
Independent (ZD_65	HCC	Soft	yellow	0.7189749
Independent (ZD_66	HCC	Soft	yellow	0.7381577
Independent (ZD_67	HCC	Soft	yellow	0.8095567
Independent (ZD_68	HCC	Soft	yellow	0.8099976
Independent (ZD_69	HCC	Soft	yellow	0.8213143
Independent (ZD_70	HCC	Soft	yellow	0.820417
Independent (ZD_71	HCC	Soft	yellow	0.8199129
Independent (HN_1	HCC	Soft	yellow	0.6699151
Independent (HN_2	HCC	Soft	yellow	0.8199791
Independent (HN_3	HCC	Soft	yellow	0.7098536
Independent (HN_4	HCC	Soft	yellow	0.6903038
Independent (HN_5	HCC	Soft	yellow	0.6599774
Independent (HN_7	HCC	Soft	yellow	0.6785167
Independent (HN_6	HCC	Soft	yellow	0.7588964
Independent (HN_8	HCC	Soft	yellowish-brown	0.6689071
Independent (HN_9	HCC	Soft	yellow	0.7297178
Independent (HN_10	HCC	Soft	yellow	0.7199461

Table S5. Different OTUs and the corresponding annotation in the discovery phase

OTU_333	Bacteria	0.04910604	H
OTU_761	Bacteria;Proteobacteria;Gammaproteobacteria;Pseudomonadales;Pseudomonadaceae;Pseudom	0.03430698	H
OTU_415	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Sutterellaceae;Parasutterella	0.04910604	H
OTU_9	Bacteria;Proteobacteria;Alphaproteobacteria;Rhizobiales;Hyphomicrobiaceae;Gemmiger	0.00070265	H
OTU_366	Bacteria;Proteobacteria;Deltaproteobacteria;Desulfovibrionales;Desulfomicrobiaceae;Desulfor	0.02403397	H
OTU_55	Bacteria;Proteobacteria;Deltaproteobacteria;Desulfovibrionales;Desulfovibrionaceae;Bilophila	0.00064481	H
OTU_312	Bacteria;Lentisphaerae;Lentisphaeria;Victivallales;Victivallaceae;Victivallis	0.00826379	H
OTU_237	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Coprobacillus	0.03324794	H
OTU_38	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Clostridium XVIII	0.01643066	H
OTU_318	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Clostridium XVIII	0.01685127	H
OTU_218	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Holdemania	0.00022908	H
OTU_336	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Erysipelotrichacea	0.03261917	H
OTU_131	Bacteria;Firmicutes;Clostridia	0.00717705	H
OTU_95	Bacteria;Firmicutes;Clostridia;Clostridiales	0.01172782	H
OTU_99	Bacteria;Firmicutes;Clostridia;Clostridiales	0.03832177	H
OTU_185	Bacteria;Firmicutes;Clostridia;Clostridiales	0.04910535	H
OTU_245	Bacteria;Firmicutes;Clostridia;Clostridiales	0.04910604	H
OTU_277	Bacteria;Firmicutes;Clostridia;Clostridiales	0.03561588	H
OTU_295	Bacteria;Firmicutes;Clostridia;Clostridiales	0.04910604	H
OTU_315	Bacteria;Firmicutes;Clostridia;Clostridiales	0.0492979	H
OTU_708	Bacteria;Firmicutes;Clostridia;Clostridiales;Peptostreptococcaceae;Peptostreptococcus	0.02403397	H
OTU_47	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae	0.03525535	H
OTU_784	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae	0.04910604	H
OTU_127	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.0021455	H
OTU_129	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.01024746	H
OTU_171	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.02414735	H
OTU_742	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.01923312	H
OTU_1099	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.0407457	H
OTU_117	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVb	0.01139679	H
OTU_121	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVb	0.00125998	H
OTU_309	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVb	0.02265545	H
OTU_100	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Anaerostipes	0.0001524	H
OTU_52	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Coprococcus	0.00694192	H
OTU_207	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Coprococcus	0.00289356	H
OTU_33	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVa	0.02647375	H
OTU_85	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVa	0.0347111	H
OTU_356	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVa	0.02167794	H
OTU_1150	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVa	0.03288939	H
OTU_68	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Dorea	0.00460352	H
OTU_1243	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Dorea	0.00796858	H
OTU_344	Bacteria;Firmicutes;Clostridia;Clostridiales;Clostridiales_Incertae Sedis XIII	0.04397792	H
OTU_22	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.00487293	H
OTU_57	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.00030061	H
OTU_93	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.04382763	H
OTU_210	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.00094795	H
OTU_229	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.00717705	H
OTU_927	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.02588507	H
OTU_1089	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.02193434	H
OTU_1091	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.04545406	H
OTU_61	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Flavonifractor	0.0227665	H

OTU_128	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Butyricoccus	1.1453E-06 H
OTU_137	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Butyricoccus	2.0587E-06 H
OTU_29	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Oscillibacter	0.03133896 H
OTU_802	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Oscillibacter	0.03572702 H
OTU_27	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Ruminococcus	0.00516054 H
OTU_733	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Hydrogenoanaerobacterium	0.04910604 H
OTU_126	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.00338941 H
OTU_235	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.00045314 H
OTU_482	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.02113542 H
OTU_888	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.04910338 H
OTU_77	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Odoribacter	0.00051653 H
OTU_25	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Parabacteroides	0.0254832 H
OTU_75	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Parabacteroides	0.00030361 H
OTU_487	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Parabacteroides	0.00025918 H
OTU_935	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Parabacteroides	0.02206171 H
OTU_1110	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Parabacteroides	0.04233631 H
OTU_109	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.02349014 H
OTU_296	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.04910604 H
OTU_139	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Butyricimonas	0.00908653 H
OTU_297	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Butyricimonas	0.02956389 H
OTU_551	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Butyricimonas	0.04910604 H
OTU_71	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Paraprevotella	0.0054358 H
OTU_14	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Rikenellaceae;Alistipes	0.00595129 H
OTU_26	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Rikenellaceae;Alistipes	0.00066658 H
OTU_162	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Rikenellaceae;Alistipes	0.04579384 H
OTU_1109	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Rikenellaceae;Alistipes	0.03802521 H
OTU_11	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	0.00429315 H
OTU_21	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	0.00117486 H
OTU_76	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	0.03265191 H
OTU_179	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	0.02253333 H
OTU_304	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	0.02403397 H
OTU_835	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	0.01523857 H
OTU_404	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Anaerorhabdus	0.0319613 H
OTU_484	Bacteria;Bacteroidetes;Flavobacteria;Flavobacteriales	0.02403397 H
OTU_49	Bacteria;Verrucomicrobia;Verrucomicrobiae;Verrucomicrobiales;Verrucomicrobiaceae;Akker	0.02435897 H
OTU_390	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae	0.00019139 H
OTU_87	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Collinsella	0.00315719 H
OTU_320	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Collinsella	0.04910604 H
OTU_244	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Eggerthella	1.6187E-05 H
OTU_421	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Gordonibacter	0.01685127 H
OTU_357	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Adlercreutzia	0.01685127 H
OTU_35	Bacteria;Actinobacteria;Actinobacteria;Bifidobacteriales;Bifidobacteriaceae;Bifidobacterium	0.00477666 H
OTU_749	Bacteria;Actinobacteria;Actinobacteria;Bifidobacteriales;Bifidobacteriaceae;Bifidobacterium	0.02936892 H
OTU_814	Bacteria	0.02667975 eLC
OTU_873	Bacteria;Proteobacteria	0.02667975 eLC
OTU_63	Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae	0.01241149 eLC
OTU_147	Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae;Citrobacte	0.00153799 eLC
OTU_1032	Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae;Klebsiella	0.00375361 eLC
OTU_427	Bacteria;Proteobacteria;Gammaproteobacteria;Pasteurellales;Pasteurellaceae;Aggregatibacter	0.00799668 eLC
OTU_40	Bacteria;Proteobacteria;Gammaproteobacteria;Pasteurellales;Pasteurellaceae;Haemophilus	0.03277962 eLC
OTU_446	Bacteria;Proteobacteria;Epsilonproteobacteria;Campylobacteriales;Campylobacteraceae;Campy	0.04890448 eLC

OTU_1064	Bacteria;Proteobacteria;Betaproteobacteria;Neisseriales;Neisseriaceae	0.02667975 eLC
OTU_45	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Sutterellaceae;Sutterella	0.01136419 eLC
OTU_161	Bacteria;Proteobacteria;Deltaproteobacteria;Desulfovibrionales;Desulfovibrionaceae	0.00386084 eLC
OTU_285	Bacteria;TM7;TM7_genera_incertae_sedis;TM7_genera_incertae_sedis;TM7_genera_incertae	0.0246178 eLC
OTU_588	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae	0.01635875 eLC
OTU_98	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Catenibacterium	0.02262528 eLC
OTU_194	Bacteria;Firmicutes;Bacilli;Lactobacillales;Leuconostocaceae;Weissella	0.02667975 eLC
OTU_428	Bacteria;Firmicutes;Bacilli;Lactobacillales;Streptococcaceae;Streptococcus	0.04610916 eLC
OTU_473	Bacteria;Firmicutes;Bacilli;Lactobacillales;Streptococcaceae;Streptococcus	0.02667975 eLC
OTU_136	Bacteria;Firmicutes;Bacilli;Lactobacillales;Lactobacillaceae;Lactobacillus	0.00024442 eLC
OTU_190	Bacteria;Firmicutes;Bacilli;Lactobacillales;Lactobacillaceae;Lactobacillus	0.01734448 eLC
OTU_1197	Bacteria;Firmicutes;Bacilli;Lactobacillales;Lactobacillaceae;Lactobacillus	0.00861157 eLC
OTU_274	Bacteria;Firmicutes;Clostridia;Clostridiales	0.0080392 eLC
OTU_773	Bacteria;Firmicutes;Clostridia;Clostridiales	0.04537526 eLC
OTU_840	Bacteria;Firmicutes;Clostridia;Clostridiales;Clostridiales_Incertae_Sedis_XI;Peptoniphilus	0.02667975 eLC
OTU_636	Bacteria;Firmicutes;Clostridia;Clostridiales;Clostridiales_Incertae_Sedis_XI;Finegoldia	0.02667975 eLC
OTU_1154	Bacteria;Firmicutes;Clostridia;Clostridiales;Clostridiaceae 1;Clostridium sensu stricto	0.04626446 eLC
OTU_805	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae	0.04526135 eLC
OTU_957	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiraceae_incertae_sedis	0.03896485 eLC
OTU_1025	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiraceae_incertae_sedis	0.00993872 eLC
OTU_1135	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Roseburia	0.00823162 eLC
OTU_1275	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Coprococcus	0.0107842 eLC
OTU_442	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.04184689 eLC
OTU_443	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.02667975 eLC
OTU_836	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.04705076 eLC
OTU_860	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Flavonifractor	0.02667975 eLC
OTU_298	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Ruminococcus	0.02667975 eLC
OTU_674	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.04736771 eLC
OTU_255	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Faecalibacterium	0.00284107 eLC
OTU_219	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Megasphaera	0.02667975 eLC
OTU_329	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Megasphaera	0.00031201 eLC
OTU_714	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Centipeda	0.0028406 eLC
OTU_34	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Megamonas	0.01512625 eLC
OTU_748	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Megamonas	0.00184085 eLC
OTU_50	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Veillonella	0.00353136 eLC
OTU_278	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Veillonella	0.00583095 eLC
OTU_258	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Mitsuokella	0.02667975 eLC
OTU_1105	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Acidaminococcaceae;Phascolarctobacteri	0.03110228 eLC
OTU_661	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Porphyromonas	0.04465502 eLC
OTU_17	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.02193434 eLC
OTU_69	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.02904939 eLC
OTU_181	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.04184689 eLC
OTU_314	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.02667975 eLC
OTU_319	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.00861157 eLC
OTU_413	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.04884427 eLC
OTU_456	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.00284107 eLC
OTU_901	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.04184689 eLC
OTU_1124	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.01798725 eLC
OTU_1195	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.02667975 eLC
OTU_1217	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.00513415 eLC
OTU_1284	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.02667975 eLC

OTU_1145	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	0.02667975 eLC
OTU_950	Bacteria;Actinobacteria;Actinobacteria;Actinomycetales;Actinomycetaceae;Actinomyces	0.02667975 eLC
OTU_814	Bacteria	0.02667975 eLC
OTU_147	Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae;Citrobacte	0.01295487 eLC
OTU_1064	Bacteria;Proteobacteria;Betaproteobacteria;Neisseriales;Neisseriaceae	0.02667975 eLC
OTU_514	Bacteria;Firmicutes	0.02667975 eLC
OTU_625	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Clostridium XVIII	0.02667975 eLC
OTU_1197	Bacteria;Firmicutes;Bacilli;Lactobacillales;Lactobacillaceae;Lactobacillus	0.00861157 eLC
OTU_83	Bacteria;Firmicutes;Clostridia;Clostridiales	0.03658046 eLC
OTU_274	Bacteria;Firmicutes;Clostridia;Clostridiales	0.0080392 eLC
OTU_291	Bacteria;Firmicutes;Clostridia;Clostridiales	0.0158863 eLC
OTU_353	Bacteria;Firmicutes;Clostridia;Clostridiales	0.03876261 eLC
OTU_448	Bacteria;Firmicutes;Clostridia;Clostridiales	0.02667975 eLC
OTU_773	Bacteria;Firmicutes;Clostridia;Clostridiales	0.04913143 eLC
OTU_1029	Bacteria;Firmicutes;Clostridia;Clostridiales	0.02667975 eLC
OTU_840	Bacteria;Firmicutes;Clostridia;Clostridiales;Clostridiales_Incertae Sedis XI;Peptoniphilus	0.02667975 eLC
OTU_636	Bacteria;Firmicutes;Clostridia;Clostridiales;Clostridiales_Incertae Sedis XI;Finegoldia	0.02667975 eLC
OTU_805	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae	0.04705076 eLC
OTU_23	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiraceae_incertain_sedis	0.02928695 eLC
OTU_521	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Anaerostipes	0.04913143 eLC
OTU_70	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Coprococcus	0.0498245 eLC
OTU_721	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVa	0.04705076 eLC
OTU_1227	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVa	0.02667975 eLC
OTU_79	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.01902918 eLC
OTU_785	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.01635875 eLC
OTU_836	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.04526135 eLC
OTU_942	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Oscillibacter	0.03305287 eLC
OTU_154	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Ruminococcus	0.02667975 eLC
OTU_193	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.0290119 eLC
OTU_669	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.04705076 eLC
OTU_674	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.02064859 eLC
OTU_1294	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Faecalibacterium	0.03829369 eLC
OTU_714	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Centipeda	0.01442887 eLC
OTU_28	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Dialister	0.01350441 eLC
OTU_478	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Acidaminococcaceae;Phascolarctobacteri	0.02667975 eLC
OTU_1105	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Acidaminococcaceae;Phascolarctobacteri	0.00246358 eLC
OTU_469	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Parabacteroides	0.02667975 eLC
OTU_661	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Porphyromonas	0.04465502 eLC
OTU_314	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.02667975 eLC
OTU_319	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.00861157 eLC
OTU_1195	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.02667975 eLC
OTU_1234	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.02667975 eLC
OTU_1284	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.02667975 eLC
OTU_542	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Rikenellaceae;Alistipes	0.04465502 eLC
OTU_664	Bacteria;Proteobacteria;Alphaproteobacteria;Caulobacteriales;Caulobacteraceae;Brevundimona	0.04910604 HCC
OTU_9	Bacteria;Proteobacteria;Alphaproteobacteria;Rhizobiales;Hyphomicrobiaceae;Gemmiger	0.00170935 HCC
OTU_312	Bacteria;Lentisphaerae;Lentisphaeria;Victivallales;Victivallaceae;Victivallis	0.01685127 HCC
OTU_38	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Clostridium XVIII	0.02409525 HCC
OTU_318	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Clostridium XVIII	0.01685127 HCC
OTU_218	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Holdemania	0.0089617 HCC
OTU_65	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Erysipelotrichaceae	0.03257519 HCC

OTU_336	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Erysipelotrichaceae	0.01438389	HCC
OTU_417	Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Erysipelotrichaceae	0.03430698	HCC
OTU_252	Bacteria;Firmicutes;Bacilli;Bacillales;Bacillales_Incertae Sedis XI;Gemella	0.04547069	HCC
OTU_245	Bacteria;Firmicutes;Clostridia;Clostridiales	0.04910604	HCC
OTU_694	Bacteria;Firmicutes;Clostridia;Clostridiales	0.04910604	HCC
OTU_776	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiraceae_incertae_sedis	0.03961183	HCC
OTU_1016	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiraceae_incertae_sedis	0.03087501	HCC
OTU_121	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVb	0.01276815	HCC
OTU_309	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVb	0.02514615	HCC
OTU_85	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVa	0.04120571	HCC
OTU_356	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium XIVa	0.04832089	HCC
OTU_68	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Dorea	0.0421489	HCC
OTU_210	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.02828326	HCC
OTU_137	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Butyricoccus	0.00683021	HCC
OTU_235	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.01402968	HCC
OTU_267	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Dialister	0.02403397	HCC
OTU_372	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Acidaminococcaceae;Acidaminococcus	0.02228398	HCC
OTU_249	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales	0.02403397	HCC
OTU_77	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Odoribacter	0.0013196	HCC
OTU_75	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Parabacteroides	0.00026072	HCC
OTU_935	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Parabacteroides	0.02257968	HCC
OTU_139	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Butyricimonas	0.03483778	HCC
OTU_176	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Butyricimonas	0.04233631	HCC
OTU_144	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.03430698	HCC
OTU_71	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Paraprevotella	0.00587507	HCC
OTU_260	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Paraprevotella	0.0284715	HCC
OTU_26	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Rikenellaceae;Alistipes	0.01509538	HCC
OTU_624	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Rikenellaceae;Alistipes	0.0099626	HCC
OTU_3	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	0.00964664	HCC
OTU_835	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	0.02093235	HCC
OTU_404	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Anaerorhabdus	0.01677087	HCC
OTU_451	Bacteria;Actinobacteria;Actinobacteria;Actinomycetales;Micrococcaceae;Rothia	0.01898803	HCC
OTU_390	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae	0.00576991	HCC
OTU_87	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Collinsella	9.5212E-05	HCC
OTU_244	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Eggerthella	3.786E-05	HCC
OTU_357	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Adlercreutzia	0.04910604	HCC
OTU_35	Bacteria;Actinobacteria;Actinobacteria;Bifidobacteriales;Bifidobacteriaceae;Bifidobacterium	0.04904884	HCC
OTU_209	Bacteria;Actinobacteria;Actinobacteria;Bifidobacteriales;Bifidobacteriaceae;Bifidobacterium	0.04800755	HCC
OTU_749	Bacteria;Actinobacteria;Actinobacteria;Bifidobacteriales;Bifidobacteriaceae;Bifidobacterium	0.0490566	HCC

Table S6. Different degree of phylum level (p value) in the discovery phase.

feature	mean(H)	median(H)	mean(C)	median(C)	P(H-C)	BH(H-C)	Q(H-C)	Enrich(H-C)
Bacteria;Proteobacteria	0.0741	0.0569	0.086677	0.0583	0.298061	0.859516	0.70933	C
Bacteria;TM7	0.00011	0	0.000149	0	0.172596	0.911311	0.75208	C
UNCLASSIFIED_PHYLUM	0.01983	0.0065	0.01096	0.004	0.055035	0.201796	0.16654	H
Bacteria;Synergistetes	9.9E-05	0	3.87E-05	0	0.026022	0.191589	0.15811	H
Bacteria;Lentisphaerae	0.00035	0	0.000187	0	0.156179	0.318222	0.26262	H
Bacteria;Fusobacteria	0.03041	0	0.018123	0.0001	0.357245	0.859516	0.70933	C
Bacteria;Firmicutes	0.37155	0.3551	0.333484	0.3269	0.082439	0.226707	0.1871	H
Bacteria;Bacteroidetes	0.49481	0.5005	0.533096	0.5352	0.074196	0.81616	0.76447	C
Bacteria;Verrucomicrobia	0.00196	0	0.001484	0	0.034834	0.191589	0.15811	H
Bacteria;Actinobacteria	0.00676	0.0019	0.014852	0.0015	0.173576	0.318222	0.26262	H
Bacteria;Cyanobacteria/Chloroplæ	2.1E-05	0	0.00002	0	0.492999	0.774713	0.63935	H

feature	mean(C)	median(C)	mean(ELC)	median(ELC)	P(C-ELC)	BH(C-ELC)	Q(C-ELC)	Enrich(C-ELC)
Bacteria;Proteobacteria	0.08668	0.0583	0.081685	0.042	0.093208	0.412024	0.39428	C
Bacteria;TM7	0.00015	0	0.000173	0	0.452745	0.711456	0.68082	C
UNCLASSIFIED_PHYLUM	0.01096	0.004	0.009318	0.0021	0.149827	0.412024	0.39428	C
Bacteria;Synergistetes	3.9E-05	0	0.000035	0	0.260121	0.74296	0.71097	ELC
Bacteria;Lentisphaerae	0.00019	0	0.000035	0	0.145873	0.412024	0.39428	C
Bacteria;Fusobacteria	0.01812	0.0001	0.019165	0.0003	0.32191	0.74296	0.71097	ELC
Bacteria;Firmicutes	0.33348	0.3269	0.342773	0.29745	0.442802	0.711456	0.68082	C
Bacteria;Bacteroidetes	0.5331	0.5352	0.543698	0.56765	0.30164	0.74296	0.71097	ELC
Bacteria;Verrucomicrobia	0.00148	0	0.000688	0	0.326703	0.711456	0.68082	C
Bacteria;Actinobacteria	0.01485	0.0015	0.00236	0.00045	0.00491	0.054009	0.05168	C
Bacteria;Cyanobacteria/Chloroplæ	0.00002	0	0.000055	0	0.374225	0.74296	0.71097	ELC

Table S7. Different degree of genera level (p value) between liver cirrhosis and early HCC

feature	mean(C	median(C	mean(ELC)	median(EL	P(C-ELC)	BH(C-EL	Q(C-ELC)	Enrich(C-ELC)
Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Eggerthella	0.0002	0	2.5E-06	0	3.34E-05	0.0029	0.00187	C
Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Collinsella	0.0024	0.0002	9.75E-05	0	8.89E-05	0.00387	0.00249	C
Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Odoribacter	0.0016	0.0009	0.000683	0	0.001384	0.04012	0.02586	C
Bacteria;Proteobacteria;Alphaproteobacteria;Rhizobiales;Hyphomicrobiaceae;Gemmiger	0.0126	0.005	0.006225	0.00235	0.002595	0.05644	0.03638	C
Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Dorea	0.0016	0.0011	0.000905	0.0006	0.003973	0.06913	0.04455	C
Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Parabacteroides	0.0106	0.0077	0.006743	0.00365	0.006127	0.08884	0.05725	C
Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Holdemania	0.0003	0.0001	7.25E-05	0	0.008267	0.10274	0.06621	C
Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Paraprevotella	0.0053	0	0.00125	0	0.011003	0.11966	0.07711	C
Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Clostridium_X	0.0038	0.0013	0.001623	0.0005	0.017021	0.16453	0.10603	C
Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Butyricoccus	0.0017	0.0011	0.001298	0.0005	0.02122	0.17433	0.11235	C
Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospira	9E-06	0	0	0	0.023962	0.17433	0.11235	C
Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Erysipelotricha	0.0028	0.0006	0.001538	0.0002	0.024046	0.17433	0.11235	C
Bacteria;Firmicutes;Negativicutes;Selenomonadales;Acidaminococcaceae;Acidaminococcu	0.0003	0	0.000045	0	0.035414	0.22364	0.14412	C
Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium_XIVb	0.0026	0.0016	0.001485	0.0008	0.035988	0.22364	0.14412	C
Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Porphyromonas	4E-06	0	0.000035	0	0.041685	0.95949	0.61834	ELC
Bacteria;Synergistetes;Synergistia;Synergistales;Synergistaceae;Pyramidobacter	3E-05	0	0.00002	0	0.04678	0.95949	0.61834	ELC
Bacteria;Firmicutes;Bacilli;Bacillales;Bacillales_Incertae_Sedis_XI;Gemella	2E-05	0	0.000025	0	0.048387	0.28065	0.18086	C
Bacteria;Actinobacteria;Actinobacteria;Actinomycetales;Micrococcaceae;Rothia	5E-05	0	0.000005	0	0.056211	0.30565	0.19698	C
Bacteria;Proteobacteria;Epsilonproteobacteria;Campylobacteriales;Campylobacteraceae;Ca	7E-05	0	5.75E-05	0	0.066473	0.95662	0.61649	ELC
Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.0021	0.0001	0.001343	0	0.070232	0.35942	0.23163	C
Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Faecalibacterium	0.0393	0.029	0.053668	0.039	0.074281	0.95662	0.61649	ELC
Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae;Enteroc	0.0001	0	0.002545	0	0.079628	0.95662	0.61649	ELC
Bacteria;Lentisphaerae;Lentisphaeria;Victivallales;Victivallaceae;Victivallis	0.0002	0	2.75E-05	0	0.080057	0.36893	0.23776	C
Bacteria;Firmicutes;Clostridia;Clostridiales;Peptococcaceae_1;Peptococcus	5E-05	0	0.000005	0	0.083074	0.36893	0.23776	C
Bacteria;Proteobacteria;Gammaproteobacteria;Pseudomonadales;Moraxellaceae;Acinetoba	1E-05	0	2.5E-06	0	0.086051	0.36893	0.23776	C
Bacteria;Proteobacteria;Deltaproteobacteria;Desulfovibrionales;Desulfovibrionaceae;Bilop	0.0028	0.0005	0.00107	0.0005	0.089053	0.36893	0.23776	C
Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Megamonas	0.0164	0	0.023975	0.0001	0.094441	0.95662	0.61649	ELC
Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Veillonella	0.0046	0.0001	0.009568	0.00045	0.097059	0.95662	0.61649	ELC
Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Solobacterium	3E-05	0	0.00001	0	0.097587	0.38591	0.2487	C
Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Megasphaera	0.0064	0	0.001008	0	0.107651	0.95662	0.61649	ELC
Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Catenibacteriu	0.0003	0	0.00047	0	0.110246	0.95662	0.61649	ELC
Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Sporobacter	9E-06	0	2.5E-06	0	0.121096	0.44678	0.28793	C
Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Hallella	1E-05	0	0.005183	0	0.131445	0.44678	0.28793	C
Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium_IV	0.0023	0.0004	0.001373	0.0002	0.138559	0.44678	0.28793	C
Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Oribacterium	1E-05	0	0.000005	0	0.14916	0.44678	0.28793	C
Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Pseudoflavonifractor	1E-05	0	0.000005	0	0.14916	0.44678	0.28793	C

Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Flavonifractor	0.0031	0.001	0.00267	0.00065	0.150762	0.44678	0.28793	C
Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae;Esche	0.0271	0.0022	0.034735	0.0016	0.155186	0.44678	0.28793	C
Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	0.2872	0.2857	0.256583	0.22205	0.168501	0.44678	0.28793	C
Bacteria;Firmicutes;Clostridia;Clostridiales;Eubacteriaceae;Eubacterium	8E-06	0	2.5E-06	0	0.170388	0.44678	0.28793	C
Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Butyricimonas	0.0019	0.0009	0.00195	0.00025	0.172658	0.44678	0.28793	C
Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Rikenellaceae;Alistipes	0.0117	0.0052	0.011165	0.00215	0.176715	0.44678	0.28793	C
Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Anaerotruncus	4E-05	0	0.00003	0	0.179836	0.44678	0.28793	C
Bacteria;Firmicutes;Bacilli;Lactobacillales;Lactobacillaceae;Lactobacillus	0.0003	0	0.000393	0	0.180649	0.44678	0.28793	C
Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Sutterellaceae;Parasutterella	0.0151	0.0025	0.010115	0.00065	0.184876	0.44678	0.28793	C
Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Anaerofilum	1E-05	0	0.000005	0	0.204258	0.48028	0.30952	C
Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae;Raoult	4E-05	0	3.75E-05	0	0.211843	0.88399	0.56969	ELC
Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae;Crono	2E-05	0	0.00001	0	0.225327	0.88042	0.56738	ELC
Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Turicibacter	0.0003	0	0.000103	0	0.226498	0.51856	0.33419	C
Bacteria;Proteobacteria;Gammaproteobacteria;Pseudomonadales;Pseudomonadaceae;Pseu	5E-06	0	2.5E-06	0	0.242521	0.54101	0.34865	C
Bacteria;Fusobacteria;Fusobacteria;Fusobacteriales;Fusobacteriaceae;Clostridium_XIX	3E-05	0	7.5E-06	0	0.257071	0.55913	0.36033	C
Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae;Proteu	5E-05	0	0.000278	0	0.26626	0.84466	0.54434	ELC
Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae;Klebsi	0.0058	0.0001	0.005495	0.00005	0.27079	0.56476	0.36396	C
Bacteria;Firmicutes;Negativicutes;Selenomonadales;Acidaminococcaceae;Phascolarctobac	0.0237	0.0038	0.018725	0.0085	0.271173	0.84466	0.54434	ELC
Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.2007	0.0017	0.239695	0.0621	0.27121	0.84466	0.54434	ELC
Bacteria;Actinobacteria;Actinobacteria;Actinomycetales;Actinomycetaceae;Actinomyces	6E-05	0	3.75E-05	0	0.276552	0.56476	0.36396	C
Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Ruminococcus	0.0076	0.0014	0.00596	0.00115	0.279132	0.56476	0.36396	C
Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Dialister	0.0068	0	0.00494	0	0.286054	0.84466	0.54434	ELC
Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae;Citrob	0.0001	0	0.00011	0	0.293715	0.84466	0.54434	ELC
Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Allisonella	0.0002	0	0.000368	0	0.311076	0.84466	0.54434	ELC
Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sed	0.0419	0.0228	0.04515	0.02225	0.314028	0.84466	0.54434	ELC
Bacteria;Verrucomicrobia;Verrucomicrobiae;Verrucomicrobiales;Verrucomicrobiaceae;Ak	0.0015	0	0.00064	0	0.314401	0.62166	0.40063	C
Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Anaerostipes	0.001	0.0002	0.000378	0.0002	0.32345	0.62534	0.403	C
Bacteria;Fusobacteria;Fusobacteria;Fusobacteriales;Fusobacteriaceae;Fusobacterium	0.013	0.0001	0.01824	0.0001	0.325321	0.84466	0.54434	ELC
Bacteria;Firmicutes;Clostridia;Clostridiales;Peptostreptococcaceae;Clostridium_XI	0.0032	0.0006	0.00598	0.00055	0.337541	0.63771	0.41097	C
Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Roseburia	0.041	0.0303	0.036688	0.02835	0.352408	0.63771	0.41097	C
Bacteria;Proteobacteria;Deltaproteobacteria;Desulfovibrionales;Desulfovibrionaceae;Desul	0.001	0	0.000363	0	0.354059	0.63771	0.41097	C
Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Coprococcus	0.0036	0.001	0.0031	0.0009	0.35917	0.63771	0.41097	C
Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Blautia	0.0044	0.0028	0.004055	0.00265	0.373328	0.64959	0.41863	C
Bacteria;Cyanobacteria/Chloroplast;Chloroplast;Chloroplast;Chloroplast;Streptophyta	2E-05	0	0.000055	0	0.374225	0.8058	0.51929	ELC
UNCLASSIFIED_GENUS	0.1255	0.1025	0.129525	0.09745	0.387897	0.66171	0.42644	C
Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium_XIVa	0.0071	0.0059	0.011658	0.00445	0.402585	0.7787	0.50183	ELC
Bacteria;Proteobacteria;Gammaproteobacteria;Pasteurellales;Pasteurellaceae;Haemophilus	0.0029	0.0004	0.003243	0.00065	0.404229	0.7787	0.50183	ELC
Bacteria;Actinobacteria;Actinobacteria;Bifidobacteriales;Bifidobacteriaceae;Bifidobacteriu	0.0118	0.0002	0.00218	0.0003	0.414068	0.67621	0.43578	C

Bacteria;Firmicutes;Bacilli;Lactobacillales;Streptococcaceae;Streptococcus	0.006	0.0004	0.005805	0.0004	0.417035	0.7787	0.50183	ELC
Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Sutterellaceae;Sutterella	0.0097	0	0.007683	0	0.417351	0.67621	0.43578	C
Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Comamonadaceae;Comamonas	9E-06	0	0.000005	0	0.417712	0.7787	0.50183	ELC
Bacteria;Proteobacteria;Gammaproteobacteria;Pasteurellales;Pasteurellaceae;Aggregatibacter	5E-05	0	5.25E-05	0	0.430751	0.67621	0.43578	C
Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Oscillibacter	0.0044	0.0027	0.003948	0.0024	0.433357	0.67621	0.43578	C
Bacteria;Firmicutes;Bacilli;Lactobacillales;Carnobacteriaceae;Granulicatella	4E-05	0	4.25E-05	0	0.435922	0.67621	0.43578	C
Bacteria;Firmicutes;Clostridia;Clostridiales;Clostridiaceae_1;Clostridium_sensu_stricto	0.0027	0.0002	0.004178	0.0002	0.443034	0.67621	0.43578	C
Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Howardella	3E-05	0	0.000055	0	0.451909	0.76318	0.49183	ELC
Bacteria;TM7;TM7_genera_incertae_sedis;TM7_genera_incertae_sedis;TM7_genera_incertae_sedis	0.0001	0	0.000173	0	0.452745	0.67911	0.43765	C
Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Gordonibacter	2E-05	0	0.000005	0	0.460545	0.67911	0.43765	C
Bacteria;Firmicutes;Bacilli;Lactobacillales;Enterococcaceae;Enterococcus	2E-05	0	2.25E-05	0	0.474763	0.74345	0.47912	ELC
Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Coprobacillus	5E-05	0	0.000465	0	0.49113	0.70594	0.45494	C
Bacteria;Synergistetes;Synergistia;Synergistales;Synergistaceae;Cloacibacillus	8E-06	0	0.000015	0	0.494967	0.70594	0.45494	C

Table S8. Different degree of genera level (p value) between healthy controls and early HCC cohort

feature	mean(H)	median(H)	mean(C)	median((P(H-C)	BH(H-C)	Q(H-C)	Enrich(H-C)
Bacteria;Firmicutes;Bacilli;Lactobacillales;Lactobacillaceae;Lactobacillus	7.87E-05	0	0.0003	0	7.41E-05	0.0064	0.006 C
Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Butyricoccus	0.003213	0.002	0.0017	0.0011	0.000173	0.015	0.015 H
Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Anaerostipes	0.002243	0.0004	0.001	0.0002	0.000628	0.0273	0.027 H
Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae;Klebsie	0.000479	0	0.0058	0.0001	0.001062	0.0462	0.046 C
Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Megasphaera	0.001745	0	0.0064	0	0.001703	0.0494	0.049 C
Bacteria;Proteobacteria;Gammaproteobacteria;Pasteurellales;Pasteurellaceae;Aggregatibacte	1.73E-05	0	5E-05	0	0.005676	0.1235	0.123 C
Bacteria;Proteobacteria;Gammaproteobacteria;Pseudomonadales;Pseudomonadaceae;Pseud	2.13E-05	0	5E-06	0	0.009835	0.2113	0.211 H
Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium_IV	0.003293	0.0009	0.0023	0.0004	0.010617	0.2113	0.211 H
Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Rikenellaceae;Alistipes	0.019992	0.0149	0.0117	0.0052	0.0139	0.2113	0.211 H
Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Ruminococcus	0.011277	0.0034	0.0076	0.0014	0.017437	0.2113	0.211 H
Bacteria;Proteobacteria;Deltaproteobacteria;Desulfovibrionales;Desulfovibrionaceae;Biloph	0.003371	0.0016	0.0028	0.0005	0.018249	0.2113	0.211 H
Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Coproccoccus	0.005024	0.0022	0.0036	0.001	0.019429	0.2113	0.211 H
Bacteria;Verrucomicrobia;Verrucomicrobiae;Verrucomicrobiales;Verrucomicrobiaceae;Akk	0.001937	0	0.0015	0	0.02408	0.2179	0.218 H
Bacteria;Firmicutes;Negativicutes;Selenomonadales;Acidaminococcaceae;Acidaminococcus	0.000232	0	0.0003	0	0.024125	0.3814	0.381 C
Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Allisonella	0.000345	0	0.0002	0	0.025041	0.2179	0.218 H
Bacteria;Actinobacteria;Actinobacteria;Actinomycetales;Micrococcaceae;Rothia	6.67E-06	0	5E-05	0	0.027326	0.3814	0.381 C
Bacteria;Firmicutes;Clostridia;Clostridiales;Eubacteriaceae;Eubacterium	3.73E-05	0	8E-06	0	0.029907	0.2283	0.228 H
Bacteria;Proteobacteria;Gammaproteobacteria;Pasteurellales;Pasteurellaceae;Haemophilus	0.001883	0.0002	0.0029	0.0004	0.031927	0.3814	0.381 C
Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Gordonibacter	0.00002	0	2E-05	0	0.033502	0.2283	0.228 H
Bacteria;Firmicutes;Negativicutes;Selenomonadales;Acidaminococcaceae;Phascolarctobacte	0.023148	0.0081	0.0237	0.0038	0.034114	0.2283	0.228 H
Bacteria;Firmicutes;Clostridia;Clostridiales;Peptococcaceae_1;Peptococcus	0.000004	0	5E-05	0	0.039773	0.3814	0.381 C
Bacteria;Firmicutes;Clostridia;Clostridiales;Clostridiaceae_1;Clostridium_sensu_stricto	0.002244	0.0001	0.0027	0.0002	0.040554	0.3814	0.381 C
Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Coproccillus	0.000169	0	5E-05	0	0.042438	0.2542	0.254 H
Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Oscillibacter	0.005816	0.0046	0.0044	0.0027	0.043821	0.2542	0.254 H
Bacteria;Firmicutes;Bacilli;Lactobacillales;Enterococcaceae;Enterococcus	6.67E-06	0	2E-05	0	0.043843	0.3814	0.381 C
Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Anaerotruncus	0.00008	0	4E-05	0	0.047399	0.2577	0.258 H
Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium_XIVb	0.003503	0.0019	0.0026	0.0016	0.050556	0.2587	0.259 H
Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Butyricimonas	0.003531	0.0013	0.0019	0.0009	0.065688	0.3151	0.315 H
Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	0.157673	0.0005	0.2007	0.0017	0.06854	0.4788	0.479 C
Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Faecalibacterium	0.056047	0.0372	0.0393	0.029	0.068805	0.3151	0.315 H
Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Veillonella	0.002313	0.0001	0.0046	0.0001	0.069745	0.4788	0.479 C

Bacteria;Firmicutes;Bacilli;Lactobacillales;Carnobacteriaceae;Granulicatella	0.000024	0	4E-05	0	0.07155	0.4788	0.479	C
UNCLASSIFIED_GENUS	0.159587	0.1089	0.1255	0.1025	0.078509	0.3283	0.328	H
Bacteria;Proteobacteria;Deltaproteobacteria;Desulfovibrionales;Desulfovibrionaceae;Desulf	0.0013	0	0.001	0	0.079248	0.3283	0.328	H
Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Clostridium_XIVa	0.008797	0.0043	0.0071	0.0059	0.080141	0.498	0.498	C
Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Turicibacter	0.000104	0	0.0003	0	0.092616	0.5308	0.531	C
Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Howardella	0.000016	0	3E-05	0	0.097614	0.5308	0.531	C
Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Holdmania	0.000296	0.0001	0.0003	0.0001	0.099328	0.3886	0.389	H
Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Flavonifractor	0.004015	0.0016	0.0031	0.001	0.102737	0.3886	0.389	H
Bacteria;Synergistetes;Synergistia;Synergistales;Synergistaceae;Pyramidobacter	0.000028	0	3E-05	0	0.120847	0.4297	0.43	H
Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Blautia	0.005171	0.0029	0.0044	0.0028	0.127324	0.4297	0.43	H
Bacteria;Synergistetes;Synergistia;Synergistales;Synergistaceae;Cloacibacillus	0.000068	0	8E-06	0	0.12841	0.4297	0.43	H
Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Dialister	0.011089	0	0.0068	0	0.143984	0.4387	0.439	H
Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Dorea	0.002439	0.0011	0.0016	0.0011	0.146946	0.4387	0.439	H
Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Comamonadaceae;Comamonas	0.000032	0	9E-06	0	0.149981	0.4387	0.439	H
Bacteria;Lentisphaerae;Lentisphaeria;Victivallales;Victivallaceae;Victivallis	0.000313	0	0.0002	0	0.151276	0.4387	0.439	H
Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Hallella	5.33E-06	0	1E-05	0	0.152087	0.6823	0.682	C
Bacteria;Firmicutes;Bacilli;Bacillales;Bacillales_Incertae_Sedis_XI;Gemella	0.000012	0	2E-05	0	0.154003	0.6823	0.682	C
Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Sporobacter	5.33E-06	0	9E-06	0	0.156399	0.6823	0.682	C
Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Megamonas	0.004543	0	0.0164	0	0.156843	0.6823	0.682	C
Bacteria;TM7;TM7_genera_incertae_sedis;TM7_genera_incertae_sedis;TM7_genera_inceri	0.000105	0	0.0001	0	0.172596	0.6852	0.685	C
Bacteria;Proteobacteria;Gammaproteobacteria;Pseudomonadales;Moraxellaceae;Acinetobac	6.67E-06	0	1E-05	0	0.178927	0.6852	0.685	C
Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospira	6.67E-06	0	9E-06	0	0.183265	0.6852	0.685	C
Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Catenibacterium	0.000237	0	0.0003	0	0.18901	0.6852	0.685	C
Bacteria;Fusobacteria;Fusobacteria;Fusobacteriales;Fusobacteriaceae;Clostridium_XIX	8.27E-05	0	3E-05	0	0.201134	0.5645	0.564	H
Bacteria;Proteobacteria;Alphaproteobacteria;Rhizobiales;Hyphomicrobiaceae;Gemmiger	0.015733	0.0081	0.0126	0.005	0.217514	0.5882	0.588	H
Bacteria;Firmicutes;Bacilli;Lactobacillales;Streptococcaceae;Streptococcus	0.001448	0.0003	0.006	0.0004	0.219952	0.7651	0.765	C
Bacteria;Actinobacteria;Actinobacteria;Actinomycetales;Actinomycetaceae;Actinomyces	5.73E-05	0	6E-05	0	0.227448	0.5882	0.588	H
Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae;Escheri	0.011957	0.0023	0.0271	0.0022	0.228654	0.7651	0.765	C
Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae;Raoulte	1.47E-05	0	4E-05	0	0.234529	0.5882	0.588	H
Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae;Cronob	0.00002	0	2E-05	0	0.240504	0.5882	0.588	H
Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiracea_incertae_sedis	0.039461	0.0279	0.0419	0.0228	0.243409	0.5882	0.588	H
Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Solobacterium	2.27E-05	0	3E-05	0	0.243424	0.7844	0.784	C
Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Odoribacter	0.002291	0.0008	0.0016	0.0009	0.256252	0.5933	0.593	H
Bacteria;Actinobacteria;Actinobacteria;Bifidobacteriales;Bifidobacteriaceae;Bifidobacteriur	0.004941	0.0007	0.0118	0.0002	0.259152	0.5933	0.593	H

Bacteria;Fusobacteria;Fusobacteria;Fusobacteriales;Fusobacteriaceae;Fusobacterium	0.024455	0	0.013	0.0001	0.276171	0.846	0.846	C
Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Sutterellaceae;Sutterella	0.012956	0	0.0097	0	0.298778	0.6665	0.667	H
Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae;Citroba	0.000169	0	0.0001	0	0.307134	0.846	0.846	C
Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Sutterellaceae;Parasutterella	0.013753	0.0025	0.0151	0.0025	0.312852	0.846	0.846	C
Bacteria;Firmicutes;Clostridia;Clostridiales;Peptostreptococcaceae;Clostridium_XI	0.002028	0.0004	0.0032	0.0006	0.322451	0.846	0.846	C
Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Collinsella	0.001207	0.0001	0.0024	0.0002	0.329414	0.846	0.846	C
Bacteria;Proteobacteria;Epsilonproteobacteria;Campylobacteriales;Campylobacteraceae;Carr	1.47E-05	0	7E-05	0	0.333493	0.846	0.846	C
Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Porphyromonas	0.000004	0	4E-06	0	0.333917	0.846	0.846	C
Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Paraprevotella	0.005156	0	0.0053	0	0.340334	0.846	0.846	C
Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae;Proteus	4.67E-05	0	5E-05	0	0.369448	0.8678	0.868	C
Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Oribacterium	9.33E-06	0	1E-05	0	0.375216	0.8678	0.868	C
Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Parabacteroides	0.017597	0.0077	0.0106	0.0077	0.37681	0.8096	0.81	H
Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Eggerthella	0.000252	0	0.0002	0	0.381554	0.8096	0.81	H
Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Roseburia	0.043189	0.0272	0.041	0.0303	0.383944	0.8678	0.868	C
Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Pseudoflavonifractor	0.000016	0	1E-05	0	0.389028	0.8678	0.868	C
Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Anaerofilum	1.73E-05	0	1E-05	0	0.413082	0.8752	0.875	C
Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae;Enterot	7.87E-05	0	0.0001	0	0.417541	0.8752	0.875	C
Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	0.276588	0.2571	0.2872	0.2857	0.422519	0.8752	0.875	C
Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Clostridium_XV	0.002741	0.0013	0.0038	0.0013	0.449125	0.9178	0.918	H
Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae;Barnesiella	0.005713	0	0.0021	0.0001	0.453613	0.9178	0.918	H
Bacteria;Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae;Erysipelotrichac	0.004653	0.0003	0.0028	0.0006	0.481866	0.9528	0.953	H
Bacteria;Cyanobacteria/Chloroplast;Chloroplast;Chloroplast;Chloroplast;Streptophyta	2.13E-05	0	2E-05	0	0.492999	0.9531	0.953	H

Table S9 The relative abundance of the 30 OTUs markers in each sample from the discovery cohort

sample	OTU_10	OTU_12	OTU_28	OTU_57	OTU_58	OTU_63	OTU_78	OTU_86	OTU_87	OTU_96	OTU_97	OTU_128
H_20	0	0	0	0.00132	0	0.0003	0	0.01013	0	0	0.00871	0.020973
H_N204	0	0	0	0.00021	0.00041	0	0.10756	0	0	0	0.00031	0.002055
H_37	0	0	0	0.00223	0	0	0	0	0.00051	0	0.0004	0.002124
H_N68	0.04473	0	0.01917	0.00268	0.00041	0.00072	0	0.00237	0	0	0.00155	0.000515
H_44	0	0	0	0	0.00031	0.0001	0.02897	0.00112	0.0002	0	0.00061	0.000816
H_N105	0.02706	0.00011	0	0.02201	0.00305	0	0	0.00505	0.00011	0	0.00105	0.000527
H_34	0	0	0	0.00042	0.0041	0	0.00021	0	0.00452	0	0.00462	0.000525
H_N39	0.00206	0	0	0.00021	0	0	0	0.01216	0.00144	0	0.00031	0.001031
H_52	0.00834	0	0.08075	0.00042	0.00094	0	0.0247	0.00281	0.00052	0	0	0.000729
H_17	0	0	0	0	0	0	0	0.01411	0	0	0.01585	0.011042
H_N50	0	0	0	0	0	0.00093	0	0.00775	0	0	0	0.005477
H_73	0	0	0	0.00102	0	0	0	0.01403	0.00348	0	0.0002	0.002663
H_22	0	0	0	0.01148	0.00424	0	0.04032	0.00507	0	0	0.00021	0.001137
H_8	0	0	0.00246	0	0.00102	0.00184	0	0.0248	0.0001	0	0.00051	0.00287
H_71	0.0001	0	0	0.00071	0	0.0001	0	0.00661	0	0	0	0.004268
H_N91	0	0	0	0.00064	0.00646	0	0	0.00169	0	0	0.00074	0.000212
H_24	0	0	0.08368	0.00336	0.00203	0	0.01149	0.00051	0.00112	0	0.00081	0.001118
H_N76	0	0	0	0	0.00615	0.0004	0	0	0.00746	0	0.00292	0.000907
H_54	0	0	0	0.00091	0	0	0	0	0	0	0.0003	0.001923
H_N181	0	0	0	0.0121	0	0	0	0.00949	0	0	0.00188	0.000522
H_N1212	0	0	0.01406	0.01459	0.0016	0.00043	0	0.01204	0	0	0.00362	0.005219
H_15	0.00216	0.0001	0.03879	0.00072	0.00072	0	0.01708	0.00216	0.0001	0	0.00082	0.001955
H_46	0	0.00308	0	0.00096	0.00223	0	0	0.00892	0	0	0.00064	0.001486
H_N132	0	0.0001	0	0.0002	0.00672	0	0.00061	0	0.00041	0	0.00092	0.000204
H_N260	0	0	0.01891	0.00062	0.00021	0.00021	0.02785	0.0054	0.00094	0	0.00125	0.000831
H_70	0.14927	0.00755	0	0	0	0.00224	0	0.00286	0	0	0.00041	0.002857
H_27	0	0	0.04049	0.02458	0.00286	0.00255	0	0.00979	0	0	0.00714	0.013563
H_N57	0	0	0	0	0	0.0001	0	0.00589	0	0	0.00142	0.000406
H_N72	0	0	0	0	0	0	0	0.0004	0	0	0.0001	0.000703
H_77	0	0	0	0	0	0	0	0.02647	0	0	0.0001	0.001737
H_N197	0.08087	0	0	0.0001	0	0.00084	0	0	0	0	0.00492	0.000105
H_6	0	0.00962	0.03143	0.00031	0.00176	0	0.0092	0.00062	0.00331	0	0.00238	0.00031
H_N55	0	0	0.00754	0.00064	0.00892	0	0	0.00308	0.00011	0	0.00053	0.002019
H_64	0	0.0001	0.02796	0.0001	0.00041	0	0	0.00226	0.0001	0	0.0001	0.000514
H_63	0	0	0	0.00032	0.00159	0	0	0	0	0	0.00074	0.002014
H_53	0	0	0	0.00061	0.0002	0.0002	0	0.00284	0.0001	0	0.0003	0.007314
H_5	0	0	0	0.00274	0	0.00071	0	0.05396	0	0	0.00559	0.003455
H_N264	0	0	0	0.00424	0.00011	0.00169	0.00011	0.00021	0	0	0	0
H_N1022	0	0	0	0.00052	0.00227	0	0	0.00083	0.00052	0	0.00083	0.001341
H_76	0	0	0	0	0.00134	0	0	0.01571	0	0	0.00236	0.000514
H_40	0	0	0	0.0001	0.0001	0	0	0.03241	0	0	0.00163	0.001121
H_N145	0	0	0.0423	0.0026	0.00188	0.00063	0	0.02136	0	0	0.00115	0.002709
H_N258	0	0	0	0.0007	0	0	0	0.07215	0	0	0.0003	0.001107
H_14	0	0	0	0.00061	0.00041	0.00031	0.01017	0.00234	0.00275	0	0	0.001221
H_13	0.01517	0	0	0.00031	0.00041	0	0	0	0	0	0.00061	0.001537
H_55	0	0	0	0.00062	0.0074	0	0	0.00442	0.0001	0	0.00062	0.000822
H_25	0	0.01715	0	0.01398	0.00245	0	0	0.00102	0.00388	0	0.00439	0.002144
H_N109	0	0	0.07094	0.00218	0.00291	0	0.00655	0.00094	0.00031	0	0	0.000416
H_61	0	0	0	0.00021	0.00063	0	0	0.04329	0.0001	0	0	0.000941
H_28	0.12541	0	0	0.0003	0	0.0001	0	0.00122	0	0	0.00467	0.001626
H_N177	0	0.00165	0.05456	0.00022	0.00132	0.00066	0	0.00408	0.00055	0	0.00022	0.00011
H_9	0	0	0	0.00235	0	0.00024	0	0	0	0	0.0033	0

H_33	0	0	0.09485	0	0.00062	0	0.09834	0.00308	0.00133	0	0.00144	0.000411
H_26	0	0	0	0.0045	0.00323	0.00023	0	0.0015	0.0045	0	0.00381	0.006458
H_N40	0	0	0	0.00193	0.00398	0	0	0.00875	0.0033	0	0.00011	0.001705
H_N121	0	0	0.01933	0.01651	0.00324	0.0001	0	0.01431	0	0	0.00313	0.006477
H_23	0	0	0	0.00113	0.02827	0	0	0.00041	0.00898	0	0.00454	0.001341
H_N56	0	0.00082	0	0.00031	0.0001	0	0	0	0.00357	0	0	0.000102
H_N164	0	0	0	0	0	0	0	0.19351	0.00041	0	0.00041	0.003006
H_12	0.0001	0	0	0.00082	0.00092	0	0	0.00051	0.00061	0	0.00112	0.001632
H_N75	0	0	0	0.00115	0.00781	0.00063	0	0.00125	0.00292	0	0.00208	0.000521
H_47	0	0	0	0.0001	0.00072	0.00082	0.0075	0.00472	0.00041	0	0.0001	0.000308
H_N84	0	0	0	0.00104	0.00135	0.00135	0	0.01396	0.00021	0	0.00042	0.006044
H_42	0	0	0	0	0	0.00031	0	0	0	0	0.0001	0.001848
H_N9	0	0	0	0.00295	0	0.00499	0	0.04551	0	0	0.0002	0.004479
H_N52	0	0	0	0.00391	0	0	0	0.00652	0	0	0.00011	0.000978
H_62	0.00076	0	0.04032	0	0.00032	0	0.0107	0.00984	0	0	0.00043	0
H_1	0	0	0	0.00384	0	0.00586	0	0.03536	0	0	0.0002	0.011314
H_N111	0	0.00938	0	0.01	0.00806	0	0	0.00153	0.00561	0	0.0002	0.001428
H_N54	0.01913	0	0	0	0	0	0	0.17403	0	0	0.00094	0
H_N102	0	0	0	0.00051	0.00164	0	0	0.00062	0.00021	0	0.00103	0.001541
H_4	0	0	0.0001	0.00061	0	0.01049	0	0.00194	0	0	0.00082	0.000306
H_36	0.09717	0	0	0.0001	0	0.00102	0	0	0	0	0.0049	0.000409
H_16	0	0.00524	0	0.00164	0.00072	0.00051	0	0	0.01038	0	0.00041	0.002159
H_69	0	0	0	0.00032	0.00168	0	0	0.01103	0.00021	0	0.00053	0.00063
C_82	0	0	0	0	0.0001	0	0	0.00876	0.00031	0	0.0001	0
C_62	0	0	0	0.00011	0.00118	0	0	0.00021	0	0	0.00011	0.000857
C_60	0.02004	0	0	0.00021	0.0001	0.00904	0	0.0001	0.00623	0	0.01194	0.004777
C_32	0.00614	0	0	0.00208	0.0001	0.00083	0	0	0.0051	0	0.0001	0.001456
C_HCC20	0.04702	0	0	0	0	0	0	0	0	0	0.00061	0
C_11	0	0	0	0	0	0	0.0002	0.00762	0	0	0.00061	0.000305
C_75	0.13476	0	0	0	0	0.00885	0	0.01688	0.00295	0	0.0001	0.000407
C_61	0.0001	0.0002	0.01545	0.00051	0.00041	0	0	0.00348	0	0.00706	0	0
C_88	0.00319	0.00042	0	0.00011	0.00011	0	0	0	0.00255	0.02028	0.00223	0
C_18	0.07219	0.00021	0	0.00147	0.00283	0.0021	0	0.00315	0.00168	0	0.00021	0.002308
C_HCC17	0	0	0	0.00205	0	0.00133	0	0.01105	0	0	0	0
C_HCC17	0.03337	0	0	0	0	0	0	0	0	0	0	0.000304
C_94	0	0.00032	0	0	0.00084	0.00411	0	0.0019	0.01264	0	0.00011	0
C_36	0	0.00031	0	0.0002	0.0001	0.00051	0.01396	0.01029	0	0	0.0001	0.001121
C_HCC22	0.0001	0	0	0	0	0	0	0	0	0	0.00061	0.000205
C_12	0	0.00063	0	0.02229	0.00084	0	0	0	0	0	0.00795	0.000942
C_101	0.06915	0	0	0.00715	0.00021	0	0	0.00032	0.00011	0	0	0.000105
C_86	0.11763	0.0019	0	0.00021	0.00042	0	0	0.00063	0.00084	0	0.00032	0.000948
C_106	0	0.0001	0	0.00114	0.00042	0.00031	0	0.022	0.00021	0	0.00052	0
C_HCC20	0	0	0	0	0	0	0	0.0002	0.00031	0	0.00164	0.001332
C_54	0.00051	0.0001	0	0	0.00163	0	0	0.00834	0.0304	0	0.00031	0.00183
C_69	0	0	0	0	0	0	0	0	0.02556	0	0.00052	0.000105
C_85	0.09807	0	0	0	0.00083	0.0001	0	0.02026	0	0	0.00031	0.000312
C_73	0	0.00081	0	0	0.00051	0	0	0.01643	0.0001	0	0	0.000304
C_64	0.00078	0.00011	0	0.00078	0.00224	0	0	0.00078	0.00034	0	0.00011	0
C_HCC22	0	0	0	0	0	0.00464	0	0	0.00494	0	0.00101	0.007457
C_HCC16	0	0	0.0004	0.00091	0	0.0002	0	0.00476	0	0	0.00081	0.000202
C_28	0.096	0	0	0.00031	0	0	0	0.02749	0	0	0.00062	0.001041
C_46	0	0.00224	0	0.00061	0.00143	0.0002	0	0.00122	0	0	0.0002	0.000816
C_HCC22	0	0.00021	0.03236	0	0.00053	0	0	0	0.00011	0	0.00043	0.001384
C_89	0.0001	0	0	0	0	0.11185	0	0	0	0	0.0001	0

C_14	0	0	0	0	0	0	0	0	0.0001	0	0.00031	0.000104
C_20	0	0	0	0	0.00012	0	0	0.00023	0.00023	0	0.00012	0
C_90	0	0	0	0	0	0.00394	0	0	0	0	0	0
C_HCC17	0	0	0	0.00101	0.00011	0.01218	0	0	0	0	0.00011	0.000559
C_19	0	0.00233	0	0.00142	0.00081	0	0	0	0.00618	0	0.0003	0.000101
C_7	0	0.00287	0	0.0001	0.00102	0	0	0.00102	0.01558	0	0.00051	0.000512
C_HCC21	0	0	0	0	0	0.00152	0	0.0001	0	0	0.00091	0.000101
C_HCC22	0	0	0	0	0	0.08386	0	0.17693	0	0	0.00157	0
C_HCC16	0	0	0	0	0	0.0003	0	0	0.00896	0.00171	0.0001	0.010969
C_HCC23	0	0	0	0	0	0.01137	0	0.00481	0.00051	0	0.0001	0.001741
C_102	0	0	0	0.0001	0	0.01052	0	0	0.0011	0	0.0001	0.001002
C_13	0	0.0001	0	0	0	0.00084	0	0	0	0	0.00031	0
C_83	0	0	0	0	0.0003	0	0	0	0	0	0	0.000102
C_74	0.00642	0	0	0	0	0.00061	0	0.00122	0.00112	0	0.00194	0.000102
C_38	0	0	0	0	0	0.0002	0	0	0	0	0.0001	0.00409
C_109	0	0	0	0	0	0.00151	0	0	0.00162	0	0.0002	0.000303
C_49	0	0.0001	0.0002	0.00051	0.00101	0.00538	0	0.00669	0	0	0.00061	0.004869
C_47	0.00011	0	0	0.0172	0.00044	0.00022	0	0.00452	0.00022	0	0.00176	0.001433
C_39	0	0.00574	0	0.0001	0.00174	0.00051	0.01569	0.02369	0.00144	0.01374	0.00041	0.00082
C_44	0	0.024	0	0.0001	0.00051	0.03487	0	0	0.00021	0	0.00092	0.000513
C_34	0.01223	0	0	0.00011	0	0.00022	0	0.01277	0.00011	0.00758	0.00011	0.001407
C_24	0	0	0	0	0.0011	0.00624	0	0.00975	0.00011	0	0.00011	0.000657
C_10	0	0.00063	0	0	0.00021	0.04903	0	0.00147	0.00031	0	0.0001	0.000629
C_6	0.15226	0	0	0.00031	0.00084	0	0	0.00346	0.0001	0	0.00042	0.000943
C_58	0	0.00857	0.00683	0.00071	0	0.0001	0	0.01989	0.00898	0	0.00235	0.004692
C_53	0	0.00359	0	0.00044	0.00174	0	0	0.00359	0.00033	0.01947	0.00076	0.000109
C_68	0	0.00553	0	0.00061	0.00184	0.00092	0	0.02959	0	0	0.0001	0
C_23	0	0	0	0.05354	0	0.0001	0	0.00932	0	0	0.00717	0
C_81	0	0.00277	0	0.00011	0.001	0.00133	0	0.00044	0.00011	0	0.00033	0.000443
C_51	0	0	0	0	0	0.00031	0	0	0	0	0.00031	0.000306
C_HCC18	0	0	0	0.00052	0	0	0	0.00041	0	0	0.0001	0.00404
C_95	0	0	0	0.00011	0.00011	0.00033	0	0.00099	0	0	0	0.00011
C_HCC17	0.0064	0	0.01807	0	0.00072	0	0.00578	0.00103	0.00052	0	0.00021	0
C_HCC20	0.00675	0	0	0.00056	0.00045	0.00101	0	0.00315	0.00011	0	0.00011	0.000337
C_27	0	0.00031	0	0.00031	0	0.03058	0	0.05704	0	0	0.00145	0.005063
C_HCC17	0.00011	0.00279	0	0.00011	0.00086	0.00441	0	0.00559	0.00011	0	0.00086	0
C_77	0	0	0	0	0	0	0	0	0	0	0	0
C_63	0.01517	0	0	0.00021	0	0.00158	0	0	0.00021	0	0.00032	0.000105
C_105	0.00609	0	0	0	0	0	0	0	0.00011	0	0.00011	0.000435
C_91	0.09063	0	0	0.0001	0.00031	0	0	0.02435	0.00174	0	0.00061	0
C_29	0	0.00674	0	0.00122	0.00061	0.00286	0	0.00122	0.01755	0	0.00296	0.002245
C_HCC23	0	0	0	0.0001	0	0.04529	0	0	0.00021	0	0.00187	0.002187
C_22	0.01145	0	0.03158	0.00138	0.0017	0.00127	0	0.0053	0.00064	0	0.00106	0.000212
C_41	0.00031	0.00094	0	0.0001	0.00533	0.0092	0	0.0001	0.00115	0	0.0001	0.001359
ELC_31	0	0	0	0	0	0.01338	0	0	0	0	0.00061	0.000102
ELC_19	0	0.00041	0	0	0.0003	0	0	0.00162	0	0	0.00071	0.00071
ELC_44	0.00276	0.0032	0	0.00011	0.00231	0	0	0	0.00033	0	0.00066	0.00022
ELC_56	0	0	0	0.00524	0.0036	0.00144	0	0	0	0	0.00021	0.000411
ELC_63	0	0	0	0.0008	0	0.0003	0	0.0007	0	0	0.00161	0.000503
ELC_47	0.05912	0.00031	0	0	0.00093	0	0	0.00113	0	0	0.00103	0.000721
ELC_20	0	0	0	0	0.00074	0	0	0.00326	0.00011	0	0.00032	0.000105
ELC_43	0	0	0	0.00041	0	0	0	0.07245	0	0	0.00206	0
ELC_13A	0.00042	0	0	0.00368	0	0	0	0.0267	0	0	0.00042	0.003995
ELC_33	0.00485	0	0	0.0001	0.0002	0.00142	0	0.00263	0.0004	0	0.0004	0.000202

ELC_40	0.01531	0.00092	0.02322	0.00021	0.0038	0	0	0.0038	0	0	0.00041	0.000103
ELC_22	0	0.00142	0	0.00132	0.00051	0.02325	0	0.00568	0.0002	0	0.00041	0.001523
ELC_18	0	0	0	0.00061	0	0	0	0.0224	0	0	0.00404	0.019275
ELC_61	0	0	0.00514	0.00072	0.00123	0	0	0.01398	0	0	0	0.000411
ELC_24	0	0	0	0	0	0.00092	0.00907	0	0	0	0.0001	0
ELC_29	0.03923	0.00502	0	0.00063	0.00126	0	0	0.0001	0.00021	0	0.00052	0.000314
ELC_42	0	0.00021	0	0	0.00053	0.01754	0	0.01106	0	0.00128	0.00074	0.000319
ELC_17	0	0	0	0	0	0	0	0.00223	0.0003	0	0	0.000508
ELC_38	0	0	0	0	0	0.0001	0	0.01449	0	0	0.0002	0
ELC_7A	0	0	0.00408	0	0	0	0	0	0	0	0.00061	0.00051
ELC_58	0	0	0.00348	0.00082	0	0.03339	0	0.00338	0	0	0.0002	0.003688
ELC_46	0	0	0.00877	0.00136	0.00439	0.10673	0	0.00157	0.00031	0	0.00021	0
ELC_25	0	0	0	0.00104	0	0	0	0.0026	0	0	0.00021	0.00177
ELC_51	0	0	0	0	0	0.00191	0	0.01672	0.0001	0	0.0001	0
ELC_117	0.08041	0	0.00083	0	0.00207	0.00517	0	0.01054	0.0001	0	0.00062	0
ELC_21	0	0	0.00792	0	0.0001	0	0	0	0	0	0.0003	0.000203
ELC_28	0	0	0	0	0.00072	0.0001	0.02523	0.00092	0.00112	0	0.00051	0.001124
ELC_37	0	0	0	0.00023	0.00023	0	0	0.00992	0	0	0.00069	0.000346
ELC_115	0.00224	0	0	0.00395	0.00021	0.00556	0	0.0015	0	0	0.00085	0.000641
ELC_48	0.00853	0.00021	0	0.0001	0.00103	0	0	0.00658	0.0001	0	0.00041	0
ELC_45	0	0.00072	0.0135	0	0.0001	0.02516	0	0	0	0	0.00031	0
ELC_23	0.00246	0.00051	0	0.00062	0.00174	0	0.00216	0.00821	0.00021	0	0.00082	0.000205
ELC_41	0	0	0	0	0	0.01317	0	0	0	0	0.00302	0
ELC_35	0	0	0	0.0002	0	0	0	0	0	0	0.001	0.001708
ELC_8A	0	0	0	0	0	0.0001	0	0.08184	0	0	0.00133	0
ELC_65A	0.04538	0	0	0	0	0.00333	0	0.0004	0	0	0.0001	0
ELC_52	0	0.0001	0.01611	0	0.00181	0.00151	0	0.00554	0	0	0.0001	0
ELC_11	0	0	0	0	0	0.00273	0	0.16945	0	0	0	0.000506
ELC_36	0	0	0	0.00021	0.00139	0.00032	0	0.00086	0	0	0.0015	0
ELC_30	0.01914	0	0.03634	0	0.00409	0.00154	0.00061	0	0	0	0.00051	0.001638

OTU_136	OTU_209	OTU_285	OTU_291	OTU_310	OTU_372	OTU_373	OTU_427	OTU_451	OTU_624	OTU_664	OTU_748
0	0	0	0	0.000608	0	0	0	0	0	0	0
0	0	0	0	0.000411	0	0	0	0	0	0	0
0	0	0	0	0.000303	0	0	0	0	0.000101	0	0
0	0	0	0.0001	0	0	0	0	0	0	0	0
0	0	0.000102	0	0	0	0	0	0	0	0	0.001224
0	0	0.000105	0	0	0	0	0	0	0.000316	0	0
0	0	0	0.00063	0	0	0	0	0	0.005568	0	0
0	0	0	0	0	0	0	0	0	0.000412	0	0.010309
0	0.000104	0	0	0	0	0	0	0	0	0	0.000417
0	0	0.000204	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0.0001	0	0	0	0
0	0	0	0	0	0.00092	0	0	0	0	0	0
0	0.001344	0	0.00103	0.000207	0	0	0	0	0.000103	0	0
0	0	0	0	0.00041	0	0	0	0	0	0	0
0	0	0	0	0.000203	0	0.0001	0	0	0	0	0
0	0	0	0.00064	0	0	0	0	0	0.000106	0	0
0	0	0	0	0	0	0	0	0	0.000102	0	0
0.000101	0	0	0	0	0.00202	0	0	0	0.000403	0	0
0	0	0	0	0.001012	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0.00031	0	0	0	0	0	0.00247	0	0
0	0	0	0	0	0	0	0	0	0.000743	0	0
0	0	0	0.00031	0	0	0	0	0	0	0	0.000306
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0.000204	0	0	0	0	0	0	0
0	0	0	0	0.000408	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0.000105	0	0
0	0	0	0	0	0	0	0	0.0001	0	0	0.001448
0	0	0	0.00085	0	0	0	0	0	0.000106	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0.00042	0	0	0	0	0	0.002968	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0.000102	0	0.000203	0	0	0	0	0	0	0
0	0	0	0	0.000318	0	0	0	0	0.000953	0	0
0	0	0	0.0001	0	0	0	0	0	0	0	0
0	0	0	0	0.000103	0	0	0	0	0	0	0
0	0	0	0	0	0	0.0001	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0.000102	0	0.00031	0.0001	0	0	0	0
0	0	0	0	0.000205	0	0	0	0	0	0	0
0	0	0	0.00072	0.000103	0	0	0	0	0.000103	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0.00021	0.00105	0	0	0	0
0	0	0	0	0.000305	0	0	0	0	0	0	0
0	0.00022	0	0	0.00011	0	0	0	0	0	0	0
0	0	0	0	0	0	0.02284	0	0	0	0	0

0	0	0	0	0.000103	0	0	0	0	0	0	0.000205
0	0	0.000231	0.00104	0.000115	0	0.00012	0	0	0.004843	0	0.005535
0	0	0	0.00045	0	0	0	0	0	0.000114	0	0.000568
0	0	0	0	0.000209	0	0	0	0	0	0	0
0.000103	0.000103	0	0	0.000103	0	0	0	0.0001	0	0	0
0	0	0	0	0	0.0001	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0.0001	0	0	0	0	0	0	0	0.000204
0	0	0	0.00073	0.000104	0.00021	0	0	0	0	0	0
0	0	0	0	0	0	0.0001	0	0	0.000103	0	0
0	0	0	0	0.000104	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0.000102	0	0	0	0.0001	0	0.0002	0.000306	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0.000102	0	0.000204	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0.000102	0	0
0	0	0	0	0	0.0001	0	0	0	0	0	0
0	0	0	0.00011	0	0	0	0	0	0	0	0
0	0	0	0	0.000102	0	0.0001	0	0	0	0	0.003055
0.000214	0.000321	0.000107	0	0	0	0	0	0	0.012315	0	0.000107
0.001869	0	0	0	0.000104	0	0	0	0	0.010697	0	0
0	0	0	0	0	0	0.00021	0	0.0001	0	0	0.000104
0.000102	0	0	0	0	0	0	0	0	0	0	0
0	0	0.000102	0	0	0	0	0	0	0.029367	0	0
0.001729	0	0	0	0	0	0	0	0	0.000814	0	0.075468
0	0.000102	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0.000105	0.0001	0	0	0	0.0001	0	0	0	0
0.000102	0	0.000102	0	0	0	0	0	0	0	0	0
0	0.00071	0	0	0	0	0	0	0	0	0	0.001217
0	0	0	0	0	0	0	0	0.00032	0.000421	0	0
0	0	0	0	0	0	0	0	0	0	0	0.0162
0	0	0	0	0	0	0.0001	0	0	0.000102	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0.000315	0	0.000315
0	0	0	0	0	0	0	0	0.00011	0.005687	0	0
0	0	0.000208	0	0	0	0	0	0	0	0	0
0	0.00041	0	0	0	0	0.0001	0.00031	0.0001	0.020184	0	0.000102
0	0	0.000102	0	0.000203	0	0.0001	0.0001	0	0	0	0.004881
0.00021	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0.000104	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0.000302	0	0	0.0006	0	0.0001	0	0	0	0.030535
0	0.000101	0.000101	0	0	0.00263	0	0	0	0	0	0.097571
0	0	0	0	0	0	0	0	0	0.009163	0	0
0	0	0	0	0	0	0	0	0	0	0	0.000306
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0.00021	0.00021	0.00052	0	0	0	0

OTU_927	OTU_968	OTU_976	OTU_1032	OTU_1091	OTU_1294	cohort
0	0	0	0.0001013	0	0.0036474	H
0	0	0	0	0	0.0008219	H
0	0	0	0	0	0.0010114	H
0.000515	0	0	0	0.0001031	0.0003092	H
0.000816	0.045288	0	0	0	0.000714	H
0	0	0	0	0	0.0001053	H
0.008719	0.066814	0	0	0.0004202	0.0002101	H
0	0.000206	0	0	0	0.0003093	H
0.001042	0.000104	0	0	0	0.0012504	H
0	0	0	0	0	0	H
0	0	0	0	0	0.00031	H
0	0	0	0	0	0	H
0.00062	0.172439	0	0	0.0001034	0.002998	H
0	0	0	0	0	0	H
0	0	0	0	0	0.0004065	H
0.00053	0	0	0	0.0001059	0.0008474	H
0.002135	0.000203	0	0	0.0007117	0.0007117	H
0	0	0	0	0	0.0006046	H
0	0	0	0	0	0.0003036	H
0	0	0	0	0	0	H
0.00032	0	0	0	0	0.0001065	H
0.000926	0.000309	0	0	0	0.0016464	H
0.00605	0	0	0	0.0003184	0.0001061	H
0.002343	0.000408	0	0	0.0002038	0.0011207	H
0	0.000104	0	0	0	0.0001039	H
0	0	0	0.0002041	0	0	H
0.000612	0	0	0.0004079	0	0	H
0	0	0	0	0	0	H
0	0	0	0	0	0.0001004	H
0	0	0	0	0	0	H
0	0.041693	0.00021	0	0	0.0001048	H
0.001551	0	0	0	0.0013442	0.0008272	H
0.000744	0.000106	0	0	0.0001062	0.0001062	H
0.000308	0.000206	0	0	0.0001028	0	H
0.001696	0	0	0	0	0	H
0	0	0	0	0	0.0006095	H
0	0	0	0.0002032	0	0.0004065	H
0	0.000636	0	0	0	0	H
0.000309	0.000103	0	0	0	0.0018568	H
0	0	0	0	0	0.0001027	H
0	0.000102	0	0	0	0	H
0	0	0	0	0	0.0003125	H
0	0	0	0	0	0	H
0.000915	0.001526	0	0	0	0.0011189	H
0.001332	0	0	0	0	0.0004099	H
0.000308	0	0	0	0.0005137	0.0002055	H
0	0	0	0	0	0.0010207	H
0.00156	0	0	0	0.000208	0.0012482	H
0.000941	0	0	0	0	0	H
0	0	0	0	0	0.0007114	H
0.001213	0	0	0	0	0.0006614	H
0	0	0	0	0	0	H

0	0.120304	0	0	0	0.0006159	H
0.011301	0.000346	0	0	0.0002306	0	H
0.003751	0.000455	0	0	0.0001137	0.0026145	H
0.000104	0.000104	0	0.0001045	0	0.0001045	H
0.001341	0	0	0	0.0013412	0.0008253	H
0	0	0	0	0	0.0003057	H
0	0	0	0	0	0	H
0.000918	0.280396	0	0	0	0.000204	H
0.001146	0.007502	0	0	0.0008336	0.0002084	H
0.000411	0.004314	0	0	0	0.0002054	H
0	0	0	0	0	0.0001042	H
0	0	0	0	0	0	H
0	0.000102	0	0.000509	0	0.0007126	H
0.001521	0	0	0	0	0.0009775	H
0.000649	0.159442	0	0	0	0.0005405	H
0	0.000808	0	0.0004041	0	0.0003031	H
0.000102	0	0	0	0.000408	0.000306	H
0	0	0	0	0	0.000104	H
0.000205	0	0	0	0	0.0013354	H
0	0	0	0.0002038	0.0005094	0.0002038	H
0	0.041688	0	0.0004087	0	0.0001022	H
0	0	0	0	0	0.0004112	H
0.000315	0	0	0	0.0001051	0.0018914	H
0	0	0	0	0	0.0001018	HCC
0	0	0	0	0	0	HCC
0	0.003427	0	0.0004154	0	0.000727	HCC
0	0.024233	0	0.000208	0	0	HCC
0	0	0	0	0	0	HCC
0	0.000102	0	0	0	0	HCC
0	0.013019	0	0.0021359	0	0	HCC
0	0.09076	0	0	0	0	HCC
0.000106	0.018794	0	0	0	0.0006371	HCC
0	0	0	0.0001049	0	0.0011541	HCC
0	0.000102	0	0.0001023	0	0.0003069	HCC
0	0	0	0	0	0	HCC
0.000632	0.016853	0.000105	0	0	0	HCC
0	0.000509	0	0.0002038	0	0.0003057	HCC
0	0.000102	0	0	0	0	HCC
0	0	0	0	0	0.0019887	HCC
0.003678	0	0	0	0	0.0002102	HCC
0.01706	0.000316	0	0	0	0	HCC
0	0	0	0	0	0.0008302	HCC
0	0	0	0	0.0001025	0.0001025	HCC
0	0.049624	0	0	0	0.0010169	HCC
0	0	0	0	0	0	HCC
0	0	0	0	0	0	HCC
0	0	0	0	0	0.0003043	HCC
0.005606	0.006615	0.000112	0	0	0.0024666	HCC
0	0	0	0.0001008	0	0.0003023	HCC
0	0.000101	0	0	0	0.0003036	HCC
0	0	0	0.0001041	0	0	HCC
0.000204	0.177071	0.000102	0	0	0.000408	HCC
0	0.128273	0	0	0	0.0040451	HCC
0	0.000104	0	0.0074151	0	0	HCC

0	0.001668	0	0	0	0.000417	HCC
0.006881	0.029858	0.000233	0	0	0.0006998	HCC
0	0.105143	0	0.0005185	0	0	HCC
0	0	0	0.0002234	0	0.0004469	HCC
0	0	0	0	0	0	HCC
0	0.06015	0	0	0	0.0006148	HCC
0	0	0	0	0	0	HCC
0	0	0	0.0081564	0	0	HCC
0	0	0	0	0	0.0005032	HCC
0	0	0	0	0	0	HCC
0	0	0	0	0	0	HCC
0	0	0	0.0004185	0	0	HCC
0	0	0	0	0	0	HCC
0	0.000204	0	0.0004078	0	0.0003058	HCC
0	0	0	0	0	0	HCC
0	0	0	0	0	0	HCC
0	0	0	0.00071	0	0.0003043	HCC
0.00011	0.00011	0	0	0.0006615	0.0003308	HCC
0	0.064506	0	0	0	0.0001026	HCC
0	0.164308	0	0.0055385	0	0.0001026	HCC
0	0.017105	0	0.0001083	0	0.0031395	HCC
0.001643	0.133874	0	0.0017528	0	0.0002191	HCC
0.00021	0.152541	0.000105	0.0011524	0	0.0003143	HCC
0	0.00021	0	0	0	0.0002096	HCC
0	0	0	0	0	0.0015301	HCC
0.001523	0.120091	0	0	0	0.0002176	HCC
0	0	0	0.0001024	0	0	HCC
0	0	0	0	0	0	HCC
0.001662	0.220007	0	0	0	0.0003323	HCC
0	0	0	0	0	0	HCC
0	0	0	0	0	0.0001036	HCC
0.000552	0.000442	0.00011	0	0	0	HCC
0	0.038918	0.000929	0	0	0.0001032	HCC
0.008773	0	0	0	0	0	HCC
0	0.001653	0	0.0014466	0	0.0001033	HCC
0.002794	0	0	0.0003224	0	0.0007524	HCC
0	0.013163	0	0	0	0	HCC
0	0	0	0.0001053	0	0	HCC
0	0.02435	0	0	0	0.0008697	HCC
0	0	0	0	0	0	HCC
0	0	0	0.0001021	0.0001021	0.0029595	HCC
0	0	0	0.0007289	0	0	HCC
0.002543	0	0	0.000106	0.000106	0.0006359	HCC
0	0.000105	0	0.0027185	0	0.0006274	HCC
0	0	0	0.0002043	0	0.0104209	ELC
0	0	0	0	0	0.0001014	ELC
0.003417	0	0	0	0.0008817	0.0004409	ELC
0	0.18493	0	0	0	0.0009252	ELC
0	0	0	0	0	0	ELC
0	0	0	0	0	0	ELC
0.00021	0.000736	0	0	0	0.0001052	ELC
0	0	0	0	0	0	ELC
0	0	0	0	0	0.001787	ELC
0	0.046622	0	0	0	0.0002023	ELC

0.003391	0.161821	0	0	0	0.0005137	ELC
0	0	0	0.0003045	0	0.0014212	ELC
0	0	0	0	0	0.0006055	ELC
0	0	0	0	0.0004113	0.0005141	ELC
0	0	0	0	0	0	ELC
0	0.000105	0	0	0.0001046	0.0007323	ELC
0.000638	0.13906	0	0.0002126	0	0.0003189	ELC
0	0	0	0	0	0	ELC
0	0	0	0	0	0	ELC
0	0	0	0	0	0	ELC
0	0	0	0.0010244	0	0.0004098	ELC
0.001149	0	0	0.0013576	0.0001044	0.0012531	ELC
0	0	0	0	0	0.0006246	ELC
0	0	0	0	0	0.0047341	ELC
0.000103	0.00062	0.000103	0.0003101	0	0.0008269	ELC
0	0.2143	0	0	0	0	ELC
0	0	0	0	0	0.0012259	ELC
0.001845	0	0	0	0	0.0004613	ELC
0	0.001176	0	0.0003206	0	0.0001069	ELC
0.001542	0	0	0.0001028	0	0.0011306	ELC
0	0.107508	0	0.0003069	0	0.0008183	ELC
0.003387	0	0	0	0	0.0001026	ELC
0	0	0	0.0004022	0	0	ELC
0	0	0	0	0	0.0001004	ELC
0	0.000924	0	0	0	0	ELC
0	0.000303	0	0	0	0	ELC
0	0.000403	0	0.0001007	0.0001007	0.0004027	ELC
0	0	0	0.0003037	0	0.0003037	ELC
0.00107	0	0	0	0	0.000107	ELC
0	0.033883	0	0.0002047	0	0.0002047	ELC

Table S10 The corresponding bacterial genera of the 30 OTUs markers

OTU_10	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides	1
OTU_12	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Clostridium IV	0.7
OTU_28	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Dialister	1
OTU_57	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.7
OTU_58	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	1
OTU_63	Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae	1
OTU_78	Bacteria;Proteobacteria;Betaproteobacteria;Burkholderiales;Sutterellaceae;Sutterella	1
OTU_86	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Lachnospiraceae_incertae_s	0.6
OTU_87	Bacteria;Actinobacteria;Actinobacteria;Coriobacteriales;Coriobacteriaceae;Collinsella	1
OTU_96	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_97	Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Blautia	1
OTU_128	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Butyrivibrio	1
OTU_136	Bacteria;Firmicutes;Bacilli;Lactobacillales;Lactobacillaceae;Lactobacillus	1
OTU_209	Bacteria;Actinobacteria;Actinobacteria;Bifidobacteriales;Bifidobacteriaceae;Bifidobacter	1
OTU_285	Bacteria;TM7;TM7_genera_incertae_sedis;TM7_genera_incertae_sedis;TM7_genera_in	1
OTU_291	Bacteria;Firmicutes;Clostridia;Clostridiales	0.9
OTU_310	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	1
OTU_372	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Acidaminococcaceae;Acidaminococ	1
OTU_373	Bacteria;Fusobacteria;Fusobacteria;Fusobacteriales;Fusobacteriaceae;Fusobacterium	1
OTU_427	Bacteria;Proteobacteria;Gammaproteobacteria;Pasteurellales;Pasteurellaceae;Aggregatib	1
OTU_451	Bacteria;Actinobacteria;Actinobacteria;Actinomycetales;Micrococcaceae;Rothia	1
OTU_624	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Rikenellaceae;Alistipes	1
OTU_664	Bacteria;Proteobacteria;Alphaproteobacteria;Caulobacteriales;Caulobacteraceae;Brevund	1
OTU_748	Bacteria;Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Megamonas	1
OTU_927	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	1
OTU_968	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Prevotella	1
OTU_976	Bacteria;Bacteroidetes;Bacteroidia;Bacteroidales;Prevotellaceae;Paraprevotella	0.5
OTU_1032	Bacteria;Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae;Klebs	0.7
OTU_1091	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae	0.9
OTU_1294	Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Faecalibacterium	1

Table S11 POD value in the discovery cohort

sample	POD	cohort	POD with moisture
H_20	0.125683	nonHCC	0.153
H_N204	0.128205	nonHCC	0.162
H_37	0.154286	nonHCC	0.219
H_N68	0.154286	nonHCC	0.137
H_44	0.269608	nonHCC	0.317
H_N105	0.315476	nonHCC	0.232
H_34	0.298851	nonHCC	0.174
H_N39	0.554286	nonHCC	0.524
H_52	0.297872	nonHCC	0.353
H_17	0.210811	nonHCC	0.242
H_N50	0.298969	nonHCC	0.189
H_73	0.212644	nonHCC	0.318
H_22	0.287356	nonHCC	0.278
H_8	0.079365	nonHCC	0.147
H_71	0.206186	nonHCC	0.212
H_N91	0.123656	nonHCC	0.106
H_24	0.077348	nonHCC	0.081
H_N76	0.427807	nonHCC	0.357
H_54	0.109948	nonHCC	0.085
H_N181	0.071429	nonHCC	0.108
H_N1212	0.050633	nonHCC	0.049
H_15	0.167539	nonHCC	0.198
H_46	0.2	nonHCC	0.251
H_N132	0.125	nonHCC	0.262
H_N260	0.133663	nonHCC	0.128
H_70	0.375661	nonHCC	0.4
H_27	0.22043	nonHCC	0.183
H_N57	0.090909	nonHCC	0.191
H_N72	0.333333	nonHCC	0.422
H_77	0.151515	nonHCC	0.174
H_N197	0.452261	nonHCC	0.59
H_6	0.333333	nonHCC	0.333
H_N55	0.052632	nonHCC	0.05
H_64	0.234694	nonHCC	0.296
H_63	0.25	nonHCC	0.26
H_53	0.165746	nonHCC	0.085
H_5	0.091398	nonHCC	0.201
H_N264	0.473958	nonHCC	0.417
H_N1022	0.05914	nonHCC	0.073
H_76	0.067797	nonHCC	0.053
H_40	0.157895	nonHCC	0.264
H_N145	0.036842	nonHCC	0.116
H_N258	0.105556	nonHCC	0.123
H_14	0.327778	nonHCC	0.443
H_13	0.121951	nonHCC	0.186
H_55	0.027778	nonHCC	0.021

H_25	0.207101	nonHCC	0.254
H_N109	0.093264	nonHCC	0.181
H_61	0.489583	nonHCC	0.447
H_28	0.17801	nonHCC	0.221
H_N177	0.322034	nonHCC	0.325
H_9	0.435897	nonHCC	0.468
H_33	0.298969	nonHCC	0.353
H_26	0.347826	nonHCC	0.382
H_N40	0.220339	nonHCC	0.266
H_N121	0.146067	nonHCC	0.12
H_23	0.384615	nonHCC	0.365
H_N56	0.776471	nonHCC	0.699
H_N164	0.187845	nonHCC	0.204
H_12	0.287293	nonHCC	0.398
H_N75	0.157895	nonHCC	0.191
H_47	0.497462	nonHCC	0.469
H_N84	0.086022	nonHCC	0.168
H_42	0.432292	nonHCC	0.437
H_N9	0.235294	nonHCC	0.231
H_N52	0.135294	nonHCC	0.197
H_62	0.301775	nonHCC	0.197
H_1	0.17561	nonHCC	0.231
H_N111	0.448087	nonHCC	0.319
H_N54	0.306452	nonHCC	0.318
H_N102	0.098361	nonHCC	0.207
H_4	0.303867	nonHCC	0.252
H_36	0.512195	nonHCC	0.511
H_16	0.5	nonHCC	0.495
H_69	0.11236	nonHCC	0.148
ELC_31	0.5625	nonHCC	0.47
ELC_19	0.395939	nonHCC	0.3
ELC_44	0.389222	nonHCC	0.394
ELC_56	0.285714	nonHCC	0.282
ELC_63	0.166667	nonHCC	0.192
ELC_47	0.52071	nonHCC	0.479
ELC_20	0.552326	nonHCC	0.486
ELC_43	0.317708	nonHCC	0.242
ELC_13A	0.364162	nonHCC	0.447
ELC_33	0.507772	nonHCC	0.448
ELC_40	0.301587	nonHCC	0.356
ELC_22	0.456522	nonHCC	0.561
ELC_18	0.1125	nonHCC	0.212
ELC_61	0.276923	nonHCC	0.232
ELC_24	0.72	nonHCC	0.513
ELC_29	0.46875	nonHCC	0.588
ELC_42	0.510417	nonHCC	0.462
ELC_17	0.575916	nonHCC	0.452
ELC_38	0.430108	nonHCC	0.39

ELC_7A	0.524324	nonHCC	0.666
ELC_58	0.533708	nonHCC	0.534
ELC_46	0.472637	nonHCC	0.465
ELC_25	0.277778	nonHCC	0.248
ELC_51	0.475962	nonHCC	0.438
ELC_117A	0.4	nonHCC	0.427
ELC_21	0.598901	nonHCC	0.725
ELC_28	0.360656	nonHCC	0.37
ELC_37	0.136364	nonHCC	0.122
ELC_115A	0.508108	nonHCC	0.493
ELC_48	0.502703	nonHCC	0.402
ELC_45	0.557377	nonHCC	0.564
ELC_23	0.370787	nonHCC	0.247
ELC_41	0.694444	nonHCC	0.774
ELC_35	0.171429	nonHCC	0.255
ELC_8A	0.34104	nonHCC	0.397
ELC_65A	0.674157	nonHCC	0.585
ELC_52	0.351351	nonHCC	0.212
ELC_11	0.337278	nonHCC	0.27
ELC_36	0.231707	nonHCC	0.179
ELC_30	0.366492	nonHCC	0.346
C_82	0.365079	HCC	0.427
C_62	0.662722	HCC	0.623
C_60	0.561497	HCC	0.477
C_32	0.604167	HCC	0.622
C_HCC20	0.38172	HCC	0.416
C_11	0.5	HCC	0.423
C_75	0.75	HCC	0.778
C_61	0.534759	HCC	0.456
C_88	0.508197	HCC	0.496
C_18	0.302857	HCC	0.272
C_HCC17	0.272727	HCC	0.264
C_HCC17	0.748634	HCC	0.673
C_94	0.681564	HCC	0.657
C_36	0.300546	HCC	0.406
C_HCC22	0.505495	HCC	0.54
C_12	0.168367	HCC	0.176
C_101	0.393258	HCC	0.389
C_86	0.632768	HCC	0.653
C_106	0.362069	HCC	0.26
C_HCC20	0.60119	HCC	0.647
C_54	0.360947	HCC	0.346
C_69	0.651741	HCC	0.59
C_85	0.394595	HCC	0.362
C_73	0.244681	HCC	0.32
C_64	0.336842	HCC	0.351
C_HCC23	0.597884	HCC	0.522
C_HCC16	0.365714	HCC	0.277

C_28	0.374302	HCC	0.389
C_46	0.35625	HCC	0.365
C_HCC22:0.302564		HCC	0.303
C_89	0.796407	HCC	0.754
C_14	0.751323	HCC	0.609
C_20	0.646409	HCC	0.615
C_90	0.674877	HCC	0.595
C_HCC17:0.402299		HCC	0.384
C_19	0.6	HCC	0.655
C_7	0.471264	HCC	0.574
C_HCC21:0.548571		HCC	0.492
C_HCC22:0.591954		HCC	0.622
C_HCC16:0.5		HCC	0.537
C_HCC23:0.701031		HCC	0.643
C_102	0.621622	HCC	0.636
C_13	0.580838	HCC	0.498
C_83	0.610169	HCC	0.528
C_74	0.668394	HCC	0.629
C_38	0.401042	HCC	0.395
C_109	0.701657	HCC	0.668
C_49	0.469945	HCC	0.406
C_47	0.194595	HCC	0.202
C_39	0.594059	HCC	0.637
C_44	0.709184	HCC	0.664
C_34	0.45679	HCC	0.556
C_24	0.513514	HCC	0.492
C_10	0.637755	HCC	0.658
C_6	0.469274	HCC	0.523
C_58	0.391061	HCC	0.372
C_53	0.414365	HCC	0.372
C_68	0.494624	HCC	0.504
C_23	0.44086	HCC	0.383
C_81	0.530303	HCC	0.457
C_51	0.446237	HCC	0.405
C_HCC18:0.079545		HCC	0.092
C_95	0.497436	HCC	0.487
C_HCC17:0.346591		HCC	0.387
C_HCC20:0.335025		HCC	0.291
C_27	0.536082	HCC	0.468
C_HCC17:0.555556		HCC	0.472
C_77	0.572139	HCC	0.46
C_63	0.647399	HCC	0.541
C_105	0.601156	HCC	0.589
C_91	0.521277	HCC	0.551
C_29	0.594203	HCC	0.69
C_HCC23:0.647959		HCC	0.725
C_22	0.267045	HCC	0.165
C_41	0.642424	HCC	0.584

Table S12 POD value in the validation cohort and independent diagnosis

sample	cohort	POD	label	POD with moisture
C_104	HCC_without_cir	0.31	early HCC	0.2768
C_40	HCC_without_cir	0.326	early HCC	0.3184
C_43	HCC_without_cir	0.642	early HCC	0.616
C_48	HCC_without_cir	0.456	early HCC	0.4664
C_57	HCC_without_cir	0.26	early HCC	0.2768
C_67	HCC_without_cir	0.474	early HCC	0.408
C_HCC214	HCC_without_cir	0.666	early HCC	0.6414
C_HCC218	HCC_without_cir	0.504	early HCC	0.4598
C_HCC228	HCC_without_cir	0.164	early HCC	0.145
C_HCC233	HCC_without_cir	0.428	early HCC	0.4226
C_15	HCC_without_cir	0.584	early HCC	0.498
C_2	HCC_without_cir	0.34	early HCC	0.3006
C_80	HCC_without_cir	0.434	early HCC	0.4012
C_84	HCC_without_cir	0.48	early HCC	0.4726
C_87	HCC_without_cir	0.618	early HCC	0.5534
C_93	HCC_without_cir	0.372	early HCC	0.3444
C_HCC195	HCC_without_cir	0.258	early HCC	0.276
C_HCC237	HCC_without_cir	0.46	early HCC	0.4194
C_HCC238	HCC_without_cir	0.152	early HCC	0.1958
H_75	H	0.088	H	0.0972
H_35	H	0.214	H	0.2358
H_N64	H	0.2	H	0.2264
H_N7	H	0.17	H	0.1722
H_60	H	0.064	H	0.0796
H_2	H	0.304	H	0.188
H_68	H	0.512	H	0.4424
H_N259	H	0.496	H	0.414
H_10	H	0.466	H	0.4544
H_N261	H	0.282	H	0.2998
H_39	H	0.152	H	0.1716
H_56	H	0.094	H	0.0878
H_N171	H	0.232	H	0.24
H_N58	H	0.528	H	0.5186
H_18	H	0.284	H	0.2676
H_N49	H	0.214	H	0.1572
H_38	H	0.076	H	0.0846
H_N160	H	0.414	H	0.3524
H_29	H	0.118	H	0.1296
H_66	H	0.488	H	0.4808
H_19	H	0.322	H	0.2266
H_N86	H	0.188	H	0.205
H_N21	H	0.6	H	0.5496
H_51	H	0.436	H	0.4176
H_67	H	0.042	H	0.102
H_N63	H	0.46	H	0.4636
H_7	H	0.232	H	0.2432

H_72	H	0.366	H	0.3544
H_N176	H	0.13	H	0.1674
H_32	H	0.138	H	0.198
H_N70	H	0.338	H	0.3004
H_59	H	0.42	H	0.3636
H_N47	H	0.434	H	0.4388
H_58	H	0.104	H	0.113
H_N65	H	0.154	H	0.1936
H_31	H	0.088	H	0.1176
H_11	H	0.108	H	0.1504
H_21	H	0.58	H	0.4764
H_N97	H	0.168	H	0.1736
H_65	H	0.326	H	0.3458
H_N101	H	0.58	H	0.5618
H_41	H	0.328	H	0.3328
H_3	H	0.494	H	0.48
H_N12231	H	0.476	H	0.461
H_N104	H	0.466	H	0.4442
C_103	aHCC	0.634	aHCC	0.605
C_108	aHCC	0.462	aHCC	0.4046
C_110	aHCC	0.528	aHCC	0.4756
C_21	aHCC	0.404	aHCC	0.3822
C_26	aHCC	0.626	aHCC	0.5888
C_33	aHCC	0.44	aHCC	0.4618
C_42	aHCC	0.818	aHCC	0.799
C_52	aHCC	0.594	aHCC	0.5656
C_55	aHCC	0.552	aHCC	0.506
C_56	aHCC	0.502	aHCC	0.5074
C_72	aHCC	0.456	aHCC	0.4462
C_8	aHCC	0.246	aHCC	0.246
C_98	aHCC	0.396	aHCC	0.4222
C_HCC165	aHCC	0.458	aHCC	0.4726
C_HCC177	aHCC	0.486	aHCC	0.4518
C_HCC186	aHCC	0.334	aHCC	0.2954
C_HCC188	aHCC	0.376	aHCC	0.391
C_HCC191	aHCC	0.556	aHCC	0.5252
C_HCC194	aHCC	0.686	aHCC	0.6616
C_HCC198	aHCC	0.526	aHCC	0.4642
C_HCC211	aHCC	0.524	aHCC	0.5832
C_HCC212	aHCC	0.484	aHCC	0.4418
C_HCC219	aHCC	0.648	aHCC	0.6048
C_HCC225	aHCC	0.766	aHCC	0.6886
C_HCC227	aHCC	0.356	aHCC	0.3856
C_HCC229	aHCC	0.51	aHCC	0.499
C_HCC234	aHCC	0.51	aHCC	0.5268
C_HCC240	aHCC	0.352	aHCC	0.3362
C_HCC241	aHCC	0.316	aHCC	0.3118
C_HCC276	aHCC	0.356	aHCC	0.4118

C_16	aHCC	0.684	aHCC	0.6658
C_17	aHCC	0.368	aHCC	0.4366
C_25	aHCC	0.14	aHCC	0.1646
C_3	aHCC	0.39	aHCC	0.3752
C_30	aHCC	0.624	aHCC	0.5652
C_4	aHCC	0.58	aHCC	0.4906
C_45	aHCC	0.4	aHCC	0.43
C_50	aHCC	0.474	aHCC	0.4566
C_59	aHCC	0.662	aHCC	0.6138
C_71	aHCC	0.232	aHCC	0.2652
C_79	aHCC	0.392	aHCC	0.4068
C_9	aHCC	0.312	aHCC	0.3148
C_92	aHCC	0.712	aHCC	0.6906
C_HCC174	aHCC	0.51	aHCC	0.4832
C_HCC236	aHCC	0.54	aHCC	0.5356
H_48	H	0.106	H	0.1482
H_N69	H	0.232	H	0.2666
H_N5	H	0.028	H	0.0618
H_57	H	0.158	H	0.1854
H_49	H	0.04	H	0.0554
H_43	H	0.352	H	0.3748
H_45	H	0.094	H	0.1114
H_N16	H	0.268	H	0.3062
H_30	H	0.314	H	0.2878
H_74	H	0.298	H	0.2748
H_50	H	0.432	H	0.4424
C_65	HCC_with_cir	0.656	early HCC	0.6228
C_31	HCC_with_cir	0.304	early HCC	0.3366
C_99	HCC_with_cir	0.768	early HCC	0.7298
C_76	HCC_with_cir	0.318	early HCC	0.3342
C_37	HCC_with_cir	0.306	early HCC	0.2296
C_HCC201	HCC_with_cir	0.4	early HCC	0.3776
C_66	HCC_with_cir	0.268	early HCC	0.273
C_HCC172	HCC_with_cir	0.324	early HCC	0.3684
C_78	HCC_with_cir	0.396	early HCC	0.3456
C_107	HCC_with_cir	0.742	early HCC	0.6166
C_35	HCC_with_cir	0.38	early HCC	0.396
HN_1	Zhengzhou	0.486	Zhengzhou	0.4612
HN_10	Zhengzhou	0.188	Zhengzhou	0.1858
HN_2	Zhengzhou	0.422	Zhengzhou	0.5008
HN_3	Zhengzhou	0.384	Zhengzhou	0.4338
HN_4	Zhengzhou	0.804	Zhengzhou	0.7456
HN_5	Zhengzhou	0.73	Zhengzhou	0.6572
HN_6	Zhengzhou	0.138	Zhengzhou	0.154
HN_7	Zhengzhou	0.528	Zhengzhou	0.4986
HN_8	Zhengzhou	0.48	Zhengzhou	0.4646
HN_9	Zhengzhou	0.526	Zhengzhou	0.513
XJ_1	Xinjiang	0.386	Xinjiang	0.3832

XJ_10	Xinjiang	0.364	Xinjiang	0.3816
XJ_11	Xinjiang	0.614	Xinjiang	0.6076
XJ_12	Xinjiang	0.63	Xinjiang	0.5722
XJ_13	Xinjiang	0.464	Xinjiang	0.4358
XJ_14	Xinjiang	0.69	Xinjiang	0.6914
XJ_15	Xinjiang	0.514	Xinjiang	0.5294
XJ_16	Xinjiang	0.484	Xinjiang	0.4844
XJ_17	Xinjiang	0.792	Xinjiang	0.735
XJ_18	Xinjiang	0.426	Xinjiang	0.418
XJ_2	Xinjiang	0.684	Xinjiang	0.643
XJ_3	Xinjiang	0.762	Xinjiang	0.7186
XJ_4	Xinjiang	0.156	Xinjiang	0.1616
XJ_5	Xinjiang	0.506	Xinjiang	0.4726
XJ_6	Xinjiang	0.43	Xinjiang	0.4024
XJ_7	Xinjiang	0.174	Xinjiang	0.1582
XJ_8	Xinjiang	0.4	Xinjiang	0.399
XJ_9	Xinjiang	0.302	Xinjiang	0.2894
ZD_1	Zhengzhou	0.558	Zhengzhou	0.588
ZD_10	Zhengzhou	0.446	Zhengzhou	0.4142
ZD_11	Zhengzhou	0.354	Zhengzhou	0.3558
ZD_12	Zhengzhou	0.674	Zhengzhou	0.6376
ZD_13	Zhengzhou	0.644	Zhengzhou	0.6062
ZD_14	Zhengzhou	0.414	Zhengzhou	0.4008
ZD_16	Zhengzhou	0.594	Zhengzhou	0.5628
ZD_17	Zhengzhou	0.668	Zhengzhou	0.6838
ZD_18	Zhengzhou	0.468	Zhengzhou	0.4722
ZD_19	Zhengzhou	0.598	Zhengzhou	0.6164
ZD_2	Zhengzhou	0.34	Zhengzhou	0.3628
ZD_20	Zhengzhou	0.38	Zhengzhou	0.366
ZD_21	Zhengzhou	0.618	Zhengzhou	0.6104
ZD_22	Zhengzhou	0.256	Zhengzhou	0.2812
ZD_23	Zhengzhou	0.508	Zhengzhou	0.5062
ZD_24	Zhengzhou	0.56	Zhengzhou	0.5094
ZD_25	Zhengzhou	0.388	Zhengzhou	0.3858
ZD_26	Zhengzhou	0.468	Zhengzhou	0.463
ZD_27	Zhengzhou	0.488	Zhengzhou	0.4754
ZD_28	Zhengzhou	0.366	Zhengzhou	0.352
ZD_29	Zhengzhou	0.446	Zhengzhou	0.5036
ZD_3	Zhengzhou	0.546	Zhengzhou	0.5096
ZD_30	Zhengzhou	0.698	Zhengzhou	0.6538
ZD_31	Zhengzhou	0.318	Zhengzhou	0.309
ZD_32	Zhengzhou	0.556	Zhengzhou	0.5602
ZD_33	Zhengzhou	0.454	Zhengzhou	0.4504
ZD_34	Zhengzhou	0.538	Zhengzhou	0.495
ZD_35	Zhengzhou	0.41	Zhengzhou	0.4296
ZD_36	Zhengzhou	0.818	Zhengzhou	0.7462
ZD_37	Zhengzhou	0.472	Zhengzhou	0.466
ZD_38	Zhengzhou	0.586	Zhengzhou	0.53

ZD_39	Zhengzhou	0.354	Zhengzhou	0.3586
ZD_4	Zhengzhou	0.306	Zhengzhou	0.3226
ZD_40	Zhengzhou	0.466	Zhengzhou	0.4446
ZD_41	Zhengzhou	0.636	Zhengzhou	0.5852
ZD_42	Zhengzhou	0.666	Zhengzhou	0.6596
ZD_43	Zhengzhou	0.18	Zhengzhou	0.2038
ZD_44	Zhengzhou	0.312	Zhengzhou	0.3332
ZD_45	Zhengzhou	0.302	Zhengzhou	0.2862
ZD_46	Zhengzhou	0.612	Zhengzhou	0.5802
ZD_47	Zhengzhou	0.668	Zhengzhou	0.6292
ZD_48	Zhengzhou	0.446	Zhengzhou	0.5034
ZD_49	Zhengzhou	0.468	Zhengzhou	0.496
ZD_5	Zhengzhou	0.28	Zhengzhou	0.3038
ZD_50	Zhengzhou	0.684	Zhengzhou	0.652
ZD_51	Zhengzhou	0.216	Zhengzhou	0.2364
ZD_52	Zhengzhou	0.612	Zhengzhou	0.6162
ZD_53	Zhengzhou	0.37	Zhengzhou	0.3664
ZD_54	Zhengzhou	0.654	Zhengzhou	0.6896
ZD_55	Zhengzhou	0.658	Zhengzhou	0.6066
ZD_56	Zhengzhou	0.364	Zhengzhou	0.4062
ZD_57	Zhengzhou	0.526	Zhengzhou	0.5246
ZD_58	Zhengzhou	0.27	Zhengzhou	0.2714
ZD_59	Zhengzhou	0.326	Zhengzhou	0.3598
ZD_6	Zhengzhou	0.502	Zhengzhou	0.4846
ZD_60	Zhengzhou	0.52	Zhengzhou	0.4926
ZD_61	Zhengzhou	0.568	Zhengzhou	0.5228
ZD_62	Zhengzhou	0.53	Zhengzhou	0.5158
ZD_63	Zhengzhou	0.476	Zhengzhou	0.4674
ZD_64	Zhengzhou	0.686	Zhengzhou	0.6456
ZD_65	Zhengzhou	0.328	Zhengzhou	0.3602
ZD_66	Zhengzhou	0.566	Zhengzhou	0.57
ZD_67	Zhengzhou	0.598	Zhengzhou	0.5962
ZD_68	Zhengzhou	0.592	Zhengzhou	0.6308
ZD_69	Zhengzhou	0.358	Zhengzhou	0.4026
ZD_7	Zhengzhou	0.264	Zhengzhou	0.2506
ZD_70	Zhengzhou	0.442	Zhengzhou	0.4276
ZD_71	Zhengzhou	0.57	Zhengzhou	0.536
ZD_8	Zhengzhou	0.542	Zhengzhou	0.5074
ZD_9	Zhengzhou	0.758	Zhengzhou	0.7194