



Fig. S1 Comparison between gut microbiome in metabolically healthy obese (n=172) and metabolically unhealthy obese individuals (n=138) from Quanzhou. (A) Box plot of the gene count in metabolically healthy obese and metabolically unhealthy obese individuals. (B) Shannon diversity; (C) and Firmicutes/Bacteroidetes (F/B) ratio. For A–C, two -tailed Wilcoxon rank-sum test was used to determine significance. Boxes represent the interquartile ranges (IQRs) between the first and third quartiles, and the line inside the box represents the median; whiskers represent the lowest or highest values within 1.5 times IQR from the first or third quartiles.

Table S1. Sample information															
Sample	Sex	Age	BMI	WL	SBP	DBP	GLU	TC	TG	LDL	HDL	UA	eGFR	Area	Class
90043605	M	58	27.6	95.5	114	69	4.87	4.29	0.54	1.9	1.57	373.7	112	ChongQing	MHO
DME03088	M	24	26.6	91.5	141	81	4.51	6.7	1.56	3.6	1.14	365	126	ChongQing	MHO
DME03101	F	42	25.4	79.2	149	105	5.55	4.57	1.58	2.23	1.35	350.6	152	ChongQing	MHO
DME03104	F	49	29.3	94	99	68	5.35	4.25	1	2.14	1.21	380.1	134	ChongQing	MHO
DME03106	F	51	25.6	83	133	83	4.87	6.42	0.71	3.5	1.57	258.8	102	ChongQing	MHO
DME03111	F	27	29.5	89.6	105	80	5.87	4.66	1.12	2.43	1.27	399.2	136	ChongQing	MHO
DME03116	F	51	25	75	106	64	4.71	5.66	2.95	2.83	1.49	229.2	117	ChongQing	MHO
DME03140	M	39	25.5	90	110	88	5.04	5.12	2.42	2.79	1.29	341.6	111	ChongQing	MHO
DME03150	M	52	27.9	90	124	79	5.73	6.1	3.52	3.33	1.14	329.5	85	ChongQing	MHO
DME03176	M	52	25.7	86.8	145	101	5.21	5.08	1.21	2.62	1.42	376.2	105	ChongQing	MHO
DME03192	M	29	32.2	98.5	133	78	5.08	3.52	1.55	1.77	1.08	306.7	87	ChongQing	MHO
DME03204	F	53	31.7	91	167	82	6.08	4.91	1.57	2.51	1.47	305.4	106	ChongQing	MHO
DME03209	F	60	26.2	93	123	60	5.28	5.3	1.41	2.47	1.93	175.3	89	ChongQing	MHO
DME03219	F	44	26.4	85	164	108	5.69	4.33	1.39	2.3	1.15	301.6	129	ChongQing	MHO
DME03228	M	58	26.8	89	145	104	5.42	6.21	1.66	3.37	1.64	351.7	102	ChongQing	MHO
DME03244	M	48	26.3	85.6	116	79	5.51	3.66	1.47	1.93	0.95	378.8	165	ChongQing	MHO
DME03246	M	31	28.1	95.2	114	81	5.29	4.89	1.59	2.49	1.23	385.9	71	ChongQing	MHO
DME03251-1	M	48	26.8	89.6	100	67	5.29	5.04	4.16	2.57	1.09	379.5	129	ChongQing	MHO
DME03257	F	39	28.8	87	96	64	5.1	3.98	0.83	2.09	1.24	376.9	79	ChongQing	MHO
DME03335	F	53	25.8	77	135	90	5.45	4.34	1.69	2.23	1.35	301.8	143	ChongQing	MHO
DME03336	F	48	25.1	76	130	92	5.24	5.13	0.7	1.75	2.9	287.8	97	ChongQing	MHO
DME03337	F	50	25	80	130	82	4.82	5.46	3.22	3.03	1.18	307.4	115	ChongQing	MHO
DME03339	F	50	26.3	93	180	61	4.98	4.93	0.91	2.71	1.26	381.5	124	ChongQing	MHO

DME03341	F	45	25.8	80	100	72	5.14	6.32	1.89	3.54	1.35	311.6	105	ChongQing	MHO
DME03355	M	43	26	90.2	115	77	5.45	6.34	1.67	3.31	1.8	353.1	112	ChongQing	MHO
DME03356	F	46	25.4	80	98	74	4.95	4.65	1.56	2.72	0.9	351.6	125	ChongQing	MHO
DME03361	M	50	27.2	87	125	88	8.1	5.87	1.24	3.11	1.39	327.5	99	ChongQing	MHO
DME03362	F	39	26.6	79.4	144	86	5.22	4.82	1.66	2.62	1.05	329.1	144	ChongQing	MHO
DME03374	M	43	26	87	141	90	5.62	4.66	1.09	2.3	1.53	304.9	118	ChongQing	MHO
DME03381	M	54	26.7	87.4	112	70	7.71	4.78	0.63	2.23	1.85	296	109	ChongQing	MHO
DME03385	F	31	32.3	93	102	71	5.3	5.23	1.4	2.83	1.22	382.9	124	ChongQing	MHO
DME03386	M	45	27.5	87	147	103	5.27	3.91	1.22	1.98	1.19	364.2	110	ChongQing	MHO
DME03393	M	36	28.6	93.6	113	63	5	5.46	1.59	2.85	1.36	361.5	78	ChongQing	MHO
DME03396	F	53	27.3	84	150	84	4.84	2.93	1.26	1.26	1.05	383	116	ChongQing	MHO
DME03414	M	43	25.6	82.1	111	73	5.14	5.55	1.42	2.87	1.3	370.7	80	ChongQing	MHO
DME03471	F	34	36.6	107.5	118	90	5.49	4.69	1.43	2.52	1.09	383.6	124	ChongQing	MHO
DME03480	M	50	25.6	86.6	103	63	5.35	4.48	1.44	2.14	1.11	366.5	81	ChongQing	MHO
DME03483	F	45	25.6	91	101	70	5.64	4.97	1.27	2.58	1.33	387.4	88	ChongQing	MHO
DME03485	M	31	26.4	89.5	116	78	4.92	3.83	1.48	1.91	0.9	371.9	109	ChongQing	MHO
DME03491	F	46	25.4	81	121	73	4.85	6.43	1.61	3.17	1.49	277.5	100	ChongQing	MHO
DME03495	M	38	25.7	87	123	92	5.54	3.68	1.99	1.64	1.35	346.3	111	ChongQing	MHO
DME03499-1	F	40	28.4	84	112	80	4.96	3	1.58	1.38	0.91	226.7	129	ChongQing	MHO
DME03514	F	43	28.6	91.5	113	80	5.96	4.55	1.39	2.17	1.26	399.3	140	ChongQing	MHO
DME03515	F	39	26.6	83	110	75	4.9	3.7	1.41	1.82	0.95	337.5	127	ChongQing	MHO
DME03519	F	51	25.7	84.3	118	66	4.98	4.78	1.29	2.46	1.35	220.4	86	ChongQing	MHO
DME03534	M	45	29.1	96	119	82	5.98	5.3	1.22	2.83	1.29	384.9	83	ChongQing	MHO
DME03538	F	42	31.2	94.5	102	62	5.54	4.29	1.08	2.17	1.17	359.6	111	ChongQing	MHO
DME03892	F	50	25.2	87.2	140	80	5.63	4.65	1.6	2.08	1.73	232	122	ChongQing	MHO

DME03894	F	49	35.5	107.5	113	78	5.61	6.91	1.67	3.57	1.54	287.4	112	ChongQing	MHO
DME03903	F	64	25.7	93.5	119	71	5.56	5.7	0.93	2.91	1.73	299.3	96	ChongQing	MHO
DME03908	M	58	25.4	84	114	76	5.17	4	1.09	2.08	0.98	322.1	97	ChongQing	MHO
DME03910	F	45	27.1	81.6	121	72	5.17	5.12	1.44	2.64	1.13	301.6	126	ChongQing	MHO
DME03923	F	49	27	86.2	109	67	5.13	4.96	0.72	2.2	1.86	202.8	126	ChongQing	MHO
DME03925	M	25	31.5	105.2	120	74	4.96	4.04	0.68	1.89	1.31	363.1	142	ChongQing	MHO
DME03943	F	44	25.2	88.2	114	82	5.75	5.09	1.41	2.67	1.41	298.3	95	ChongQing	MHO
DME03944	M	46	27.4	98	127	86	5.18	4.18	1.37	2.1	1.29	262.9	99	ChongQing	MHO
DME03953	F	49	25	80	145	94	5.92	5.74	1.36	2.85	1.65	244.3	126	ChongQing	MHO
DME03959	F	47	27.9	92	125	78	5.84	5.51	0.76	2.69	1.77	240.5	100	ChongQing	MHO
DME03961	F	62	29.6	85	133	79	5.29	5.95	1.4	3.18	1.33	317.8	78	ChongQing	MHO
DME03969	F	52	27.2	88.2	122	76	5.3	5.5	1.6	2.96	1.34	248.2	134	ChongQing	MHO
DME04006	M	43	27.4	89	114	69	5.57	5.65	1.55	3.24	1.07	290	107	ChongQing	MHO
DME04011	F	52	25.9	81	121	79	5.39	6.6	1.88	3.64	1.33	296.9	106	ChongQing	MHO
DME04024	F	42	26.4	85.2	132	82	5.14	4.05	0.94	2.08	1.12	307.8	125	ChongQing	MHO
DME04705-w	M	53	27.8	97.1	131	75	5.97	5.22	0.89	2.36	1.86	311.2	129	ChongQing	MHO
DME04706	F	30	27.1	89.2	109	78	5.47	3.67	0.47	1.75	1.36	285.2	144	ChongQing	MHO
DME04711	M	45	25.6	86	107	82	5.19	5.88	1.7	3.24	1.11	343.9	81	ChongQing	MHO
DME04712	F	57	28.7	96.8	122	80	5.35	5.79	1.12	3.07	1.55	286.5	135	ChongQing	MHO
DME04715	F	28	28.1	83	114	81	5.14	5.1	1.7	2.52	1.4	312.9	126	ChongQing	MHO
DME04717	F	49	26.7	84.8	144	80	5.13	5.2	3.1	2.6	1.14	343.9	111	ChongQing	MHO
DME04722	F	55	26.1	85.1	116	60	5.18	4.87	1.02	2.45	1.26	333.4	126	ChongQing	MHO
DME04752	F	33	27.8	87.2	120	74	4.32	4.41	1.45	2.03	1.43	261.7	128	ChongQing	MHO
DME04753	F	43	27.6	84	112	78	5.78	6.07	0.87	2.92	1.89	386.9	146	ChongQing	MHO
DME04756	F	33	30.4	88.2	123	71	5.48	4.57	1.35	2.24	1.22	369	123	ChongQing	MHO

DME04757	M	47	25.6	90.2	117	56	5.46	5.51	1.21	2.93	1.16	328.5	131	ChongQing	MHO
DME04764	F	35	27.3	86	99	71	5.41	3.17	0.48	1.47	1.11	269.3	115	ChongQing	MHO
DME04767	F	48	28.3	85	118	70	5.99	6.07	1.74	3.01	1.42	200.5	128	ChongQing	MHO
DME04772	M	53	27.4	90	117	76	5.73	7.75	1.7	3.75	2.17	371.3	106	ChongQing	MHO
DME04777	M	33	29	96.1	122	73	4.86	6.21	1.5	3.16	1.38	368.3	137	ChongQing	MHO
DME04792	F	45	28.9	102	122	73	5.18	4.36	1.53	2.05	1.31	254.6	148	ChongQing	MHO
DME04794	F	32	27.3	80.2	115	72	4.88	4.95	1.53	2.4	1.33	241.6	154	ChongQing	MHO
DME04802	F	47	28.5	82.3	132	91	5.81	4.76	1.33	2.19	1.69	303	116	ChongQing	MHO
DME04807	M	53	28.6	96.1	132	79	5.36	6.56	1.32	3.48	1.26	296.3	116	ChongQing	MHO
DME04809	F	28	25.4	82.6	104	75	5.12	4.49	0.77	2.04	1.57	228	162	ChongQing	MHO
DME04813	F	63	27.8	84.2	138	74	5.83	7.01	1.14	3.37	1.47	281.7	98	ChongQing	MHO
DME04816	M	40	26.1	89	112	80	5.41	3.53	0.98	1.75	0.99	394.6	106	ChongQing	MHO
DME04843	F	27	29.7	92.6	119	79	5.57	4.8	1.17	1.83	1.3	345.1	146	ChongQing	MHO
DME04845	F	60	33	113	150	82	6.04	6.14	1.09	2.35	1.63	335.9	110	ChongQing	MHO
DME04847	M	49	28.5	91.3	131	82	5.43	5.42	0.85	2.23	1.19	379.3	125	ChongQing	MHO
DME04849	F	44	25.9	80.8	117	77	5.32	5.55	1.37	3.08	1.29	296.2	98	ChongQing	MHO
DME04863	F	28	31.7	91.2	137	83	5.04	5.14	0.94	2.53	1.57	352.5	173	ChongQing	MHO
DME04866	F	45	26.8	88.2	105	62	5.58	5.98	1.23	3.04	1.34	268.4	118	ChongQing	MHO
DME04874	M	43	26.7	86	115	76	5.2	4.58	1.45	1.72	1.27	344.9	121	ChongQing	MHO
DME04875	F	57	27.3	94	112	56	5.78	3.88	0.68	1.33	1.33	298.3	130	ChongQing	MHO
DME04878	F	44	27.1	84	140	94	4.72	5.01	0.78	2.36	1.7	327.5	125	ChongQing	MHO
DME04880	M	50	25.4	84	157	92	5.74	6.01	1.47	2.91	1.79	348.8	106	ChongQing	MHO
DME04884	M	46	26.5	95	125	88	5.98	5.29	1.21	2.52	1.71	308.7	121	ChongQing	MHO
DME04890	F	48	35.3	112.6	132	82	5.91	4.78	1.54	2.4	1.23	298.9	127	ChongQing	MHO
DME04900	F	29	29.5	100.4	95	65	5.37	3.81	0.89	1.72	1.3	364.8	125	ChongQing	MHO

DME04908	F	42	27	88	140	84	5.27	5.84	0.88	2.59	2	235	153	ChongQing	MHO
DME04910	M	41	26.5	88.1	106	69	4.99	6.06	2.93	3.23	1.13	337.7	106	ChongQing	MHO
DME04911	F	24	25.7	88	121	95	4.94	5.42	1.31	2.54	1.51	375	127	ChongQing	MHO
DME04929	M	40	26.5	88.2	111	78	5.65	4.96	1.65	2.06	1.1	361.2	112	ChongQing	MHO
DME05000-W	F	32	27.2	89	108	62	5.42	5.4	0.92	2.76	1.27	311.8	138	ChongQing	MHO
DME05003	M	46	26.7	88.1	129	82	5.24	4.36	1.58	2.23	1.05	373.4	127	ChongQing	MHO
DME05007	F	31	30.1	86.6	129	76	5.56	6.7	1.11	3.48	1.37	374.1	127	ChongQing	MHO
DME05011	F	46	25.5	85.3	96	62	5.45	5.32	0.99	2.48	1.46	216.6	161	ChongQing	MHO
DME05024	F	23	28.2	86.2	98	60	5.41	4.59	0.72	2.28	1.16	378.9	154	ChongQing	MHO
DME05082	F	34	26.1	78	105	79	5.27	4.73	0.91	1.54	1.6	300.4	93	ChongQing	MHO
DME05099	F	40	29.5	96	122	71	4.69	5.79	1.1	2.54	2.14	230.5	157	ChongQing	MHO
DME05101	F	36	25.6	84.2	114	70	5.84	3.84	0.85	1.86	0.92	217.1	154	ChongQing	MHO
DME05111	F	29	25.7	84.2	115	70	5.19	3.71	0.65	1.32	1.91	313.3	145	ChongQing	MHO
DME05113	M	41	28.5	88.8	125	88	5.5	5.9	3.15	3.12	1.11	261.3	100	ChongQing	MHO
DME05114	F	58	25.9	84.5	116	74	5.22	6.66	1.7	3.51	1.39	259.1	93	ChongQing	MHO
DME05267	M	45	33.3	87	132	81	5.69	6.32	3.18	3.26	1.43	362.4	144	ChongQing	MHO
DME05321	F	53	26.4	78.1	106	68	5.72	6.62	1.25	3.32	1.52	327.2	92	ChongQing	MHO
DME05322	F	41	27.6	82.1	95	65	5.21	3.74	0.9	1.55	1.57	361.5	138	ChongQing	MHO
DME05323	M	34	26.8	93	111	81	4.59	4.74	1.28	2.4	1.13	324.8	98	ChongQing	MHO
DME05330	F	41	28.1	89.4	126	90	6.03	5.35	0.9	2.5	1.64	247.1	171	ChongQing	MHO
DME05333	F	36	27.6	83	145	101	4.19	5.4	1.26	2.53	1.51	344.4	132	ChongQing	MHO
DME05340	F	51	26	84	124	82	5.79	5.58	2.22	2.29	2.33	378.8	105	ChongQing	MHO
DME05475	M	44	27	89	106	70	6.08	4.41	2.73	2.12	1.32	397.2	102	ChongQing	MHO
DME05493	M	51	25.2	87.2	142	94	5.29	4.65	0.96	2.31	1.19	275.2	120	ChongQing	MHO
DME05506	F	49	26.5	83	136	84	5.94	5.27	5.13	2.48	1.05	357	127	ChongQing	MHO

DME05510	F	53	25.6	79.4	141	80	5.85	5.81	2.27	2.87	1.31	343.8	91	ChongQing	MHO
DME05517	M	59	27.9	99.2	114	65	6.09	7.03	1.24	3.35	2.07	303.2	100	ChongQing	MHO
DME05522	F	52	25.5	80	142	81	5.09	5.03	1.19	2.56	1.14	225	143	ChongQing	MHO
DME05540	M	41	28.7	101.2	112	79	5.55	4.36	1.52	2.7	1.08	329.7	89	ChongQing	MHO
DME05571	M	44	25.1	84.2	147	97	5.94	4.85	1.4	2.44	1.2	384.8	90	ChongQing	MHO
DME05580	F	53	27.5	80	125	90	5.57	4.7	0.89	2.3	1.3	226.7	106	ChongQing	MHO
DME05582	F	53	26.6	88.4	122	78	4.97	5.48	1.37	2.66	1.43	364.5	97	ChongQing	MHO
DME05597	M	47	27.3	90	148	94	5.07	4.71	0.89	2.39	1.41	268.4	123	ChongQing	MHO
DME05715	F	50	27.2	78	130	82	5.99	6.44	1.65	3.17	1.48	284.9	126	ChongQing	MHO
DME05794	F	33	28	98.2	114	84	5.29	4.59	1.35	2.18	1.22	375.6	168	ChongQing	MHO
DME05915	F	55	30.6	82.1	140	88	4.79	5.52	0.82	2.38	1.95	346.4	107	ChongQing	MHO
DME05932	M	44	27.4	90	100	61	5.64	4.42	1.11	2.4	0.9	364.6	109	ChongQing	MHO
DME05936	F	61	25.4	80	106	72	5.23	5.55	5.54	2.63	1.17	264.9	113	ChongQing	MHO
DME05948	F	51	25.1	76.2	117	74	4.98	6.45	1.52	3.04	1.61	251.1	130	ChongQing	MHO
DME05949	F	35	27.7	92	119	91	4.59	5.58	0.6	2.93	1.35	387.8	132	ChongQing	MHO
DME05951	M	51	25.8	85	111	68	6.2	6.37	1.07	3.4	1.43	343.7	95	ChongQing	MHO
DME05960	F	60	26.6	85.5	144	83	4.99	5.07	1.32	2.56	1.43	176.3	148	ChongQing	MHO
DME06157	F	31	25	84.5	96	58	5.05	5.48	0.46	2.71	1.71	246.1	145	ChongQing	MHO
DME06160	M	40	26.4	86.4	136	105	5.59	5.81	1.63	2.9	1.38	308.7	149	ChongQing	MHO
DME06202	F	42	25	92	111	79	4.53	5.2	0.9	2.27	1.68	232.8	139	ChongQing	MHO
DME06210	F	41	27.6	81.3	121	71	7.33	4.34	1.09	2.23	1.39	253.3	196	ChongQing	MHO
DME06211	F	41	25.5	84.4	122	65	4.74	4.36	0.93	2.35	1.14	231.4	107	ChongQing	MHO
DME06217	F	40	27.1	84.2	110	71	5.16	5.25	1.07	2.67	1.22	289.4	102	ChongQing	MHO
DME06218	F	47	28.4	88	98	66	5.74	3.53	0.64	1.58	1.15	307.7	111	ChongQing	MHO
DME06220	F	38	26.1	78.2	103	71	5.26	4.87	0.64	2.4	1.54	232.9	146	ChongQing	MHO

DME06223	M	45	26.8	96.2	124	85	5.85	6.32	1.65	3.29	1.13	377.5	114	ChongQing	MHO
DME06230	F	54	28.4	91.2	138	83	5.41	4.51	1.24	2.16	1.48	256.5	151	ChongQing	MHO
DME06231	F	55	25.4	73.2	120	85	5.14	6.14	2.12	3.08	1.45	301.4	148	ChongQing	MHO
DME06232	M	42	29	98.9	125	78	5.75	6.25	1.38	3.33	1.25	393.1	134	ChongQing	MHO
DME06233	M	37	28.4	95.2	113	66	6.09	5.6	1.36	2.92	1.34	372.2	127	ChongQing	MHO
DME06234	M	45	31.5	106.3	149	75	4.92	5.9	1.6	3.25	1.23	368.9	104	ChongQing	MHO
DME06243	F	36	26.6	78	91	51	4.72	3.51	0.81	1.69	1.28	168.5	142	ChongQing	MHO
DME06252	F	53	27	82	102	68	5.59	6.38	2.42	3.24	1.56	354.5	93	ChongQing	MHO
DME06268	M	34	26.9	94.2	115	70	5.26	4.94	1.54	2.44	1.4	352.6	136	ChongQing	MHO
DME06288	M	45	29.4	98	149	84	5.8	5.16	1.68	2.73	1.39	374.3	95	ChongQing	MHO
DME06298	F	58	27.7	88	129	84	5.64	4.75	0.88	1.55	2.28	290.4	151	ChongQing	MHO
DME06338	F	51	25	87	123	94	5.99	6.51	1.15	3.4	1.83	257.8	120	ChongQing	MHO
DME06344	M	42	27	90	116	71	5.4	4.61	1	2.34	1.22	346.9	84	ChongQing	MHO
DME06345	M	63	26	88.5	139	88	4.8	5.91	1.65	2.81	1.76	346.6	86	ChongQing	MHO
DME06384-w	F	50	28.3	93.4	128	88	5.39	6.2	1.34	2.77	1.94	248.6	102	ChongQing	MHO
DME06449	F	46	26.2	80.4	154	95	4.92	5.95	1.32	3.15	1.36	354.3	115	ChongQing	MHO
DME06463	F	36	26.4	88	146	81	4.97	4.82	1.43	3.76	1.34	314	181	ChongQing	MHO
DME06533	M	56	26.2	90	112	67	5.62	5.03	1.05	2.43	1.38	320.5	86	ChongQing	MHO
DME06539	M	53	28.3	98	135	64	5.22	5.07	1.33	2.63	1.27	357.3	116	ChongQing	MHO
DME06676	F	52	34.9	114	117	68	6.06	6.53	0.94	3.13	2.04	336.1	115	ChongQing	MHO
DME06681	F	58	29.8	88	109	67	5.41	5.68	1.35	2.76	1.62	238.3	109	ChongQing	MHO
DSFP00812	M	41	25.4	90	117	72	5.53	5.66	2.2	2.93	1.45	366.5	95	ChongQing	MHO
DSFP00934	F	59	28.6	84.2	152	89	5.1	5.46	1.23	2.48	1.7	271.7	105	ChongQing	MHO
DSFP00988	F	61	28.4	85	140	75	5.94	6.38	1.46	3.08	1.99	308.8	101	ChongQing	MHO
90042801	M	41	27.1	96.2	112	76	4.7	5.07	1.93	2.71	1	466.1	139	ChongQing	MUO

90043608	M	24	27.5	98.3	172	113	5.71	5.39	2.74	2.79	0.97	414.3	152	ChongQing	MUO
DME03089	M	45	29.2	103.2	125	76	6.17	5.3	11.84	1.92	0.65	406.7	113	ChongQing	MUO
DME03100	M	44	26.8	90.4	127	77	5.76	4.95	3.09	2.61	0.91	421.5	98	ChongQing	MUO
DME03107-w	M	29	35	104.5	130	69	5.59	4.22	2.94	2.28	0.78	672.1	147	ChongQing	MUO
DME03110	M	61	27.9	95	135	86	9.05	4.81	1.45	2.52	1.26	411.6	123	ChongQing	MUO
DME03119	M	52	29.3	97.8	119	69	5.25	4.37	3.14	2.27	0.95	424.2	91	ChongQing	MUO
DME03127	M	41	32.3	99.2	135	76	6.79	3.41	1.86	1.89	0.68	418.6	96	ChongQing	MUO
DME03134	M	38	32.6	105	117	69	10.02	5.42	2.18	2.9	1.22	400.2	136	ChongQing	MUO
DME03146	M	35	38.3	125.3	127	87	5.15	6.26	2.1	3.73	1.03	460.1	113	ChongQing	MUO
DME03153	F	40	36.4	105	118	63	5.71	4.11	2.19	2.15	1.04	425.2	119	ChongQing	MUO
DME03157	M	43	28.6	98	117	86	5.75	3.93	2.44	2.25	0.86	406.8	104	ChongQing	MUO
DME03158	M	48	26.7	95	113	75	5.49	4.54	2.92	2.36	1.02	408.4	123	ChongQing	MUO
DME03163	M	40	29.3	98.4	111	67	4.93	6.31	4.85	3.19	0.97	554.2	97	ChongQing	MUO
DME03164	M	32	34.4	103.6	134	73	5.22	5.15	3.58	2.68	0.9	427.2	90	ChongQing	MUO
DME03166	M	45	26.7	94.6	144	92	5.23	4.75	1.95	2.47	1.27	405.8	110	ChongQing	MUO
DME03175	M	31	28.8	98	120	72	5.28	4.26	4.26	2.31	0.79	496.1	101	ChongQing	MUO
DME03186	M	42	28.8	92.5	133	71	5.25	3.36	3.51	1.86	0.66	543.8	96	ChongQing	MUO
DME03187	M	43	27.6	91.5	110	77	6.31	5.13	2.64	2.71	1.18	407.2	106	ChongQing	MUO
DME03195	M	18	32.1	109	118	69	4.46	3.87	12.57	1.26	0.63	544.6	152	ChongQing	MUO
DME03212	M	37	29.7	104.1	128	88	6.22	6.68	3.4	3.36	1.21	408.2	120	ChongQing	MUO
DME03213	M	46	26	93.2	123	77	6.8	4.15	1.37	2.26	0.99	416.7	96	ChongQing	MUO
DME03214	M	41	32.5	95	136	94	5.5	5.51	1.98	3.16	1.15	457.9	103	ChongQing	MUO
DME03217-w	M	27	31.2	97	132	72	4.49	4.73	1.8	2.67	0.91	725.4	135	ChongQing	MUO
DME03222	M	22	30.3	94.1	110	76	5.56	4.59	2.67	2.46	0.84	472.1	107	ChongQing	MUO
DME03241	M	45	30	102.1	124	83	5.8	3.88	3.58	2	0.89	507.3	102	ChongQing	MUO

DME03242	M	42	28.2	97.2	113	73	5.85	5.15	4.8	2.71	0.84	432.5	94	ChongQing	MUO
DME03248	M	32	27.3	95.2	135	90	5.93	5.63	2	3.07	1.36	465.1	94	ChongQing	MUO
DME03259	F	50	33.4	96.5	126	88	6.76	6.36	3.89	3.43	0.99	404.5	103	ChongQing	MUO
DME03260	M	23	36.7	113.1	134	75	4.97	6.44	2.04	3.59	1.01	500.2	95	ChongQing	MUO
DME03264	M	36	31.3	107.2	130	82	7.47	5.6	2.09	2.99	1.14	474.7	102	ChongQing	MUO
DME03338	M	30	31.1	94	137	87	5.34	5.06	3.84	2.76	0.95	527.1	93	ChongQing	MUO
DME03350	M	47	28	92.6	117	81	4.63	5.79	1.75	3.34	1.02	420.2	93	ChongQing	MUO
DME03358	M	53	26.5	95.3	121	75	6.88	3.71	3.58	1.92	0.87	446	115	ChongQing	MUO
DME03365	M	19	34.7	102.6	133	86	5.01	5.57	1.96	3.17	0.96	486.7	173	ChongQing	MUO
DME03367	M	54	27.6	97.8	179	96	5.89	5.16	1.71	2.47	1.69	413.1	91	ChongQing	MUO
DME03383	M	31	29.4	99.4	115	77	5.64	5.2	4.75	2.64	1.03	454.5	119	ChongQing	MUO
DME03401	F	45	33.6	90	104	83	5.29	4.41	2.2	2.36	1	665.8	90	ChongQing	MUO
DME03405	M	40	29.2	95	130	92	6.05	4.65	2.17	2.6	0.87	402.6	109	ChongQing	MUO
DME03409	M	50	30.2	101.2	145	97	5.8	5.51	1.81	2.96	1.18	441.2	115	ChongQing	MUO
DME03413	M	43	31.7	106.2	121	74	4.39	5.45	2.83	2.94	1.01	464.1	107	ChongQing	MUO
DME03475	M	34	29	96	113	86	4.65	5.62	11.84	2.17	0.7	436.1	153	ChongQing	MUO
DME03477	M	48	31.2	101.7	140	97	5.32	4.21	1.46	2.18	0.97	405.1	101	ChongQing	MUO
DME03481	M	29	35.5	113.5	123	79	6.28	6.12	5.59	2.95	1.21	535.5	117	ChongQing	MUO
DME03487	M	29	34.3	112	150	94	5.69	5.74	1.87	0.97	3.95	509.2	133	ChongQing	MUO
DME03493	M	47	30.2	99.5	114	77	5.34	4.38	3.46	2.18	0.8	528.4	126	ChongQing	MUO
DME03497	F	53	28.7	87.5	111	71	5.74	5.02	1.9	2.66	0.94	453.7	119	ChongQing	MUO
DME03520	M	42	28	102	122	88	5.17	5.83	15.8	1.86	0.69	477.1	207	ChongQing	MUO
DME03539-W	M	34	29.6	96	117	62	4.9	4.49	4.91	2.23	0.91	518.9	99	ChongQing	MUO
DME03901	M	31	31.9	103	132	88	5.3	5.05	1.94	2.61	1.07	453.1	101	ChongQing	MUO
DME03916	M	31	28.8	98.4	139	87	5.91	4.73	1.85	2.42	0.9	430.2	108	ChongQing	MUO

DME03947	M	44	27	91.8	139	86	5.54	4.79	2.11	2.36	1.38	435.7	99	ChongQing	MUO
DME03950	M	58	34.1	117	116	72	6.6	3.86	2.02	1.97	0.9	443.7	108	ChongQing	MUO
DME03979	M	44	27.8	95.2	132	90	5.14	5.86	1.78	2.96	1.67	417.6	107	ChongQing	MUO
DME03984	M	45	29.9	100	116	79	5.08	4.94	2.75	2.81	0.84	411.8	90	ChongQing	MUO
DME03988	M	29	35.4	113.4	153	90	4.92	6.3	3.51	3.48	1.14	412.9	116	ChongQing	MUO
DME03989	M	46	33.5	112.9	163	100	6.18	5.26	1.88	2.88	1.14	482.8	108	ChongQing	MUO
DME04000	M	37	30.1	95	126	86	5.5	5.87	15.32	1.92	0.62	492.4	123	ChongQing	MUO
DME04014	M	41	32.7	96	131	80	5.36	4.4	2.3	2.39	0.91	404.9	117	ChongQing	MUO
DME04716	M	31	30.1	95.3	137	88	5.22	5.15	2.26	2.58	1.22	688.7	92	ChongQing	MUO
DME04727	M	53	30.4	104.5	131	83	6.29	3.75	2.36	1.93	0.85	454.8	103	ChongQing	MUO
DME04749	F	39	32.9	99.6	120	89	6.18	6.81	3.2	3.7	1.17	440.7	108	ChongQing	MUO
DME04750	M	34	32.4	106	145	95	6.94	6.18	2.08	3.34	1.19	475.6	130	ChongQing	MUO
DME04755	M	36	29.6	97.2	133	89	6.22	5.73	2.53	2.9	1.19	425.6	110	ChongQing	MUO
DME04765	M	40	28.5	97	127	81	6.24	5.2	1.74	2.44	1.35	413.2	86	ChongQing	MUO
DME04771	M	25	35.3	116.9	122	75	5.06	3.89	2.01	1.97	0.91	455.4	110	ChongQing	MUO
DME04788	M	42	26	93	126	70	5.33	6.71	14.49	2.2	0.67	416.7	144	ChongQing	MUO
DME04812-w	M	45	28.2	103.2	132	83	7.97	4.83	2.01	2.72	1.04	443.1	118	ChongQing	MUO
DME04844	M	24	26.9	93.6	142	96	5.13	4.74	3.28	1.87	1.04	412.2	109	ChongQing	MUO
DME04897	M	18	32.8	104	130	88	4.91	4.05	1.4	2.07	0.99	584.1	154	ChongQing	MUO
DME04902	M	62	27.5	96.5	147	90	7.15	5.01	1.38	2.47	1.23	407	99	ChongQing	MUO
DME04906	M	53	28.7	89.2	132	89	6.12	4.97	1.72	2.49	1.15	451.3	111	ChongQing	MUO
DME04928	M	25	35.3	111.2	133	74	6.32	5.24	1.95	2.86	1.12	468	109	ChongQing	MUO
DME04933	F	53	27.2	89	165	104	6.04	5.12	2.14	2	1.24	514.7	118	ChongQing	MUO
DME05009	F	48	30.3	92.6	139	77	5.52	5.26	1.77	2.64	1.01	426.7	103	ChongQing	MUO
DME05026	M	37	26.1	94.3	133	77	6.41	4.61	2	2.38	1.12	429.3	136	ChongQing	MUO

DME05032	M	53	25.7	90.8	135	96	5.13	6.16	4.43	3.04	1.07	407	119	ChongQing	MUO
DME05318	M	46	26.3	87.3	133	89	5.2	5.45	1.96	2.83	1.01	420.1	134	ChongQing	MUO
DME05320	M	57	27.1	90	135	97	6.11	5.16	3.11	2.62	0.99	410.2	106	ChongQing	MUO
DME05324	F	50	33.8	103.4	178	117	6.16	5.49	1.07	2.85	1.16	419.7	131	ChongQing	MUO
DME05326	M	33	35.5	106.2	137	89	5.48	3.43	3.36	1.65	0.77	466.9	116	ChongQing	MUO
DME05331	M	45	29.4	90.5	136	91	5.68	5.2	2.11	2.6	1.25	452.3	112	ChongQing	MUO
DME05336	M	44	30.4	109.2	110	62	6.54	4.43	1.37	2.37	1.03	414.5	101	ChongQing	MUO
DME05342-c-w	M	41	26.6	91.3	126	79	5.55	4.44	1.95	2.35	0.94	503.2	108	ChongQing	MUO
DME05344	M	46	26.2	94.2	111	64	4.41	5.06	18.16	1.34	0.45	489.4	116	ChongQing	MUO
DME05465-w	M	39	33.6	100.7	123	82	6.02	4.75	3.76	2.3	0.95	617.1	124	ChongQing	MUO
DME05471	F	38	30.6	86.4	119	76	5.46	5.73	4.96	2.81	0.91	419.9	117	ChongQing	MUO
DME05485	M	48	26	90	108	78	6.21	5	2.37	2.73	1.02	434	127	ChongQing	MUO
DME05488	M	46	27.6	94	116	82	6.2	5.29	1.95	2.75	1.33	453.8	104	ChongQing	MUO
DME05489	M	40	29.7	101.3	142	102	5.61	4.29	7.16	1.86	0.77	617.8	115	ChongQing	MUO
DME05496	M	49	27.2	93	121	77	6.1	5.08	3.88	2.32	0.98	481.6	111	ChongQing	MUO
DME05499	M	33	40.6	123.3	128	83	6.5	5.11	4.04	2.57	0.93	515.5	154	ChongQing	MUO
DME05513	M	31	34.5	117	120	82	5.38	5.24	5.66	2.56	0.99	472.4	125	ChongQing	MUO
DME05537	M	53	32.5	104	137	86	5.87	3.81	0.97	2.03	0.9	404.3	133	ChongQing	MUO
DME05547	F	32	29.8	87.2	106	58	6.2	5.35	1.76	3.21	0.99	450.8	132	ChongQing	MUO
DME05556	M	58	29.7	91	137	85	6.15	5.35	1.99	2.74	1.1	454.2	92	ChongQing	MUO
DME05558	M	26	29.7	99	114	77	5.25	5.47	2.65	2.77	1.04	488	117	ChongQing	MUO
DME05576	M	43	28.3	96.2	131	92	5.57	5.62	1.82	2.84	1.22	475.1	112	ChongQing	MUO
DME05581	M	31	27.2	93	116	72	4.8	8.55	18.39	1.92	0.58	460.5	114	ChongQing	MUO
DME05591	M	37	53.7	152.5	230	135	5.42	4.21	1.77	2.06	1.47	487.8	160	ChongQing	MUO
DME05601	M	42	30	100.2	136	87	5.21	5.67	1.95	2.73	1.41	427.3	106	ChongQing	MUO

DME05606	M	50	27.9	99	140	89	5.05	5.38	1.89	2.95	1.06	408.9	114	ChongQing	MUO
DME05611	M	42	30.3	94.2	130	88	5.44	6.42	2.57	3.35	1.19	502.9	93	ChongQing	MUO
DME05720	M	63	29.8	98.2	136	78	4.78	3.43	1.78	1.55	0.93	411	87	ChongQing	MUO
DME05722	M	50	30	96.3	139	88	8.8	4.73	1.35	2.37	1.18	444.3	123	ChongQing	MUO
DME05793	M	45	29.6	100.1	128	89	5.35	4.15	2.82	1.98	0.95	544.2	83	ChongQing	MUO
DME05801	M	48	31.3	103.2	137	78	5.94	4.56	1.76	2.36	0.87	446.2	92	ChongQing	MUO
DME05808-w	M	46	30.4	100	136	87	5.85	4.76	2.42	2.53	1.01	440.1	93	ChongQing	MUO
DME05814	M	28	30.3	101.2	130	89	5.22	5.26	4.6	2.59	0.96	400.5	113	ChongQing	MUO
DME05816	M	47	28.3	97	108	79	5.93	4.4	3.6	2.31	0.78	436.5	122	ChongQing	MUO
DME05907	M	47	32.2	109.3	135	88	5.74	6.66	2.08	3.39	1.63	454.6	151	ChongQing	MUO
DME05916	M	51	34.3	109.2	154	96	6.28	5.14	1.85	2.53	1.36	590.7	96	ChongQing	MUO
DME05950	M	49	28.6	96	130	88	6.29	5.59	1.44	2.69	1.45	527.7	136	ChongQing	MUO
DME05962	M	44	32.3	103	144	86	6.14	5.83	0.91	2.97	1.34	408	115	ChongQing	MUO
DME05975	M	44	25.9	92	129	82	5.45	4.65	4.49	2.33	0.83	450	93	ChongQing	MUO
DME06015	M	43	32.3	101.3	139	98	6.78	4.63	1.86	2.43	1.08	407.6	79	ChongQing	MUO
DME06043	M	42	28	106	119	79	5.65	4.7	2.11	2.38	0.92	479	129	ChongQing	MUO
DME06187	M	44	29.4	94.2	105	69	4.61	6.21	5.48	2.92	0.98	407.5	96	ChongQing	MUO
DME06192	M	58	28.6	95.2	115	82	6.17	6.67	2.69	3.43	1.22	427	113	ChongQing	MUO
DME06200	M	44	31.1	108	121	78	4.55	3.59	1.7	1.7	0.95	434.2	127	ChongQing	MUO
DME06213	F	25	36.6	109	138	100	6.79	4.84	1.51	2.42	1.09	566.9	148	ChongQing	MUO
DME06226	M	36	26.7	93.7	125	84	6.59	5.78	4.05	2.84	1.1	450.9	100	ChongQing	MUO
DME06227	M	33	33.8	106.2	141	96	6.21	4.61	1.4	2.35	1.19	454.1	119	ChongQing	MUO
DME06253-w	M	48	30.2	88.2	132	87	4.9	7.02	17.57	1.91	0.56	479.1	144	ChongQing	MUO
DME06274-w	M	48	27	97.6	142	90	5.39	5.68	1.94	2.94	1.05	406	104	ChongQing	MUO
DME06289-w	F	30	30.5	97	114	70	5.61	3.8	2.38	1.85	0.96	434.1	144	ChongQing	MUO

DME06305	M	42	29.1	97	165	115	5.89	5.91	2	2.39	1.11	438.8	107	ChongQing	MUO
DME06340	M	32	32	98.3	117	71	4.82	3.84	2.48	1.92	1.03	604.5	105	ChongQing	MUO
DME06343	M	52	30.1	94	130	87	5.53	6.36	3.14	3.39	1.29	459.5	109	ChongQing	MUO
DME06385	M	26	27.9	92	106	73	5	4.39	9.03	1.65	0.73	461.4	109	ChongQing	MUO
DME06446	M	35	28.4	93	120	80	5.55	6.06	2.8	3.29	0.98	405.5	113	ChongQing	MUO
DME06460	M	41	27.6	96.5	135	100	5.9	5.67	2.06	2.92	1.38	566	90	ChongQing	MUO
DME06679	F	51	36.2	110	147	73	6.14	4.74	2.18	2.33	1.1	470.7	136	ChongQing	MUO
DME06694-w	M	52	42.8	129	130	86	5.24	5.07	1.4	2.61	0.99	447.2	130	ChongQing	MUO
DME06696	M	27	31	98.8	119	77	5.35	4.88	1.8	2.5	0.95	556.4	91	ChongQing	MUO
DSFP01038-w	M	39	28.6	99.2	115	72	6.54	5.1	2.59	2.73	1.15	514.9	107	ChongQing	MUO
DSFP01047	F	21	33.6	103	120	86	5.62	6.86	5.64	3.66	0.92	507.7	115	ChongQing	MUO
DSFP01085	M	34	28.3	96.7	119	71	5.67	5.5	3.33	2.89	0.9	455.6	101	ChongQing	MUO
90043293	M	45	26.5	90	131	76	4.71	6.38	1.19	4.29	1.63	379.4	105	QuanZhou	MHO
DME03082	M	30	25.2	85	129	83	4.54	6.74	2.18	4.5	1.32	343.8	97	QuanZhou	MHO
DME03511	M	51	26.3	90	125	87	5.39	6.16	0.94	3.53	2.02	359.6	98	QuanZhou	MHO
DME04097	M	44	27.9	90	125	87	7.16	4.65	1.07	2.94	1.11	380.5	70	QuanZhou	MHO
DME04099	F	40	25.4	81	115	69	4.91	4.84	0.99	3.45	1.36	178.9	158	QuanZhou	MHO
DME04101-1	F	39	26.1	88	112	63	4.92	6.08	1.27	3.9	2.31	377.6	143	QuanZhou	MHO
DME04102	M	30	29.7	93	124	65	4.92	5.08	1.45	3.45	1.33	372.8	111	QuanZhou	MHO
DME04104-1	F	34	36.9	115	110	62	5	4.64	1.47	2.86	1.66	326.1	190	QuanZhou	MHO
DME04105	M	55	28.8	92	129	70	5.3	4.65	1.2	1.29	2.56	181.3	124	QuanZhou	MHO
DME04107	M	52	26	87	133	81	8.42	5.8	1.29	3.3	2.21	310.6	101	QuanZhou	MHO
DME04108	M	43	25.3	89	109	67	6.04	5.07	1.36	3.36	1.4	339.8	89	QuanZhou	MHO
DME04176-1	F	34	27.1	NA	123	86	5.14	5.34	0.91	3.28	1.23	391.6	108	QuanZhou	MHO
DME04177	M	54	26.7	93	114	62	5.07	6.53	1.27	4.39	1.6	351.2	100	QuanZhou	MHO

DME04181	M	26	30.4	100	127	69	5.73	3.31	0.42	1.91	1.29	321.7	128	QuanZhou	MHO
DME04182-w	M	43	26	90	101	57	5.78	5.47	0.74	3.24	1.23	366	90	QuanZhou	MHO
DME04184-1	M	52	28.3	90	101	61	6.94	5.01	0.68	2.92	1.37	354.4	98	QuanZhou	MHO
DME04189-1	M	50	26.4	92	137	70	5.1	4.55	0.77	2.43	1.63	378.7	93	QuanZhou	MHO
DME04234	F	48	25.4	76	116	72	5.49	6.09	0.86	5.02	1.65	289.3	118	QuanZhou	MHO
DME04236	F	54	26.6	84	133	80	5.16	5.36	0.63	3.55	1.98	309.5	161	QuanZhou	MHO
DME04238	M	45	27.6	92	138	82	5.45	6.33	1.27	4.79	1.57	341.6	117	QuanZhou	MHO
DME04240	F	44	28.4	82	104	69	5.55	5.86	0.78	3.43	1.49	207.6	106	QuanZhou	MHO
DME04241	M	60	26.8	93	150	82	5.77	4.33	0.69	2.81	1.22	396.7	117	QuanZhou	MHO
DME04243	M	27	28.5	90	134	83	5.42	5.21	2.51	3.74	1.14	394.7	131	QuanZhou	MHO
DME04417	M	33	28	87	109	57	5.85	4.72	0.68	2.87	1.67	396.6	136	QuanZhou	MHO
DME04418	F	33	25	83	110	65	5.1	6.97	1.22	4.92	1.62	371	127	QuanZhou	MHO
DME04422	M	34	26.1	NA	124	81	5.33	6.26	1.09	4.78	1.54	373.2	137	QuanZhou	MHO
DME04430	M	45	27.8	90	135	93	4.8	5.58	1.11	4.04	1.46	297.8	67	QuanZhou	MHO
DME04432	M	61	25.4	95	132	75	5.66	7.66	1.52	6.48	1.5	373.6	107	QuanZhou	MHO
DME04464	M	51	25.3	84	131	80	5.16	4.66	3.21	3.21	1.17	319.1	76	QuanZhou	MHO
DME04471	M	64	27.8	91	108	68	5.2	4.31	0.76	2.43	1.72	277.3	133	QuanZhou	MHO
DME04473	F	40	26.2	76	117	68	4.92	5.54	0.54	2.59	2.13	243.7	122	QuanZhou	MHO
DME04474	M	32	27.9	93	118	77	5.62	5.69	1.08	4.03	1.39	377.9	97	QuanZhou	MHO
DME04476	F	47	26.4	78.5	109	58	4.78	6.15	1.35	4.78	1.35	331.9	134	QuanZhou	MHO
DME04478	M	36	26.5	84	126	72	5.34	5.31	1.16	3.74	1.46	292	91	QuanZhou	MHO
DME04489	F	49	26.2	92	98	58	4.97	5.08	1.04	4.05	1.09	337.1	114	QuanZhou	MHO
DME04492	M	36	26.1	83	124	75	5.35	6.93	1.46	5.39	1.41	326.4	115	QuanZhou	MHO
DME04499	F	45	27.6	92	97	55	4.84	6.62	1.34	4.12	1.67	280.3	100	QuanZhou	MHO
DME04501	F	43	27.2	89	117	74	5.98	5.08	1.07	2.73	1.85	331.1	128	QuanZhou	MHO

DME04502	F	34	26.4	NA	129	74	4.76	6.08	1.36	4.05	1.73	313.9	144	QuanZhou	MHO
DME04504	F	59	28.2	92	135	77	6.05	6.16	0.99	4.01	1.84	345.9	89	QuanZhou	MHO
DME03092	M	34	28.6	99	135	87	6.47	4.82	1.85	2.87	1.32	512.5	78	QuanZhou	MUO
DME04088	M	43	25.3	93	109	81	6.53	7.2	2.82	5.37	1.16	480.5	108	QuanZhou	MUO
DME04090	M	46	30.8	104	126	83	6.24	4.43	1.09	3.01	0.94	421.8	95	QuanZhou	MUO
DME04098	M	51	28.4	103	152	85	6.27	4.84	0.77	3.2	1.55	400	102	QuanZhou	MUO
DME04179	M	39	27.5	97	135	86	6.09	4.21	1.99	2.41	1.6	403.7	114	QuanZhou	MUO
DME04180-1	M	34	27.6	100	148	97	5.44	5.37	2.11	3.21	1.38	487.6	92	QuanZhou	MUO
DME04185-1-w	M	27	32.3	107	111	63	5.18	5.9	3.5	2.94	1.02	562.5	93	QuanZhou	MUO
DME04193	M	26	27	95	157	96	5.55	6.08	2.02	3.97	1.2	489.1	100	QuanZhou	MUO
DME04233	M	36	27.5	91	130	87	5.5	4.66	3.5	2.27	1.3	551.3	94	QuanZhou	MUO
DME04433	M	48	26.9	94	138	88	6.59	6.1	1.72	4.47	1.64	574.2	95	QuanZhou	MUO
DME04434-w	M	46	26.9	90	140	99	6.34	5.37	5.79	1.21	1.02	415.6	121	QuanZhou	MUO
DME04463	M	55	27.8	97	127	79	6.55	5.54	1.72	3.55	1.46	544.5	86	QuanZhou	MUO
DME04477	M	24	31.9	94	116	81	6.46	7.89	5.6	3.06	1.27	752.3	109	QuanZhou	MUO
DME04481	M	52	27.6	96	124	77	8.45	4.84	2.06	2.97	1.14	494.6	107	QuanZhou	MUO
DME04485	M	42	25.2	91	113	81	6.37	7.88	10.53	5.12	1.75	426.8	91	QuanZhou	MUO
DME04543-w	M	57	29.3	108	137	85	5.64	5.98	2.15	4.63	1.04	457.8	96	QuanZhou	MUO
DME04645	M	40	25	93	124	77	6.03	4.24	1.94	2.53	0.93	442.8	114	QuanZhou	MUO
DME05280	M	45	27.8	102	150	105	6.95	7.39	8.75	4.34	1.37	411	107	QuanZhou	MUO
DME05351	M	23	39	123	128	81	5.57	4.69	3.21	3.36	0.86	727.8	103	QuanZhou	MUO
DME05369	M	43	26.5	92	146	103	6.32	5.78	0.79	3.46	1.93	407.4	116	QuanZhou	MUO
DME05371	M	50	28.2	103	108	63	6.38	7.62	1.76	6.01	1.7	537.9	96	QuanZhou	MUO
DME05732-W	M	32	28.1	97	132	86	5.42	4.56	2.35	3.21	1.13	498.8	148	QuanZhou	MUO
DME05818	M	31	30.2	99	138	86	6.97	6.05	2.69	3.99	1.29	528.7	104	QuanZhou	MUO

DME05856	M	53	25	94	129	86	6.34	6.4	2.45	3.58	1.95	482.8	97	QuanZhou	MUO
DME06325	M	50	28.3	95	154	88	6.27	5.6	1.23	4.03	1.84	432.4	130	QuanZhou	MUO
DME06332-w	M	54	26.6	97	131	86	4.65	5.5	2.35	3.75	1.19	487.8	122	QuanZhou	MUO
DME06396-w	M	31	26.4	94	139	87	4.74	5.71	2.25	4.25	1.25	441.7	121	QuanZhou	MUO
DME06404	M	33	32.2	105	128	73	6.81	6.01	2.69	4.21	1.18	430.1	108	QuanZhou	MUO
DME06423-w	M	63	31.8	103	152	92	7.45	4.84	0.6	2.91	1.38	405.6	103	QuanZhou	MUO
DME06448	M	55	30.5	107	138	85	5.58	5.68	2.05	3.6	1.53	482.1	136	QuanZhou	MUO
DSFP01031-w	M	22	40.2	117	134	76	5.78	4.04	1.95	2.71	0.97	523.6	157	QuanZhou	MUO
DSFP01070	M	46	27	92	132	85	6.1	5.69	1.24	3.98	1.24	400.7	117	QuanZhou	MUO
DSFP01080	M	38	30.1	100	139	88	6.31	5.12	2.93	3.49	1.16	622.8	119	QuanZhou	MUO

Table S2. The clinical information of Chongqing and Quanzhou cohorts

	Chongqing Cohort		Quanzhou Cohort	
	MHO	MUO	MHO	MUO
Age (years, mean \pm SD)	44.924 \pm 9.19	40.652 \pm 9.752	43.550 \pm 9.842	41.485 \pm 10.963
BMI (kg/m ² , mean \pm SD)	27.431 \pm 2.135	30.526 \pm 3.710	27.160 \pm 2.025	28.894 \pm 3.447
WL (cm, mean \pm SD)	88.350 \pm 7.181	99.838 \pm 8.961	82.288 \pm 24.628	99.152 \pm 7.425
SBP (mm Hg, mean \pm SD)	122.285 \pm 16.158	129.826 \pm 16.448	120.975 \pm 12.548	133.333 \pm 12.920
DBP (mm Hg, mean \pm SD)	77.761 \pm 10.708	83.449 \pm 11.278	72.250 \pm 9.650	84.909 \pm 9.190
GLU (mmol/L, mean \pm SD)	5.401 \pm 0.506	5.759 \pm 0.836	5.440 \pm 0.733	6.162 \pm 0.745
TC (mmol/L, mean \pm SD)	5.171 \pm 0.903	5.114 \pm 0.865	5.557 \pm 0.888	5.637 \pm 1.047
TG (mmol/L, mean \pm SD)	1.419 \pm 0.720	3.466 \pm 3.382	1.173 \pm 0.519	2.741 \pm 2.119
LDL (mmol/L, mean \pm SD)	2.566 \pm 0.554	2.540 \pm 0.513	3.665 \pm 0.993	3.566 \pm 0.950
HDL (mmol/L, mean \pm SD)	1.405 \pm 0.307	1.046 \pm 0.328	1.573 \pm 0.338	1.324 \pm 0.293
UA (μ mol/L, mean \pm SD)	315.933 \pm 54.814	465.220 \pm 62.891	331.055 \pm 55.005	492.085 \pm 86.250
eGFR (mL/min/1.73m ² , mean \pm SD)	118.924 \pm 22.946	114.109 \pm 19.714	114.250 \pm 25.195	108.455 \pm 17.139

BMI:Body mass index; WL:Waist; SBP:Systolic blood pressure; DBP:diastolic blood pressure; GLU:Glucose; TC:Total cholesterol; TG:Triglyceride; LDL:Low density lipoprotein; HDL:High density lipoprotein; UA:Uric acid; eGFR:Epidermal growth factor receptor

Table S3. The sequencing data production

Sample	Rawdata(Gb)	Cleandata(Gb)	Align(Gb)	Align Rates(%)	Area	Class	gene count
90043605	4.212	2.809	1.799	64.05	ChongQing	MHO	510598
DME03088	5.845	3.598	2.651	73.68	ChongQing	MHO	350028
DME03101	4.906	3.763	2.939	78.1	ChongQing	MHO	559206
DME03104	5.359	4.664	3.538	75.84	ChongQing	MHO	585663
DME03106	6.262	5.178	3.994	77.12	ChongQing	MHO	614551
DME03111	6.289	5.041	3.888	77.12	ChongQing	MHO	644172
DME03116	6.546	5.710	4.268	74.75	ChongQing	MHO	646270
DME03140	5.968	4.175	3.264	78.18	ChongQing	MHO	442738
DME03150	6.079	4.430	3.483	78.61	ChongQing	MHO	395686
DME03176	6.471	5.385	3.872	71.89	ChongQing	MHO	606736
DME03192	5.743	4.521	3.418	75.6	ChongQing	MHO	321864
DME03204	5.151	4.298	3.138	73	ChongQing	MHO	799985
DME03209	5.589	4.849	3.164	65.25	ChongQing	MHO	890980
DME03219	5.99	5.078	3.847	75.76	ChongQing	MHO	606931
DME03228	5.918	4.707	3.032	64.41	ChongQing	MHO	384568
DME03244	5.153	4.405	3.220	73.1	ChongQing	MHO	483346
DME03246	5.423	4.814	3.568	74.11	ChongQing	MHO	427398
DME03251-1	5.816	4.687	3.362	71.73	ChongQing	MHO	519297
DME03257	4.874	3.842	2.926	76.15	ChongQing	MHO	383446
DME03335	5.743	4.715	3.560	75.49	ChongQing	MHO	779014
DME03336	6.208	4.622	3.613	78.17	ChongQing	MHO	405479
DME03337	4.65	3.507	2.550	72.71	ChongQing	MHO	571036
DME03339	5.532	4.551	3.602	79.16	ChongQing	MHO	501205
DME03341	5.563	4.521	3.416	75.56	ChongQing	MHO	551524
DME03355	5.504	4.235	3.157	74.54	ChongQing	MHO	370340
DME03356	5.429	4.163	3.053	73.32	ChongQing	MHO	798058
DME03361	5.42	4.087	3.178	77.76	ChongQing	MHO	460024
DME03362	4.81	3.617	2.736	75.64	ChongQing	MHO	317223
DME03374	5.029	4.347	3.381	77.77	ChongQing	MHO	510308
DME03381	5.388	4.102	3.095	75.44	ChongQing	MHO	681849
DME03385	5.833	4.553	3.436	75.47	ChongQing	MHO	886909
DME03386	5.686	4.394	3.413	77.68	ChongQing	MHO	573075
DME03393	5.733	4.314	3.204	74.27	ChongQing	MHO	523216
DME03396	5.956	4.742	3.638	76.72	ChongQing	MHO	559578
DME03414	5.532	4.199	3.174	75.59	ChongQing	MHO	697640
DME03471	4.808	3.118	2.285	73.28	ChongQing	MHO	589143
DME03480	6.345	5.087	3.821	75.11	ChongQing	MHO	588430
DME03483	5.319	4.511	3.291	72.95	ChongQing	MHO	699995
DME03485	6.211	5.101	3.844	75.36	ChongQing	MHO	693165
DME03491	5.291	4.203	3.170	75.43	ChongQing	MHO	553961
DME03495	5.592	4.433	3.344	75.45	ChongQing	MHO	401115
DME03499-1	7.423	5.836	4.322	74.06	ChongQing	MHO	546556
DME03514	5.407	4.346	3.273	75.3	ChongQing	MHO	506226
DME03515	6.348	5.240	3.857	73.61	ChongQing	MHO	744013
DME03519	6.337	5.460	3.912	71.64	ChongQing	MHO	734714
DME03534	5.474	4.535	3.453	76.14	ChongQing	MHO	528853
DME03538	5.22	4.302	3.089	71.81	ChongQing	MHO	482124
DME03892	6.349	6.029	4.499	74.62	ChongQing	MHO	752640
DME03894	4.501	3.612	2.701	74.78	ChongQing	MHO	423508
DME03903	4.646	3.828	2.766	72.25	ChongQing	MHO	603501

Table S3. The sequencing data production

Sample	Rawdata(Gb)	Cleandata(Gb)	Align(Gb)	Align Rates(%)	Area	Class	gene count
DME03908	5.081	4.444	3.285	73.91	ChongQing	MHO	615107
DME03910	5.198	4.413	3.286	74.48	ChongQing	MHO	642125
DME03923	4.484	3.283	1.816	55.32	ChongQing	MHO	604536
DME03925	5.801	5.019	3.510	69.93	ChongQing	MHO	773156
DME03943	4.427	3.546	2.638	74.39	ChongQing	MHO	381239
DME03944	4.82	4.089	3.037	74.26	ChongQing	MHO	516124
DME03953	4.989	4.366	2.628	60.18	ChongQing	MHO	195266
DME03959	5.115	4.301	3.294	76.57	ChongQing	MHO	617369
DME03961	5.478	4.527	3.350	73.99	ChongQing	MHO	728302
DME03969	5.581	4.730	3.603	76.16	ChongQing	MHO	399292
DME04006	6.264	4.858	3.695	76.06	ChongQing	MHO	684981
DME04011	6.594	5.808	4.298	74.01	ChongQing	MHO	660007
DME04024	5.351	4.654	3.568	76.66	ChongQing	MHO	314273
DME04705-w	5.162	4.767	3.263	68.46	ChongQing	MHO	323809
DME04706	5.252	4.553	3.187	70.01	ChongQing	MHO	522133
DME04711	6.129	5.500	3.961	72.02	ChongQing	MHO	435300
DME04712	5.897	5.142	3.589	69.8	ChongQing	MHO	616916
DME04715	5.408	4.775	3.416	71.55	ChongQing	MHO	427563
DME04717	6.275	5.523	4.015	72.69	ChongQing	MHO	366523
DME04722	5.595	4.647	3.290	70.8	ChongQing	MHO	600165
DME04752	6.149	4.329	2.820	65.14	ChongQing	MHO	744536
DME04753	5.161	4.224	2.805	66.4	ChongQing	MHO	587550
DME04756	5.508	4.378	2.990	68.29	ChongQing	MHO	268895
DME04757	5.924	5.202	3.666	70.48	ChongQing	MHO	837270
DME04764	5.112	4.332	3.064	70.75	ChongQing	MHO	742864
DME04767	6.333	5.539	3.701	66.81	ChongQing	MHO	766326
DME04772	5.154	4.411	3.162	71.68	ChongQing	MHO	531608
DME04777	5.78	5.082	3.569	70.22	ChongQing	MHO	633406
DME04792	5.82	5.059	3.594	71.05	ChongQing	MHO	328204
DME04794	5.33	4.691	3.352	71.45	ChongQing	MHO	384997
DME04802	5.445	4.598	3.373	73.37	ChongQing	MHO	363046
DME04807	5.719	5.152	3.632	70.5	ChongQing	MHO	828612
DME04809	5.554	4.894	3.359	68.65	ChongQing	MHO	958193
DME04813	6.384	5.555	3.957	71.23	ChongQing	MHO	661933
DME04816	5.873	5.018	3.587	71.48	ChongQing	MHO	520857
DME04843	5.879	5.360	3.743	69.83	ChongQing	MHO	565115
DME04845	6.068	5.574	3.888	69.76	ChongQing	MHO	502673
DME04847	5.797	4.939	3.339	67.59	ChongQing	MHO	546281
DME04849	5.472	4.827	3.340	69.18	ChongQing	MHO	921474
DME04863	5.563	4.859	3.380	69.56	ChongQing	MHO	775081
DME04866	5.152	4.887	3.452	70.62	ChongQing	MHO	728652
DME04874	6.216	5.672	3.466	61.11	ChongQing	MHO	452754
DME04875	6.134	5.165	3.394	65.72	ChongQing	MHO	931528
DME04878	5.41	4.683	3.202	68.37	ChongQing	MHO	647577
DME04880	6.49	5.364	3.649	68.02	ChongQing	MHO	537632
DME04884	6.66	6.113	4.237	69.31	ChongQing	MHO	516067
DME04890	6.208	5.394	3.770	69.88	ChongQing	MHO	545154
DME04900	6.476	5.842	4.024	68.89	ChongQing	MHO	845411
DME04908	6.176	5.510	3.776	68.54	ChongQing	MHO	774694
DME04910	5.132	4.525	3.194	70.59	ChongQing	MHO	517834

Table S3. The sequencing data production

Sample	Rawdata(Gb)	Cleandata(Gb)	Align(Gb)	Align Rates(%)	Area	Class	gene count
DME04911	6.574	5.907	4.097	69.36	ChongQing	MHO	710175
DME04929	6.15	5.245	3.677	70.09	ChongQing	MHO	692365
DME05000-W	5.98	3.423	2.158	63.04	ChongQing	MHO	572836
DME05003	6.949	5.653	3.842	67.96	ChongQing	MHO	538619
DME05007	7.207	5.718	4.006	70.06	ChongQing	MHO	459191
DME05011	5.476	3.498	2.192	62.66	ChongQing	MHO	539744
DME05024	6.953	4.312	2.979	69.08	ChongQing	MHO	627805
DME05082	5.602	4.974	3.485	70.06	ChongQing	MHO	572977
DME05099	4.785	3.748	2.663	71.04	ChongQing	MHO	340918
DME05101	5.195	4.644	3.258	70.15	ChongQing	MHO	517221
DME05111	5.862	5.182	3.592	69.31	ChongQing	MHO	697266
DME05113	6.117	5.386	3.790	70.37	ChongQing	MHO	397118
DME05114	5.075	4.223	2.938	69.57	ChongQing	MHO	466809
DME05267	5.501	3.795	2.148	56.59	ChongQing	MHO	320681
DME05321	6.368	5.154	3.300	64.02	ChongQing	MHO	1052542
DME05322	4.366	3.278	2.257	68.85	ChongQing	MHO	270558
DME05323	5.458	4.415	3.048	69.04	ChongQing	MHO	442219
DME05330	5.298	4.145	2.715	65.5	ChongQing	MHO	589634
DME05333	5.386	4.159	2.818	67.76	ChongQing	MHO	498075
DME05340	4.81	3.984	2.778	69.73	ChongQing	MHO	366964
DME05475	5.546	4.856	3.335	68.68	ChongQing	MHO	317678
DME05493	5.149	4.505	3.002	66.64	ChongQing	MHO	558566
DME05506	5.978	4.867	3.392	69.69	ChongQing	MHO	494968
DME05510	4.255	3.395	2.375	69.95	ChongQing	MHO	627034
DME05517	4.436	3.564	2.513	70.52	ChongQing	MHO	553080
DME05522	4.536	3.464	2.510	72.46	ChongQing	MHO	350776
DME05540	6.389	5.529	3.767	68.13	ChongQing	MHO	588828
DME05571	5.773	4.641	3.345	72.08	ChongQing	MHO	382898
DME05580	5.505	4.795	3.266	68.12	ChongQing	MHO	709385
DME05582	5.563	4.435	3.208	72.33	ChongQing	MHO	416972
DME05597	5.969	4.392	3.161	71.98	ChongQing	MHO	330317
DME05715	5.097	3.830	2.410	62.92	ChongQing	MHO	690499
DME05794	7.193	6.281	4.205	66.95	ChongQing	MHO	404530
DME05915	5.864	4.601	3.209	69.76	ChongQing	MHO	634820
DME05932	5.544	4.600	3.151	68.49	ChongQing	MHO	714872
DME05936	5.37	4.434	3.228	72.8	ChongQing	MHO	318246
DME05948	4.96	3.987	2.691	67.49	ChongQing	MHO	916212
DME05949	5.949	5.092	3.605	70.81	ChongQing	MHO	434730
DME05951	5.686	5.002	3.301	66	ChongQing	MHO	529595
DME05960	5.486	3.467	2.460	70.97	ChongQing	MHO	246779
DME06157	5.97	5.159	3.242	62.83	ChongQing	MHO	844793
DME06160	5.804	5.252	3.845	73.2	ChongQing	MHO	299830
DME06202	5.187	4.155	2.808	67.57	ChongQing	MHO	806211
DME06210	6.088	5.033	3.528	70.1	ChongQing	MHO	562291
DME06211	5.101	4.480	3.166	70.68	ChongQing	MHO	441504
DME06217	5.366	4.826	3.424	70.95	ChongQing	MHO	715961
DME06218	6.305	5.612	4.009	71.43	ChongQing	MHO	1035325
DME06220	6.286	5.733	3.975	69.33	ChongQing	MHO	579124
DME06223	5.392	4.468	2.984	66.79	ChongQing	MHO	414731
DME06230	6.287	5.381	3.978	73.93	ChongQing	MHO	502599

Table S3. The sequencing data production

Sample	Rawdata(Gb)	Cleandata(Gb)	Align(Gb)	Align Rates(%)	Area	Class	gene count
DME06231	5.757	4.635	3.222	69.53	ChongQing	MHO	693517
DME06232	4.225	3.632	2.601	71.61	ChongQing	MHO	359158
DME06233	5.438	4.849	3.327	68.61	ChongQing	MHO	588220
DME06234	5.449	3.301	2.364	71.6	ChongQing	MHO	371387
DME06243	6.452	5.678	4.020	70.81	ChongQing	MHO	747539
DME06252	6.281	5.652	4.137	73.18	ChongQing	MHO	513038
DME06268	5.933	4.370	3.099	70.92	ChongQing	MHO	398601
DME06288	5.784	4.789	3.368	70.32	ChongQing	MHO	523796
DME06298	6.258	5.614	3.980	70.9	ChongQing	MHO	615658
DME06338	5.143	2.776	1.794	64.62	ChongQing	MHO	423468
DME06344	5.89	3.812	2.287	59.99	ChongQing	MHO	740205
DME06345	6.133	4.755	2.667	56.09	ChongQing	MHO	138186
DME06384-w	4.393	1.548	0.782	50.54	ChongQing	MHO	155086
DME06449	4.32	3.270	1.781	54.45	ChongQing	MHO	323861
DME06463	4.885	3.855	2.658	68.93	ChongQing	MHO	278523
DME06533	5.261	4.893	3.317	67.78	ChongQing	MHO	568868
DME06539	5.409	4.842	3.368	69.55	ChongQing	MHO	478587
DME06676	6.345	6.193	4.431	71.54	ChongQing	MHO	434386
DME06681	5.913	5.346	3.654	68.34	ChongQing	MHO	804138
DSFP00812	5.253	4.570	3.162	69.19	ChongQing	MHO	468669
DSFP00934	5.283	3.882	1.966	50.65	ChongQing	MHO	456750
DSFP00988	6.334	5.605	1.837	32.78	ChongQing	MHO	315414
90042801	7.975	6.757	4.492	66.48	ChongQing	MUO	348889
90043608	3.447	2.377	1.551	65.26	ChongQing	MUO	531525
DME03089	7.146	5.001	3.869	77.36	ChongQing	MUO	489185
DME03100	6.044	4.636	3.608	77.84	ChongQing	MUO	489574
DME03107-w	5.232	3.863	2.555	66.13	ChongQing	MUO	564283
DME03110	5.56	4.392	3.416	77.77	ChongQing	MUO	352535
DME03119	5.907	4.474	3.407	76.15	ChongQing	MUO	630385
DME03127	5.794	4.528	3.133	69.18	ChongQing	MUO	664999
DME03134	5.818	4.725	3.532	74.75	ChongQing	MUO	393499
DME03146	6.028	5.114	4.018	78.58	ChongQing	MUO	559322
DME03153	6.573	5.498	4.288	77.98	ChongQing	MUO	661631
DME03157	5.748	4.369	3.485	79.76	ChongQing	MUO	332101
DME03158	5.683	4.618	3.522	76.26	ChongQing	MUO	672590
DME03163	5.848	4.911	3.779	76.95	ChongQing	MUO	572907
DME03164	5.326	3.880	2.873	74.05	ChongQing	MUO	542845
DME03166	6.144	5.360	3.844	71.72	ChongQing	MUO	413300
DME03175	5.788	3.851	2.802	72.76	ChongQing	MUO	503419
DME03186	5.283	4.239	3.141	74.09	ChongQing	MUO	433456
DME03187	5.836	4.723	3.337	70.65	ChongQing	MUO	392828
DME03195	5.217	3.908	2.998	76.71	ChongQing	MUO	339628
DME03212	5.171	4.046	2.863	70.77	ChongQing	MUO	415223
DME03213	5.45	4.215	3.074	72.94	ChongQing	MUO	332838
DME03214	6.316	5.056	3.761	74.38	ChongQing	MUO	319244
DME03217-w	5.117	3.904	2.730	69.92	ChongQing	MUO	588191
DME03222	5.603	4.306	3.205	74.42	ChongQing	MUO	450064
DME03241	4.906	4.228	3.008	71.14	ChongQing	MUO	282919
DME03242	4.39	3.238	2.398	74.05	ChongQing	MUO	389298
DME03248	5.076	3.836	2.716	70.81	ChongQing	MUO	393759

Table S3. The sequencing data production

Sample	Rawdata(Gb)	Cleandata(Gb)	Align(Gb)	Align Rates(%)	Area	Class	gene count
DME03259	6.206	4.717	3.449	73.12	ChongQing	MUO	463364
DME03260	7.375	5.868	4.417	75.27	ChongQing	MUO	415830
DME03264	6.549	4.717	3.669	77.77	ChongQing	MUO	359648
DME03338	5.262	4.569	3.350	73.32	ChongQing	MUO	361979
DME03350	6.768	4.981	3.525	70.77	ChongQing	MUO	705715
DME03358	6.066	4.562	3.465	75.95	ChongQing	MUO	458414
DME03365	5.256	4.494	3.352	74.58	ChongQing	MUO	356143
DME03367	5.285	3.814	2.932	76.86	ChongQing	MUO	389623
DME03383	5.554	4.308	2.894	67.17	ChongQing	MUO	521636
DME03401	5.996	4.585	3.468	75.64	ChongQing	MUO	364304
DME03405	5.192	3.864	3.004	77.75	ChongQing	MUO	285946
DME03409	5.542	4.189	3.148	75.15	ChongQing	MUO	722986
DME03413	4.8	3.668	2.735	74.57	ChongQing	MUO	378125
DME03475	4.903	3.675	2.813	76.54	ChongQing	MUO	272759
DME03477	5.859	4.543	3.387	74.55	ChongQing	MUO	395576
DME03481	5.503	4.357	3.152	72.34	ChongQing	MUO	321825
DME03487	5.269	4.134	3.143	76.03	ChongQing	MUO	406406
DME03493	5.882	4.561	3.391	74.35	ChongQing	MUO	482993
DME03497	5.583	4.500	3.412	75.83	ChongQing	MUO	606859
DME03520	5.458	4.283	3.169	74	ChongQing	MUO	333332
DME03539-W	4.38	2.847	1.663	58.41	ChongQing	MUO	282424
DME03901	5.186	4.334	2.448	56.47	ChongQing	MUO	547740
DME03916	5.073	4.377	3.172	72.47	ChongQing	MUO	437696
DME03947	5.429	4.665	3.470	74.39	ChongQing	MUO	683023
DME03950	4.609	3.805	2.832	74.42	ChongQing	MUO	644731
DME03979	5.548	4.861	3.677	75.63	ChongQing	MUO	292926
DME03984	5.035	4.267	3.190	74.77	ChongQing	MUO	417097
DME03988	6.128	5.223	3.898	74.63	ChongQing	MUO	456370
DME03989	5.176	4.245	3.212	75.65	ChongQing	MUO	516694
DME04000	5.22	4.110	3.120	75.9	ChongQing	MUO	268107
DME04014	5.602	4.779	3.632	75.99	ChongQing	MUO	481148
DME04716	6.242	5.141	3.620	70.4	ChongQing	MUO	550924
DME04727	6.248	4.252	3.129	73.6	ChongQing	MUO	285494
DME04749	5.209	4.564	3.129	68.57	ChongQing	MUO	790529
DME04750	5.88	5.275	3.731	70.72	ChongQing	MUO	375542
DME04755	5.802	5.175	3.597	69.51	ChongQing	MUO	750570
DME04765	6.011	5.191	3.701	71.3	ChongQing	MUO	507770
DME04771	5.071	4.360	3.089	70.85	ChongQing	MUO	476300
DME04788	5.189	4.151	2.963	71.38	ChongQing	MUO	449746
DME04812-w	5.973	4.878	3.477	71.27	ChongQing	MUO	497815
DME04844	6.777	5.739	4.076	71.02	ChongQing	MUO	553802
DME04897	5.277	4.659	3.279	70.37	ChongQing	MUO	511366
DME04902	6.193	5.462	3.815	69.84	ChongQing	MUO	725759
DME04906	5.618	5.004	3.484	69.62	ChongQing	MUO	564517
DME04928	6.149	4.762	3.062	64.29	ChongQing	MUO	489232
DME04933	5.744	5.105	3.671	71.9	ChongQing	MUO	456151
DME05009	5.285	3.586	2.326	64.86	ChongQing	MUO	494900
DME05026	7.057	5.349	3.675	68.69	ChongQing	MUO	401102
DME05032	5.227	3.731	2.456	65.84	ChongQing	MUO	412582
DME05318	5.444	4.507	3.055	67.79	ChongQing	MUO	651307

Table S3. The sequencing data production

Sample	Rawdata(Gb)	Cleandata(Gb)	Align(Gb)	Align Rates(%)	Area	Class	gene count
DME05320	5.976	4.836	3.408	70.47	ChongQing	MUO	462480
DME05324	5.378	4.244	2.748	64.74	ChongQing	MUO	299066
DME05326	4.859	3.856	2.341	60.71	ChongQing	MUO	440569
DME05331	5.339	4.472	3.118	69.73	ChongQing	MUO	371143
DME05336	4.617	3.480	2.322	66.74	ChongQing	MUO	485526
DME05342-c-w	5.484	3.877	2.814	72.6	ChongQing	MUO	483179
DME05344	5.584	4.072	2.681	65.84	ChongQing	MUO	324217
DME05465-w	7.194	5.492	3.701	67.39	ChongQing	MUO	735674
DME05471	6.368	4.740	3.303	69.68	ChongQing	MUO	779138
DME05485	6.216	4.772	3.384	70.92	ChongQing	MUO	357861
DME05488	5.432	4.629	3.162	68.3	ChongQing	MUO	209797
DME05489	5.067	4.510	3.113	69.02	ChongQing	MUO	580659
DME05496	5.875	4.955	3.451	69.64	ChongQing	MUO	517910
DME05499	5.445	4.771	3.328	69.76	ChongQing	MUO	412302
DME05513	4.235	3.311	2.230	67.35	ChongQing	MUO	374554
DME05537	6.424	5.027	3.480	69.24	ChongQing	MUO	878380
DME05547	6.377	5.175	3.663	70.78	ChongQing	MUO	593586
DME05556	5.862	5.098	3.545	69.54	ChongQing	MUO	746384
DME05558	5.316	4.347	2.941	67.65	ChongQing	MUO	467284
DME05576	5.643	4.535	3.251	71.69	ChongQing	MUO	406476
DME05581	5.723	5.024	3.677	73.19	ChongQing	MUO	315830
DME05591	6.417	5.894	4.163	70.63	ChongQing	MUO	460065
DME05601	6.059	5.051	3.566	70.6	ChongQing	MUO	737333
DME05606	7.959	6.354	4.574	71.98	ChongQing	MUO	466820
DME05611	5.975	4.968	3.598	72.42	ChongQing	MUO	389062
DME05720	5.829	5.267	3.713	70.49	ChongQing	MUO	772454
DME05722	5.492	4.485	3.083	68.74	ChongQing	MUO	743294
DME05793	6.652	5.727	3.488	60.9	ChongQing	MUO	383592
DME05801	7.42	6.280	4.420	70.39	ChongQing	MUO	572888
DME05808-w	7.476	6.902	4.521	65.5	ChongQing	MUO	768938
DME05814	5.659	4.727	3.390	71.7	ChongQing	MUO	553274
DME05816	5.507	5.043	3.464	68.69	ChongQing	MUO	399563
DME05907	5.737	5.254	3.703	70.48	ChongQing	MUO	358542
DME05916	5.089	4.087	2.815	68.87	ChongQing	MUO	366676
DME05950	5.01	4.428	3.031	68.46	ChongQing	MUO	430830
DME05962	5.463	4.745	3.130	65.96	ChongQing	MUO	560282
DME05975	4.798	3.934	2.849	72.41	ChongQing	MUO	461572
DME06015	5.323	4.480	3.083	68.82	ChongQing	MUO	543076
DME06043	6.118	5.079	3.718	73.2	ChongQing	MUO	290586
DME06187	5.152	4.144	2.723	65.72	ChongQing	MUO	357533
DME06192	5.576	4.984	3.528	70.8	ChongQing	MUO	529212
DME06200	5.914	5.348	3.828	71.59	ChongQing	MUO	733952
DME06213	6.247	5.105	3.547	69.49	ChongQing	MUO	455133
DME06226	5.851	5.372	3.877	72.16	ChongQing	MUO	425278
DME06227	6.214	5.087	3.558	69.94	ChongQing	MUO	404887
DME06253-w	5.616	3.142	1.703	54.21	ChongQing	MUO	453771
DME06274-w	6.268	4.253	2.167	50.95	ChongQing	MUO	332394
DME06289-w	5.774	4.512	3.170	70.25	ChongQing	MUO	223303
DME06305	6.308	5.250	3.680	70.1	ChongQing	MUO	669288
DME06340	5.758	5.408	3.995	73.88	ChongQing	MUO	228154

Table S3. The sequencing data production

Sample	Rawdata(Gb)	Cleandata(Gb)	Align(Gb)	Align Rates(%)	Area	Class	gene count
DME06343	5.652	3.449	1.998	57.95	ChongQing	MUO	509768
DME06385	4.67	3.675	2.345	63.83	ChongQing	MUO	277379
DME06446	5.183	3.057	1.748	57.17	ChongQing	MUO	370196
DME06460	6.394	5.349	3.704	69.24	ChongQing	MUO	708442
DME06679	5.698	5.281	3.598	68.13	ChongQing	MUO	484878
DME06694-w	4.87	4.568	2.752	60.24	ChongQing	MUO	350725
DME06696	5.136	4.749	3.216	67.72	ChongQing	MUO	543406
DSFP01038-w	5.143	4.154	2.584	62.21	ChongQing	MUO	361781
DSFP01047	5.575	4.682	3.390	72.4	ChongQing	MUO	299917
DSFP01085	4.977	4.331	2.738	63.22	ChongQing	MUO	597032
90043293	4.977	3.324	1.825	54.91	QuanZhou	MHO	546071
DME03082	5.296	3.879	2.977	76.75	QuanZhou	MHO	333222
DME03511	4.304	3.080	2.283	74.13	QuanZhou	MHO	383355
DME04097	5.406	4.460	3.284	73.63	QuanZhou	MHO	536193
DME04099	5.65	4.858	3.494	71.93	QuanZhou	MHO	962117
DME04101-1	4.434	3.313	2.301	69.46	QuanZhou	MHO	585195
DME04102	6.053	5.108	3.636	71.17	QuanZhou	MHO	614196
DME04104-1	6.691	5.203	3.305	63.52	QuanZhou	MHO	390411
DME04105	6.38	4.910	3.536	72.01	QuanZhou	MHO	479652
DME04107	5.996	5.138	3.525	68.62	QuanZhou	MHO	564496
DME04108	5.63	4.962	3.664	73.83	QuanZhou	MHO	698882
DME04176-1	5.328	4.369	3.256	74.54	QuanZhou	MHO	503923
DME04177	5.502	3.834	2.608	68.03	QuanZhou	MHO	654217
DME04181	5.629	4.498	3.413	75.88	QuanZhou	MHO	408052
DME04182-w	7.206	4.210	2.156	51.22	QuanZhou	MHO	158587
DME04184-1	5.724	4.444	3.393	76.34	QuanZhou	MHO	554129
DME04189-1	5.405	3.902	2.878	73.75	QuanZhou	MHO	418367
DME04234	5.115	4.253	3.088	72.6	QuanZhou	MHO	421564
DME04236	5.936	3.841	2.613	68.04	QuanZhou	MHO	903190
DME04238	5.187	4.213	3.094	73.44	QuanZhou	MHO	482740
DME04240	4.727	3.835	2.868	74.79	QuanZhou	MHO	611645
DME04241	5.214	4.380	3.034	69.27	QuanZhou	MHO	815016
DME04243	5.036	4.015	2.917	72.66	QuanZhou	MHO	574053
DME04417	6.136	4.871	3.366	69.11	QuanZhou	MHO	247331
DME04418	5.45	2.982	1.855	62.22	QuanZhou	MHO	289222
DME04422	5.641	4.306	3.185	73.96	QuanZhou	MHO	473740
DME04430	5.571	2.880	1.665	57.81	QuanZhou	MHO	338133
DME04432	5.916	4.390	2.697	61.44	QuanZhou	MHO	366156
DME04464	6.086	4.924	3.757	76.3	QuanZhou	MHO	637975
DME04471	5.671	4.684	3.479	74.29	QuanZhou	MHO	465251
DME04473	4.935	4.015	3.063	76.29	QuanZhou	MHO	632594
DME04474	6.559	5.545	4.130	74.48	QuanZhou	MHO	338569
DME04476	6.17	4.966	3.749	75.49	QuanZhou	MHO	765236
DME04478	5.636	4.564	3.385	74.17	QuanZhou	MHO	383281
DME04489	5.4	4.378	3.407	77.84	QuanZhou	MHO	502760
DME04492	5.445	4.385	3.349	76.38	QuanZhou	MHO	538989
DME04499	5.701	4.632	3.548	76.59	QuanZhou	MHO	538949
DME04501	6.352	5.038	3.671	72.87	QuanZhou	MHO	369104
DME04502	6.665	5.304	3.843	72.44	QuanZhou	MHO	749105
DME04504	6.109	5.084	3.714	73.06	QuanZhou	MHO	567027

Table S3. The sequencing data production

Sample	Rawdata(Gb)	Cleandata(Gb)	Align(Gb)	Align Rates(%)	Area	Class	gene count
DME03092	6.136	4.653	3.551	76.3	QuanZhou	MUO	326851
DME04088	5.72	4.484	2.845	63.43	QuanZhou	MUO	633392
DME04090	5.512	4.397	3.095	70.39	QuanZhou	MUO	377506
DME04098	6.157	5.102	3.742	73.34	QuanZhou	MUO	598705
DME04179	5.765	4.523	3.472	76.75	QuanZhou	MUO	380792
DME04180-1	6.301	5.007	3.664	73.16	QuanZhou	MUO	418336
DME04185-1-w	5.174	4.216	3.016	71.54	QuanZhou	MUO	588316
DME04193	5.851	4.439	3.232	72.81	QuanZhou	MUO	647518
DME04233	5.034	3.615	2.777	76.82	QuanZhou	MUO	258016
DME04433	5.748	4.312	2.870	66.56	QuanZhou	MUO	412502
DME04434-w	6.057	2.662	1.759	66.07	QuanZhou	MUO	318072
DME04463	4.962	3.640	2.551	70.06	QuanZhou	MUO	683120
DME04477	5.153	4.213	2.837	67.32	QuanZhou	MUO	409806
DME04481	6.287	4.993	3.801	76.13	QuanZhou	MUO	648336
DME04485	6.373	4.552	3.502	76.95	QuanZhou	MUO	499035
DME04543-w	4.411	3.393	2.777	81.83	QuanZhou	MUO	770416
DME04645	7.136	5.862	4.509	76.93	QuanZhou	MUO	461928
DME05280	4.972	3.579	2.327	65.03	QuanZhou	MUO	361494
DME05351	5.587	4.578	3.136	68.51	QuanZhou	MUO	351106
DME05369	5.698	4.386	2.838	64.72	QuanZhou	MUO	565184
DME05371	5.813	3.865	2.225	57.57	QuanZhou	MUO	612240
DME05732-W	4.377	2.400	1.408	58.66	QuanZhou	MUO	253002
DME05818	5.337	4.987	2.919	58.54	QuanZhou	MUO	378917
DME05856	5.197	4.300	3.069	71.37	QuanZhou	MUO	517243
DME06325	5.696	4.034	2.488	61.66	QuanZhou	MUO	352918
DME06332-w	5.413	4.125	2.908	70.5	QuanZhou	MUO	666205
DME06396-w	6.108	0.905	0.307	33.94	QuanZhou	MUO	71948
DME06404	4.656	2.356	1.111	47.16	QuanZhou	MUO	356406
DME06423-w	5.834	3.374	0.990	29.36	QuanZhou	MUO	274882
DME06448	6.162	2.729	1.073	39.34	QuanZhou	MUO	180082
DSFP01031-w	4.958	3.265	1.770	54.21	QuanZhou	MUO	282527
DSFP01070	4.618	3.022	1.451	48	QuanZhou	MUO	273060
DSFP01080	6.194	4.911	3.260	66.38	QuanZhou	MUO	212653

Table S4. The taxonomic analysis of two cohorts (phylum level)

Sample ID	Actinobacteria	Bacteroidetes	Firmicutes	Fusobacteria	Proteobacteria	Verrucomicrobia
90043605	1.56534	74.89341	19.09651	0.02559	3.15969	1.11891
DME03088	0.25937	63.11787	20.81978	1.04934	14.75364	0
DME03101	1.89576	61.96549	28.26812	0.10301	7.34554	0.42208
DME03104	0.75559	66.77116	28.12615	0.64846	3.65922	0
DME03106	0.2157	56.54021	38.40688	0	4.76325	0.06461
DME03111	2.69491	57.57201	26.54985	0	11.91103	1.27219
DME03116	1.10157	44.0927	52.62337	0	2.18036	0
DME03140	2.04548	57.32571	35.34082	1.31297	3.8709	0.10413
DME03150	1.76073	82.80043	14.34398	0	1.09486	0
DME03176	0.55188	69.2811	14.19873	0	15.9683	0
DME03192	2.78652	58.7396	9.09818	0	29.3757	0
DME03204	1.71167	32.40107	44.96501	0	2.07976	18.72763
DME03209	29.04773	9.42231	57.34551	0	2.15191	0
DME03219	2.61394	56.34526	19.70356	0	21.33723	0
DME03228	2.10379	45.40401	13.2773	0.04048	39.07633	0.06011
DME03244	0.33281	82.70483	14.66767	0	2.29469	0
DME03246	3.83154	64.50753	27.78303	0	3.8779	0
DME03251-1	1.14409	44.59675	53.68017	0	0.57899	0
DME03257	2.32871	75.3068	18.86033	0.06222	3.44193	0
DME03335	3.02142	50.79961	44.00078	0	1.36565	0.78493
DME03336	2.90063	67.55159	20.4813	0.02647	8.91266	0
DME03337	7.59257	54.0611	35.65029	0	2.38374	0
DME03339	13.03098	64.56953	21.50202	0	0.89747	0
DME03341	1.0925	52.24864	44.92208	0	1.73677	0
DME03355	5.75562	22.43493	44.48944	0	27.30737	0
DME03356	0.17903	66.92973	30.26403	0	2.45407	0.17315
DME03361	2.93333	86.03592	10.76353	0	0.26721	0
DME03362	10.38237	31.0764	52.3413	0	6.19993	0
DME03374	0.13375	76.79842	20.70785	0	2.27633	0.08364
DME03381	0.86438	36.7662	61.46293	0	0.89669	0
DME03385	2.24228	56.33034	36.17324	0	5.25414	0
DME03386	1.33773	73.81011	23.28387	0	1.51638	0.0519
DME03393	3.13107	33.6978	56.18973	4.92728	2.04533	0.00879
DME03396	0.96027	66.69034	29.8178	0	2.53159	0
DME03414	3.1357	33.78144	61.29027	0	1.35354	0
DME03471	1.93941	40.79638	51.69757	0	5.50233	0
DME03480	0.40102	63.57374	30.62218	0	5.40306	0
DME03483	2.86212	43.33164	48.75352	0.26019	4.79253	0
DME03485	1.19425	53.59418	41.0922	1.04785	3.06769	0
DME03491	2.91539	28.80745	47.69714	0	20.57074	0
DME03495	1.85613	57.32175	35.99163	0.22937	4.60111	0
DME03499-1	2.56459	52.16177	44.68708	0	0.57728	0
DME03514	0.89795	78.83152	19.0203	0.42329	0.78598	0.04097
DME03515	1.62819	56.58368	36.54911	0	5.23197	0

DME03519	9.13278	26.35204	59.42403	0	5.08507	0
DME03534	4.85461	40.68587	50.80401	0	2.95788	0
DME03538	0.5995	41.36866	46.8211	0	11.21074	0
DME03892	16.75265	44.83956	37.29623	0	1.05426	0.05515
DME03894	0.81095	67.27133	30.70982	0.07713	1.13076	0
DME03903	2.45972	13.38536	82.26582	0	1.88911	0
DME03908	0.98968	74.68411	23.26453	0	0.95998	0.10171
DME03910	0.93962	38.22529	59.61095	0	1.21806	0.00608
DME03923	0.5405	52.92305	45.05125	0	1.4852	0
DME03925	3.22651	46.79384	48.30162	0	1.67726	0
DME03943	4.06401	39.00636	55.141	0.01219	1.76195	0
DME03944	3.51444	74.99849	20.79282	0	0.69425	0
DME03953	3.82289	14.93959	49.60084	0	31.56042	0
DME03959	1.42071	51.41887	40.74806	0	5.20066	1.14284
DME03961	3.82004	68.86904	26.52641	0	0.73825	0.03415
DME03969	6.01717	58.95671	33.86255	0	1.16357	0
DME04006	0.78543	43.17749	54.76091	0	1.27617	0
DME04011	9.53524	45.5477	35.06298	0	9.85408	0
DME04024	2.60124	56.93101	37.17363	0	3.29412	0
DME04705-w	0.86166	91.1321	6.89304	0	0.64976	0
DME04706	0.92875	75.0436	21.73516	0	2.29249	0
DME04711	0.01783	31.59117	59.8173	0.00135	8.57235	0
DME04712	0.12929	67.79222	28.07331	0.07299	0.77398	0
DME04715	0.37826	84.23419	8.8152	0	6.57235	0
DME04717	1.27324	59.0708	37.34956	0.00138	2.30501	0
DME04722	1.05887	31.8083	52.03101	13.33106	1.77075	0
DME04752	0.24713	53.70313	44.91187	0	0.81617	0.3217
DME04753	0.82711	54.44571	43.55445	0	1.16404	0
DME04756	0.10372	43.53053	56.21362	0	0.15213	0
DME04757	0.42795	62.22027	35.9222	0	1.42093	0
DME04764	0.04048	68.91564	30.53738	0.00344	0.24553	0
DME04767	0.03812	65.37143	33.93626	0.26256	0.39163	0
DME04772	0.52786	61.27553	35.91982	0.32986	1.94693	0
DME04777	0.82314	41.70707	55.87622	0.0325	1.56106	0
DME04792	9.54782	69.44996	18.99464	0	2.00757	0
DME04794	1.71632	40.23837	56.46028	0.03695	1.54809	0
DME04802	0.7841	72.88018	21.39719	0	4.93852	0
DME04807	0.34775	51.10769	46.66754	0.01182	0.82122	0.39538
DME04809	0.43073	42.93354	52.69475	0.02069	3.8864	0
DME04813	0.77836	61.73647	34.89716	0.00298	1.02162	1.54685
DME04816	0.27323	68.87615	19.86353	8.66027	2.32682	0
DME04843	0.11468	61.94918	37.43535	0	0.50079	0
DME04845	0.41556	84.6789	14.81892	0	0.0841	0
DME04847	0.33708	34.82646	62.08441	0	2.73222	0
DME04849	1.28682	52.79685	43.08868	0	2.28285	0.54481
DME04863	0.63682	65.78748	32.94695	0.01033	0.61843	0

DME04866	1.2844	55.55341	42.08505	0	1.07714	0
DME04874	0.09654	77.59616	19.8646	0	2.4427	0
DME04875	0.21319	51.89883	44.65268	0	0.85105	0
DME04878	0.43219	72.68703	26.31291	0	0.49274	0.07514
DME04880	1.15332	51.6964	44.74069	0	2.40959	0
DME04884	0.06779	71.21972	28.65011	0	0.05159	0.00839
DME04890	2.39171	21.53876	26.29257	0.23183	49.53892	0
DME04900	1.13973	43.14922	54.2185	0	1.48629	0
DME04908	7.61678	23.62056	65.67389	0	3.08328	0.0055
DME04910	1.77551	50.28591	46.21964	0.42531	1.27042	0.02322
DME04911	0.75469	39.32684	55.39007	0.00324	3.78513	0.74003
DME04929	0.7605	38.14467	58.64703	0.00487	2.42815	0
DME05000-W	4.10958	46.47808	45.89459	0.18936	2.21609	1.1123
DME05003	0.739	52.43721	44.97741	0	1.84104	0
DME05007	1.00433	49.97576	47.97595	0	1.03511	0.00885
DME05011	0.86055	42.79942	55.31789	0.75943	0.26271	0
DME05024	6.68611	61.38365	30.9082	0	1.02204	0
DME05082	1.09872	41.60221	53.08613	1.34795	2.79433	0.05203
DME05099	0.02667	67.6944	30.25174	0	1.96351	0
DME05101	2.46907	81.01964	16.10226	0	0.40904	0
DME05111	0.74085	60.00586	37.18607	0	2.06534	0
DME05113	5.65455	25.5612	66.39417	0.11654	2.27355	0
DME05114	2.90321	23.43224	69.85382	0	3.81073	0
DME05267	0.0009	42.17479	47.09479	1.01224	9.71729	0
DME05321	0.36538	58.6524	37.82681	0	3.12214	0
DME05322	0.21173	38.08199	30.85165	29.99283	0.8618	0
DME05323	0.83329	40.13987	40.31203	2.18663	16.18012	0
DME05330	0.12863	69.91101	28.91223	0.03955	1.00858	0
DME05333	1.74477	36.85406	58.50508	0.01961	2.87647	0
DME05340	1.90626	58.53124	28.15707	4.82215	6.58329	0
DME05475	0.26315	84.19311	9.22928	3.50017	1.29369	0
DME05493	0.47154	56.69644	42.80044	0	0.03159	0
DME05506	0.75249	29.9832	68.26272	0	1.00159	0
DME05510	1.12717	69.13644	28.50998	0	1.17214	0.05426
DME05517	0.50214	63.90368	35.10639	0	0.48779	0
DME05522	4.68279	63.01434	30.35276	1.22153	0.70574	0
DME05540	0.35657	60.86897	37.64591	0	1.12855	0
DME05571	0.13013	73.60667	19.18258	3.53641	3.54422	0
DME05580	0.88126	71.32305	24.27314	0	1.52812	1.99444
DME05582	1.1208	73.3668	24.50309	0	0.98496	0
DME05597	0.63692	52.70317	41.97465	0	4.68527	0
DME05715	1.69504	10.96057	86.55074	0	0.79365	0
DME05794	1.44782	7.94506	81.31344	6.84339	2.45029	0
DME05915	0.40579	59.97132	36.4797	0	0.65139	2.48742
DME05932	1.78716	59.66849	35.28194	0	2.2285	0.00801
DME05936	3.05174	55.25149	38.26525	0.70368	2.68956	0

DME05948	0.5947	57.26645	41.07043	0	0.71954	0
DME05949	0.53281	61.85864	36.36975	0.62385	0.61495	0
DME05951	0.08428	65.24413	31.27444	0.05195	3.34521	0
DME05960	0.23353	51.26901	29.78876	3.37502	15.31231	0
DME06157	0.75705	49.65895	48.51265	0	1.07135	0
DME06160	0.32967	81.95953	12.33961	0	4.9964	0
DME06202	1.68654	40.13644	53.46667	0	2.3232	2.21349
DME06210	0.88772	59.22112	36.58884	0.01703	3.28529	0
DME06211	9.57384	34.84036	53.9008	0	1.685	0
DME06217	2.90335	43.92896	52.64202	0	0.51307	0
DME06218	3.94359	59.68694	34.76484	0	1.45468	0
DME06220	0.25191	75.26629	21.88473	0.21471	2.38236	0
DME06223	0.6998	50.5544	47.94921	0.0448	0.73099	0
DME06230	1.25524	72.40882	25.62575	0	0.70128	0
DME06231	2.97565	39.16879	56.18525	0	1.67031	0
DME06232	0.53758	50.30235	47.16616	0.25247	1.73684	0
DME06233	0.66274	60.96649	37.67105	0	0.69972	0
DME06234	1.07445	51.19885	47.09398	0.26511	0.34141	0
DME06243	0.41316	29.03315	70.03472	0	0.49571	0.02326
DME06252	0.17565	52.98873	41.26859	0.03561	5.51482	0
DME06268	1.17316	74.66369	21.12937	0	3.03378	0
DME06288	0.2324	33.54765	61.71309	3.40739	1.0938	0
DME06298	1.22958	56.55176	37.16835	0.0069	2.56936	2.47405
DME06338	1.16242	44.6987	50.96161	2.0175	1.15466	0.00511
DME06344	18.77458	18.40746	61.74361	0	0.68555	0.3598
DME06345	6.95992	18.88447	63.89805	0	10.20586	0
DME06384-w	1.14885	3.46067	94.34745	0	0.47735	0
DME06449	3.39474	0.56047	95.41921	0	0.57659	0
DME06463	20.33157	0.68565	78.6906	0	0.06301	0
DME06533	0.62526	42.27324	55.28519	0	1.14264	0.67366
DME06539	0.19895	65.78865	18.79382	7.4132	7.7919	0
DME06676	2.3311	64.84129	31.6399	0.1097	0.85556	0.22246
DME06681	16.17533	40.21566	41.36126	0	0.30819	1.93956
DSFP00812	0.96764	72.99103	23.1417	0.69304	1.47643	0
DSFP00934	0.14246	61.26903	36.6894	0.05287	1.74428	0
DSFP00988	0.15666	75.28506	11.73161	0.07939	12.61831	0
90042801	0.18994	22.38328	22.22735	0	55.19942	0
90043608	0.40295	69.33012	26.59665	0	3.28194	0.21669
DME03089	6.55779	14.26674	61.66301	0	17.47931	0
DME03100	4.55438	62.15373	27.07165	0	6.22023	0
DME03107-w	1.95151	33.72526	58.69568	0.01299	3.42026	0
DME03110	1.1006	68.18427	18.66418	0	12.05095	0
DME03119	1.95294	61.87574	27.26979	0	8.88458	0
DME03127	3.57748	57.64489	31.16	0	7.60096	0
DME03134	0.68007	30.46898	13.65161	0.09259	55.10675	0
DME03146	0.63233	68.30384	22.62968	1.00878	7.42537	0

DME03153	0.48857	72.42723	26.05074	0.0811	0.95237	0
DME03157	0.68589	88.87948	8.2387	0	2.19593	0
DME03158	1.40801	70.80738	24.40029	0.11764	3.26668	0
DME03163	0.21608	71.7592	24.54263	1.06764	2.41446	0
DME03164	1.5594	58.72435	37.44687	0	2.24551	0
DME03166	0.76483	55.86706	42.74548	0	0.39354	0
DME03175	0.52324	67.135	18.03043	0.42591	13.88543	0
DME03186	3.74458	19.21974	18.17855	0.11155	58.74558	0
DME03187	0.81916	31.13491	48.55009	8.22871	11.26712	0
DME03195	2.88382	76.30011	10.09407	0	10.72201	0
DME03212	1.57066	63.83782	30.99853	2.4974	1.09558	0
DME03213	0.53203	56.55739	38.61619	3.32314	0.97125	0
DME03214	2.56054	74.85137	19.71556	0.03223	2.8403	0
DME03217-w	0.73817	56.93298	40.859	0.00647	1.29458	0.04961
DME03222	9.91926	56.31434	29.373	0	4.3934	0
DME03241	1.22173	12.1466	9.50319	0.00998	77.05232	0
DME03242	0.44918	65.72098	32.38215	0	1.44769	0
DME03248	1.68164	36.60967	54.03205	0	7.67664	0
DME03259	3.37227	73.50651	18.67177	0	4.44945	0
DME03260	0.39481	76.38519	19.82282	0.07378	3.3234	0
DME03264	0.58038	86.68945	11.94764	0.11464	0.66789	0
DME03338	2.29365	81.89573	14.35019	0	1.46043	0
DME03350	4.75873	47.06609	42.5058	0	5.632	0
DME03358	2.79727	46.52155	44.20616	0.02183	6.38121	0
DME03365	0.78329	24.40951	9.83994	0	64.96727	0
DME03367	0.79025	71.49304	23.84026	0.19553	3.66976	0.01115
DME03383	0.75189	38.42376	56.66493	0	4.15941	0
DME03401	1.61469	80.202	14.32865	0	3.85466	0
DME03405	0.22587	70.07936	26.9513	0	2.74347	0
DME03409	2.22487	55.36114	39.62347	0	2.7129	0.07761
DME03413	0.33181	76.28124	22.99156	0	0.39293	0.00245
DME03475	0.02996	79.49011	15.41569	3.58341	1.46002	0
DME03477	5.13369	65.6785	15.05455	0	14.13238	0
DME03481	0.02915	83.83897	9.5928	0.03863	6.50046	0
DME03487	2.49388	77.42157	15.56571	0	4.51884	0
DME03493	6.64922	56.78066	27.52484	0.0155	9.0275	0
DME03497	1.34959	64.01306	32.56705	0	2.06275	0
DME03520	0.01892	56.71218	6.73135	7.90047	28.63708	0
DME03539-W	0.43106	18.94504	63.8622	14.9012	0.55144	0
DME03901	0.8566	67.48777	30.75761	0	0.89801	0
DME03916	0.0249	59.68317	38.29121	0	2.00073	0
DME03947	0.38795	20.81485	77.97436	0	0.8209	0
DME03950	1.86756	48.62223	41.98334	0.02977	7.4971	0
DME03979	1.49651	78.46447	18.35052	0	1.67844	0
DME03984	3.18133	28.10519	64.4852	0.77585	3.44534	0
DME03988	1.51474	68.45131	29.2368	0	0.79406	0

DME03989	0.29056	69.70598	26.17099	0	3.83247	0
DME04000	1.07232	18.30885	59.39974	2.54647	18.66951	0
DME04014	0.81305	64.87808	31.52857	0.07382	2.70648	0
DME04716	0.16304	69.34559	27.39347	0.00384	3.09406	0
DME04727	1.2332	53.58536	31.29904	12.26917	1.61323	0
DME04749	0.56209	61.49907	37.32516	0	0.5239	0.08978
DME04750	0.08105	68.19687	31.63547	0.00891	0.06235	0
DME04755	0.73961	45.03019	52.40254	0	1.82766	0
DME04765	0.17685	46.94975	52.50218	0.00659	0.36463	0
DME04771	0.33436	86.77303	10.54548	0	2.34713	0
DME04788	0.69201	53.31422	43.51211	0.0264	2.45527	0
DME04812-w	0.30906	55.75009	42.00405	0.28475	1.65205	0
DME04844	0.96556	23.8788	72.04667	0	3.10896	0
DME04897	3.83908	43.49638	47.78194	3.49706	1.38554	0
DME04902	4.39769	52.70972	39.16766	0	3.72105	0
DME04906	1.00955	46.52364	44.40136	0	7.39476	0.6707
DME04928	1.5645	50.76579	23.81562	21.22326	2.47691	0.06909
DME04933	0.67502	63.19501	34.81778	0.00157	1.31062	0
DME05009	7.69733	30.32726	61.21151	0	0.59583	0
DME05026	0.16389	60.0892	37.38878	1.13069	0.87043	0.35701
DME05032	1.35228	49.82681	39.64019	0.16672	9.014	0
DME05318	0.08039	61.19595	38.33205	0	0.38488	0.00672
DME05320	5.98543	61.89987	30.75458	0	1.36013	0
DME05324	0.3568	43.96803	37.01094	17.95748	0.70675	0
DME05326	1.5242	59.20851	37.59159	0	1.5842	0
DME05331	0.67681	80.33142	15.08997	3.35091	0.55089	0
DME05336	1.21542	71.93326	26.54335	0	0.30797	0
DME05342-c-w	0.24502	29.73481	60.74685	2.72389	6.53758	0.0075
DME05344	0.85298	82.05606	15.82378	0	1.24823	0.01896
DME05465-w	0.30057	38.20449	59.3643	0.32247	1.80817	0
DME05471	1.45606	41.48475	52.85072	0	3.71946	0
DME05485	0.57088	41.05301	57.62009	0.01845	0.73758	0
DME05488	0.14513	65.54647	33.51842	0	0.78998	0
DME05489	0.18763	61.91103	37.1114	0	0.78994	0
DME05496	1.02797	47.07935	33.97033	1.52734	16.39501	0
DME05499	1.24806	59.89666	35.14054	1.88143	1.83135	0.00196
DME05513	0.75502	34.28767	64.23734	0.08005	0.62414	0
DME05537	0.97854	59.9501	27.01499	0.09886	11.94294	0
DME05547	0.16822	57.76724	38.88019	2.25166	0.84389	0.07804
DME05556	0.44858	62.22964	36.54151	0	0.78027	0
DME05558	2.00189	36.35938	48.83954	11.61876	1.17498	0
DME05576	0.55091	53.07704	45.64325	0.13179	0.59701	0
DME05581	0.07389	79.36731	18.52154	0.80241	1.22712	0
DME05591	0.12367	83.86209	14.47029	0.79733	0.74544	0.00118
DME05601	0.49223	64.39173	34.0436	0	1.05755	0.01489
DME05606	1.93555	55.72817	35.9246	1.05947	5.19127	0

DME05611	0.23088	41.60714	32.32335	0.05085	25.78779	0
DME05720	2.23295	52.70083	43.88917	0	0.96949	0.20755
DME05722	0.16403	45.55594	53.03612	0	1.16621	0
DME05793	25.89284	1.32705	71.46443	0.24357	0.66569	0
DME05801	5.69397	51.85719	40.88264	0.22568	1.33888	0.00165
DME05808-w	0.84436	34.29299	48.03291	11.37698	5.35648	0.00255
DME05814	0.05765	40.51813	58.72006	0	0.6043	0.08557
DME05816	3.03564	34.08536	60.47877	0	2.38587	0
DME05907	0.22871	83.03946	16.0681	0.32747	0.33626	0
DME05916	0.15694	80.18824	18.80394	0.33549	0.51539	0
DME05950	0.43349	70.99658	26.23116	0.05835	2.23623	0
DME05962	10.55319	7.30199	59.23673	0.00232	22.82277	0
DME05975	0.72892	55.82574	42.07506	0	1.26312	0.09969
DME06015	3.53295	26.50091	67.78609	0	2.14736	0.01357
DME06043	0.10941	74.88067	23.08544	0.37098	1.55293	0
DME06187	0.04106	77.0895	19.69616	1.95665	1.21663	0
DME06192	0.91683	75.83388	19.19782	2.4935	1.54834	0
DME06200	1.2406	58.37792	39.00369	0.11021	0.99211	0.27358
DME06213	1.53035	66.87786	16.68546	8.89523	5.96843	0
DME06226	0.66103	66.22965	29.52735	0.0981	3.46485	0
DME06227	1.814	50.65571	43.26313	1.06775	3.19276	0
DME06253-w	0.9111	2.53189	56.10339	0.01132	39.95164	0.00201
DME06274-w	0.28641	69.78031	26.73163	0.85408	2.34756	0
DME06289-w	0.05907	39.19935	45.0862	0.01932	15.61374	0
DME06305	0.50571	60.60215	37.868	0.03204	0.99209	0
DME06340	0.03746	79.79097	14.06714	0.01815	5.82752	0
DME06343	2.08051	1.08978	95.75842	0.01411	0.99886	0
DME06385	0.17027	43.20707	38.84174	7.41308	10.04999	0
DME06446	0.05468	17.6763	81.34103	0	0.92799	0
DME06460	0.72771	47.24441	41.20027	0	10.65118	0
DME06679	4.93082	62.87483	30.99621	0	1.19814	0
DME06694-w	0.34793	83.8602	14.23169	0.07587	1.4843	0
DME06696	0.7329	84.54112	13.66517	0	0.9655	0
DSFP01038-w	0.1953	41.27053	51.25481	6.31414	0.728	0
DSFP01047	3.0871	83.61676	9.12507	0	4.17107	0
DSFP01085	6.19556	43.18902	48.57649	0	1.99481	0
90043293	0.88232	41.57698	56.76351	0	0.77379	0
DME03082	0.30387	64.59275	25.89117	0	9.21221	0
DME03511	0.36217	59.15341	30.40431	0	10.04901	0
DME04097	1.11446	53.81251	41.49667	0.03035	3.54601	0
DME04099	0.6055	53.10801	38.18811	0	5.03565	3.06273
DME04101-1	1.02475	64.2825	33.64346	0	1.03922	0.01008
DME04102	0.59053	57.31279	39.33936	0.0649	2.69242	0
DME04104-1	22.38633	0.97271	76.62173	0	0.01331	0
DME04105	2.48404	58.54399	35.35974	0	3.60848	0.00129
DME04107	21.6893	9.95963	67.80074	0	0.55034	0

DME04108	1.95928	55.39287	40.30672	0	2.33917	0.00197
DME04176-1	1.00182	81.56204	15.35679	0	2.07936	0
DME04177	2.40249	32.44307	63.49528	0	1.46775	0
DME04181	0.7458	83.91415	14.15581	0	1.18424	0
DME04182-w	1.29822	5.74388	85.35167	0	0.2261	0
DME04184-1	0.66964	33.90051	63.65286	0	1.77698	0
DME04189-1	1.2854	61.30208	35.88859	0	1.51877	0
DME04234	6.44053	8.03744	82.13299	0	3.38383	0
DME04236	2.64245	53.79899	36.41322	0	4.1335	1.82789
DME04238	1.87454	34.02994	57.34214	0	6.09869	0.6547
DME04240	20.17267	33.29407	45.20734	0	1.32592	0
DME04241	1.78145	48.91448	35.90023	0	1.05595	11.18612
DME04243	0.40165	27.37338	71.01565	0	1.20932	0
DME04417	0.45028	0.22203	75.72967	0	23.58896	0
DME04418	1.37839	1.85774	96.03697	0	0.61773	0.00438
DME04422	1.07982	61.23779	35.86762	0.10624	1.67543	0
DME04430	23.0227	1.01371	75.58636	0	0.16976	0
DME04432	8.20235	0.8925	75.46283	0	15.31017	0
DME04464	1.39165	35.72577	58.5684	1.6762	1.41302	1.11422
DME04471	3.30546	34.87214	45.21292	0	16.56921	0
DME04473	2.9103	57.86081	33.37553	0	4.75639	0.65035
DME04474	1.84058	72.96636	24.28293	0	0.91013	0
DME04476	1.86939	60.29029	30.50992	0	4.57365	2.75675
DME04478	5.15225	56.71302	34.0136	0.0449	4.07623	0
DME04489	11.50388	57.39091	24.45935	0.24045	6.35935	0
DME04492	3.13571	35.06061	59.25297	1.37845	1.15157	0.02069
DME04499	1.1269	72.3326	26.12623	0	0.41427	0
DME04501	8.95838	56.19954	28.41767	0	5.70687	0
DME04502	1.08609	53.64217	41.99707	0	2.55259	0.02849
DME04504	1.56277	48.72463	44.16582	0	5.53617	0
DME03092	11.78986	31.69282	13.05645	0	42.41221	0
DME04088	2.43855	29.86088	65.27745	0	2.39904	0
DME04090	0.22327	76.79262	15.83456	0	7.09778	0
DME04098	6.9976	34.69823	56.5215	0	1.77819	0.00182
DME04179	0.18793	35.49788	61.0669	0	3.24729	0
DME04180-1	0.87755	52.09485	41.46173	0.40231	5.15256	0
DME04185-1-w	7.3396	26.95742	65.45875	0	0.24423	0
DME04193	0.09524	52.41713	46.24188	0	1.23265	0.01005
DME04233	1.84134	81.10201	10.92332	4.44287	1.69047	0
DME04433	20.18702	0.45895	60.51855	0	0.30546	18.49298
DME04434-w	11.42307	2.43574	85.53821	0	0.54643	0.01727
DME04463	3.01492	10.39387	85.11485	0.06588	0.6383	0.76103
DME04477	9.55808	5.08581	84.73416	0.00679	0.48754	0
DME04481	3.31193	21.65991	74.0405	0	0.98766	0
DME04485	0.94482	76.99094	20.39155	0	1.67269	0
DME04543-w	3.51247	67.36147	25.41172	0	3.69086	0.02348

DME04645	4.17975	67.28108	23.03457	1.0312	4.46006	0.00294
DME05280	0.22514	70.09869	17.72413	6.19968	5.75236	0
DME05351	0.40949	58.19768	36.33821	0.70054	4.34844	0
DME05369	1.92715	20.37347	75.35518	0.30375	2.03405	0
DME05371	23.30231	5.76893	68.00375	0.00429	0.44492	2.40208
DME05732-W	1.18443	0.5239	92.76718	0.03848	2.48496	0
DME05818	9.42836	0.2807	89.35084	0	0.84757	0
DME05856	0.26398	69.54206	16.0849	11.70108	1.73278	0.6752
DME06325	4.47602	0.46038	69.86319	0.00057	24.35158	0
DME06332-w	0.76623	45.5473	47.95963	0	5.70043	0
DME06396-w	0.39704	40.37844	58.22797	0	0.99655	0
DME06404	1.37632	8.02825	88.0423	0.00115	1.19954	0
DME06423-w	3.34467	9.66066	65.40608	0.14999	0.98441	0
DME06448	0.04171	4.79052	67.14019	0	27.76847	0
DSFP01031-w	29.16949	8.85609	60.56791	0	1.02677	0.00165
DSFP01070	6.04728	0.84857	92.97042	0	0.11311	0
DSFP01080	3.4297	0.40391	95.83422	0	0.1162	0

Table S5. The significantly different functional categories in KEGG annotation

Levels2_KEGG	Levels3_KEGG	Mean.H_O_C Q	SD.H_O_CQ	Mean.O_Met s_CQ	SD.O_Mets_C Q	p.value
Amino_acid_metabolism	Phenylalanine_metabolism	0.201311	0.023189	0.208362	0.025602	0.008356492
Biosynthesis_of_other_secon dary_metabolites	Acarbose_and_validamycin_biosynthesis	0.093087	0.016296	0.098576	0.017943	0.001917721
Biosynthesis_of_other_secon dary_metabolites	Isoquinoline_alkaloid_biosynthesis	0.048464	0.009906	0.050874	0.009502	0.00754589
Biosynthesis_of_other_secon dary_metabolites	Flavone_and_flavonol_biosynthesis	0.01758	0.004751	0.016267	0.005099	0.002682446
Biosynthesis_of_other_secon dary_metabolites	Betalain_biosynthesis	0.001672	0.001999	0.002634	0.002332	2.29E-06
Biosynthesis_of_other_secon dary_metabolites	Indole_alkaloid_biosynthesis	0.000632	0.000861	0.001193	0.001337	2.10E-05
Carbohydrate_metabolism	Amino_sugar_and_nucleotide_sugar_metabolism	1.622539	0.125568	1.667037	0.119377	0.001172503
Carbohydrate_metabolism	Galactose_metabolism	1.158501	0.118971	1.193294	0.114551	0.010635822
Carbohydrate_metabolism	Fructose_and_mannose_metabolism	0.839701	0.079565	0.866485	0.082624	0.007153971
Carbohydrate_metabolism	Pentose_and_glucuronate_interconversions	0.589214	0.073149	0.612665	0.073236	0.012254934
Carbohydrate_metabolism	Propanoate_metabolism	0.517893	0.056035	0.538205	0.062377	0.003481951
Carbohydrate_metabolism	Inositol_phosphate_metabolism	0.136192	0.017998	0.143807	0.022519	0.002089638
Carbohydrate_metabolism	Ascorbate_and_aldarate_metabolism	0.098246	0.020286	0.104835	0.022049	0.004750767
Glycan_biosynthesis_and_me tabolism	Other_glycan_degradation	0.631132	0.102519	0.664573	0.106414	0.006252914
Glycan_biosynthesis_and_me tabolism	Lipopolysaccharide_biosynthesis	0.171253	0.040674	0.193123	0.044908	1.52E-05
Glycan_biosynthesis_and_me tabolism	Glycosphingolipid_biosynthesis_-_ganglio_series	0.090716	0.023446	0.099738	0.026496	0.001852668
Glycan_biosynthesis_and_me tabolism	N-Glycan_biosynthesis	0.055041	0.007802	0.052466	0.006942	0.00222773
Lipid_metabolism	Glycerophospholipid_metabolism	0.459346	0.029885	0.45056	0.031361	0.007236381
Lipid_metabolism	Primary_bile_acid_biosynthesis	0.040859	0.004825	0.039401	0.004007	0.00857898
Lipid_metabolism	Steroid_biosynthesis	0.008917	0.003477	0.007378	0.002842	3.87E-05
Lipid_metabolism	Arachidonic_acid_metabolism	0.006636	0.003077	0.0078	0.003438	0.000321435
Lipid_metabolism	alpha-Linolenic_acid_metabolism	0.003719	0.002152	0.004476	0.002383	0.002604848
Lipid_metabolism	Fatty_acid_elongation	0.001908	0.000764	0.001681	0.000817	0.002208846

Metabolism_of_cofactors_and_vitamins	Biotin_metabolism	0.270008	0.02676	0.277764	0.026498	0.00813918
Metabolism_of_cofactors_and_vitamins	Folate_biosynthesis	0.253087	0.022392	0.265728	0.021434	3.67E-07
Metabolism_of_cofactors_and_vitamins	Riboflavin_metabolism	0.133266	0.016467	0.138967	0.016516	0.001959438
Metabolism_of_cofactors_and_vitamins	iquinone_and_other_terpenoid-quinone_biosynthe	0.115854	0.026517	0.124707	0.024514	0.001019784
Metabolism_of_other_amino_acids	beta-Alanine_metabolism	0.090883	0.014955	0.096312	0.015414	0.000192465
Metabolism_of_other_amino_acids	Phosphonate_and_phosphinate_metabolism	0.071539	0.009115	0.074842	0.008888	0.001394623
Metabolism_of_terpenoids_and_polyketides	Polyketide_sugar_unit_biosynthesis	0.173633	0.02632	0.180247	0.025862	0.003207294
Metabolism_of_terpenoids_and_polyketides	Tetracycline_biosynthesis	0.070145	0.010518	0.073313	0.009608	0.005585182
Metabolism_of_terpenoids_and_polyketides	Biosynthesis_of_siderophore_group_nonribosomal_peptides	0.019926	0.014622	0.021976	0.01128	0.003824155
Metabolism_of_terpenoids_and_polyketides	Biosynthesis_of_type_II_polyketide_products	0.009671	0.003113	0.008073	0.002839	4.61E-06
Metabolism_of_terpenoids_and_polyketides	Geraniol_degradation	0.006326	0.003514	0.007402	0.003858	0.000559011
Metabolism_of_terpenoids_and_polyketides	Carotenoid_biosynthesis	0.002457	0.001436	0.00195	0.001184	0.001529713
Metabolism_of_terpenoids_and_polyketides	Type_I_polyketide_structures	0.002289	0.001049	0.002062	0.00113	0.012612859
Xenobiotics_biodegradation_and_metabolism	Aminobenzoate_degradation	0.072534	0.012183	0.077979	0.013077	7.35E-05
Xenobiotics_biodegradation_and_metabolism	Fluorobenzoate_degradation	0.003568	0.003614	0.004451	0.003396	0.000683946
Xenobiotics_biodegradation_and_metabolism	Toluene_degradation	0.002606	0.002339	0.003286	0.002464	0.000586007

Table S6. Relative abundance of co-abundance groups

ID	Chongqing							Quanzhou						
	MHO_mean	MHO_sd	MUO_mean	MUO_sd	p	pfdr	enriched group	MHO_mean	MHO_sd	MUO_mean	MUO_sd	p	pfdr	enriched group
CAG001	4.86E-05	9.57E-05	3.53E-05	1.59E-04	6.87E-04	8.95E-04	MHO	5.22E-05	1.20E-04	1.76E-05	4.86E-05	7.04E-02	1.51E-01	MHO
CAG002	3.84E-05	1.26E-04	1.08E-05	5.60E-05	1.15E-05	6.19E-05	MHO	2.45E-05	8.45E-05	5.86E-06	3.37E-05	5.60E-02	1.34E-01	MHO
CAG003	3.18E-05	7.90E-05	1.17E-04	4.14E-04	7.92E-06	4.87E-05	MUO	5.41E-05	1.41E-04	7.64E-05	1.56E-04	7.25E-01	8.66E-01	MUO
CAG004	5.43E-05	4.73E-04	6.08E-06	1.48E-05	3.32E-07	1.43E-05	MHO	2.91E-05	5.33E-05	5.06E-05	9.66E-05	6.19E-01	8.36E-01	MUO
CAG005	1.60E-05	4.64E-05	3.85E-05	1.51E-04	7.93E-04	1.00E-03	MUO	2.37E-05	6.84E-05	6.44E-05	1.20E-04	5.55E-01	8.23E-01	MUO
CAG006	6.39E-05	1.79E-04	1.81E-04	5.41E-04	6.04E-04	8.38E-04	MUO	9.28E-05	2.20E-04	2.13E-04	3.71E-04	3.91E-01	6.23E-01	MUO
CAG007	7.29E-05	1.14E-04	8.18E-05	5.78E-04	2.20E-05	8.00E-05	MUO	7.48E-05	1.29E-04	1.46E-04	3.06E-04	8.61E-01	9.50E-01	MUO
CAG008	7.48E-05	4.77E-04	2.05E-05	4.59E-05	1.04E-04	2.14E-04	MHO	3.21E-05	5.18E-05	4.40E-05	7.15E-05	6.87E-01	8.51E-01	MUO
CAG009	4.30E-05	9.57E-05	1.80E-04	7.11E-04	5.22E-06	4.87E-05	MUO	5.48E-05	1.14E-04	1.53E-04	2.35E-04	9.07E-02	1.77E-01	MUO
CAG010	3.54E-05	1.20E-04	1.29E-04	3.98E-04	1.51E-05	7.22E-05	MUO	4.84E-05	1.39E-04	1.43E-04	3.46E-04	6.43E-01	8.37E-01	MUO
CAG011	2.79E-05	7.98E-05	8.89E-06	4.85E-05	2.86E-05	8.18E-05	MHO	1.89E-05	4.04E-05	7.42E-07	4.26E-06	4.99E-03	5.16E-02	MHO
CAG012	6.84E-05	5.21E-04	3.92E-05	5.13E-05	1.82E-01	1.82E-01	MHO	5.32E-05	1.53E-04	7.44E-05	8.80E-05	7.96E-02	1.63E-01	MUO
CAG013	9.16E-05	1.33E-04	1.54E-04	1.69E-04	6.38E-04	8.58E-04	MUO	4.41E-05	9.03E-05	1.15E-04	1.81E-04	6.36E-02	1.44E-01	MUO
CAG014	4.56E-05	1.89E-04	1.09E-04	2.81E-04	3.00E-03	3.11E-03	MUO	3.74E-05	8.89E-05	1.50E-04	3.75E-04	3.43E-01	5.89E-01	MUO
CAG015	8.82E-05	2.32E-04	6.62E-05	3.81E-04	9.19E-05	2.08E-04	MHO	1.61E-04	3.95E-04	6.99E-05	1.67E-04	9.75E-01	9.79E-01	MHO
CAG016	5.59E-05	1.73E-04	2.69E-05	8.07E-05	1.19E-04	2.32E-04	MHO	4.56E-05	1.08E-04	3.18E-05	5.88E-05	9.41E-01	9.79E-01	MHO
CAG017	4.04E-04	1.21E-03	4.86E-04	1.14E-03	4.62E-04	7.03E-04	MUO	2.71E-04	6.61E-04	1.30E-03	2.03E-03	2.05E-03	5.16E-02	MUO
CAG018	7.47E-05	2.33E-04	1.55E-04	4.02E-04	3.03E-03	3.11E-03	MUO	1.21E-04	2.78E-04	3.64E-05	1.37E-04	2.45E-02	7.68E-02	MHO
CAG019	9.37E-05	5.24E-04	1.40E-04	2.50E-04	1.10E-03	1.24E-03	MUO	6.08E-05	1.43E-04	1.02E-04	2.70E-04	6.22E-01	8.36E-01	MUO
CAG020	9.08E-05	2.02E-04	3.63E-05	7.86E-05	2.62E-05	8.06E-05	MHO	1.12E-04	1.81E-04	3.21E-05	8.04E-05	1.53E-02	6.95E-02	MHO
CAG021	5.72E-05	1.21E-04	3.72E-05	1.57E-04	4.19E-04	6.68E-04	MHO	5.33E-05	1.10E-04	1.80E-05	4.90E-05	4.99E-02	1.34E-01	MHO
CAG022	1.03E-04	3.63E-04	3.96E-05	7.61E-05	4.74E-04	7.03E-04	MHO	7.01E-05	1.20E-04	7.47E-05	1.31E-04	8.28E-01	9.50E-01	MUO
CAG023	2.02E-04	7.87E-05	2.35E-04	7.24E-05	6.96E-06	4.87E-05	MUO	2.12E-04	1.23E-04	2.94E-04	1.80E-04	5.79E-03	5.16E-02	MUO
CAG024	2.83E-05	4.84E-05	1.69E-05	6.99E-05	2.42E-05	8.00E-05	MHO	4.16E-05	7.44E-05	7.98E-06	2.42E-05	7.80E-03	5.59E-02	MHO
CAG025	7.51E-05	5.10E-04	1.89E-05	4.94E-05	7.13E-06	4.87E-05	MHO	5.81E-05	1.36E-04	2.09E-05	7.24E-05	2.40E-02	7.68E-02	MHO
CAG026	2.74E-04	1.26E-04	3.09E-04	9.57E-05	2.01E-05	8.00E-05	MUO	2.89E-04	1.66E-04	3.76E-04	1.74E-04	6.00E-03	5.16E-02	MUO
CAG027	7.56E-05	1.83E-04	2.77E-05	6.52E-05	5.60E-06	4.87E-05	MHO	1.37E-04	2.28E-04	1.31E-04	2.07E-04	8.39E-01	9.50E-01	MHO
CAG028	3.27E-05	8.64E-05	8.59E-05	2.89E-04	2.82E-03	3.03E-03	MUO	4.22E-05	1.04E-04	8.79E-05	1.77E-04	3.56E-01	5.89E-01	MUO

CAG029	5.78E-05	9.53E-05	3.08E-05	1.08E-04	1.31E-04	2.46E-04	MHO	1.49E-04	3.60E-04	1.51E-04	5.20E-04	1.96E-01	3.66E-01	MUO
CAG030	3.36E-05	9.62E-05	1.29E-05	7.08E-05	5.07E-05	1.28E-04	MHO	3.03E-05	1.03E-04	9.42E-06	5.41E-05	5.60E-02	1.34E-01	MHO
CAG031	4.10E-05	1.31E-04	8.91E-05	2.58E-04	9.56E-04	1.14E-03	MUO	4.40E-05	1.04E-04	1.06E-04	2.38E-04	3.49E-01	5.89E-01	MUO
CAG032	2.95E-05	9.71E-05	7.34E-06	3.07E-05	1.00E-03	1.16E-03	MHO	1.60E-05	3.76E-05	6.09E-07	3.50E-06	2.50E-02	7.68E-02	MHO
CAG033	2.22E-04	1.02E-04	2.48E-04	7.62E-05	4.86E-05	1.28E-04	MUO	2.06E-04	1.19E-04	2.86E-04	1.49E-04	4.67E-03	5.16E-02	MUO
CAG034	3.00E-05	1.51E-04	7.69E-06	2.20E-05	5.22E-04	7.49E-04	MHO	1.54E-05	4.17E-05	5.69E-06	1.94E-05	4.65E-01	7.15E-01	MHO
CAG035	7.97E-05	2.02E-04	2.68E-05	7.01E-05	4.16E-06	4.87E-05	MHO	2.18E-04	5.91E-04	1.47E-04	2.38E-04	9.60E-01	9.79E-01	MHO
CAG036	3.24E-05	9.75E-05	1.10E-05	5.48E-05	1.00E-04	2.14E-04	MHO	2.02E-05	6.57E-05	5.12E-06	2.94E-05	5.60E-02	1.34E-01	MHO
CAG037	8.72E-05	1.88E-04	2.49E-05	7.78E-05	1.25E-03	1.38E-03	MHO	7.85E-05	1.89E-04	8.38E-06	3.19E-05	1.62E-02	6.95E-02	MHO
CAG038	8.74E-05	2.40E-04	3.03E-05	7.13E-05	8.76E-05	2.08E-04	MHO	2.24E-04	4.91E-04	1.37E-04	2.28E-04	5.80E-01	8.32E-01	MHO
CAG039	4.17E-05	1.13E-04	1.42E-04	4.12E-04	3.44E-04	5.92E-04	MUO	7.14E-05	2.09E-04	1.22E-04	2.68E-04	6.93E-01	8.51E-01	MUO
CAG040	2.98E-05	8.99E-05	1.00E-05	5.86E-05	3.67E-04	6.07E-04	MHO	1.74E-05	3.82E-05	6.33E-07	3.64E-06	1.40E-02	6.95E-02	MHO
CAG041	4.02E-05	2.47E-04	7.73E-05	1.94E-04	8.64E-04	1.06E-03	MUO	5.16E-05	1.20E-04	2.12E-04	3.70E-04	1.44E-02	6.95E-02	MUO
CAG042	2.68E-04	1.07E-04	3.06E-04	9.46E-05	2.24E-05	8.00E-05	MUO	2.67E-04	1.54E-04	3.34E-04	1.68E-04	2.08E-02	7.68E-02	MUO
CAG043	1.74E-05	5.09E-05	9.03E-05	4.20E-04	3.20E-04	5.73E-04	MUO	1.56E-05	4.35E-05	2.80E-05	7.22E-05	9.79E-01	9.79E-01	MUO

Table S7. AUC results for each iteration

iteration	CQ tests dataset					QZ validation dataset				
	Accuracy	Precision	Recall	F1	roc	Accuracy	Precision	Recall	F1	roc
1	0.61	0.63	0.71	0.67	0.66	0.64	0.64	0.80	0.71	0.65
2	0.79	0.81	0.83	0.82	0.87	0.67	0.65	0.85	0.74	0.73
3	0.66	0.71	0.65	0.68	0.73	0.63	0.63	0.78	0.70	0.69
4	0.60	0.62	0.68	0.65	0.70	0.66	0.64	0.88	0.74	0.66
5	0.68	0.70	0.74	0.72	0.78	0.66	0.65	0.80	0.72	0.68
6	0.65	0.64	0.79	0.71	0.74	0.66	0.64	0.88	0.74	0.67
7	0.70	0.70	0.80	0.75	0.81	0.64	0.65	0.75	0.70	0.69
8	0.77	0.80	0.80	0.80	0.85	0.64	0.65	0.78	0.70	0.70
9	0.66	0.71	0.65	0.68	0.71	0.67	0.65	0.88	0.74	0.66
10	0.65	0.69	0.65	0.67	0.67	0.64	0.63	0.85	0.72	0.69
11	0.66	0.68	0.74	0.70	0.70	0.64	0.63	0.83	0.72	0.67
12	0.82	0.78	0.94	0.85	0.83	0.66	0.64	0.88	0.74	0.65
13	0.62	0.66	0.68	0.67	0.67	0.71	0.69	0.88	0.77	0.69
14	0.73	0.75	0.77	0.76	0.78	0.71	0.70	0.83	0.76	0.75
15	0.71	0.73	0.77	0.75	0.76	0.62	0.61	0.83	0.70	0.69
16	0.66	0.69	0.71	0.70	0.71	0.66	0.65	0.83	0.73	0.72
17	0.73	0.73	0.83	0.77	0.79	0.62	0.62	0.80	0.70	0.66
18	0.74	0.73	0.85	0.78	0.81	0.66	0.64	0.88	0.74	0.64
19	0.67	0.72	0.68	0.70	0.71	0.66	0.66	0.78	0.71	0.68
20	0.69	0.71	0.77	0.74	0.77	0.66	0.64	0.88	0.74	0.69
21	0.69	0.67	0.85	0.75	0.77	0.66	0.65	0.83	0.73	0.68
22	0.66	0.73	0.63	0.68	0.77	0.62	0.63	0.73	0.67	0.70
23	0.74	0.74	0.82	0.78	0.81	0.66	0.64	0.85	0.73	0.67
24	0.67	0.71	0.69	0.70	0.72	0.64	0.63	0.85	0.72	0.69
25	0.69	0.70	0.76	0.73	0.72	0.68	0.66	0.88	0.75	0.71
26	0.73	0.75	0.77	0.76	0.78	0.67	0.66	0.83	0.73	0.67
27	0.67	0.69	0.71	0.70	0.69	0.66	0.64	0.88	0.74	0.68
28	0.69	0.74	0.68	0.71	0.71	0.66	0.65	0.83	0.73	0.73
29	0.69	0.71	0.74	0.72	0.79	0.63	0.64	0.75	0.69	0.67
30	0.69	0.68	0.82	0.75	0.83	0.60	0.61	0.78	0.68	0.71
31	0.61	0.63	0.71	0.67	0.67	0.68	0.67	0.83	0.74	0.71
32	0.75	0.74	0.83	0.78	0.73	0.64	0.63	0.83	0.72	0.69
33	0.69	0.70	0.76	0.73	0.81	0.62	0.63	0.73	0.67	0.66
34	0.67	0.68	0.77	0.72	0.72	0.64	0.63	0.88	0.73	0.68
35	0.67	0.75	0.62	0.68	0.76	0.66	0.65	0.83	0.73	0.69
36	0.60	0.63	0.65	0.64	0.67	0.62	0.62	0.78	0.69	0.65
37	0.77	0.78	0.82	0.80	0.84	0.66	0.64	0.85	0.73	0.70
38	0.69	0.74	0.68	0.71	0.76	0.67	0.65	0.85	0.74	0.69
39	0.71	0.72	0.80	0.76	0.77	0.68	0.67	0.83	0.74	0.69
40	0.66	0.68	0.77	0.72	0.75	0.67	0.65	0.88	0.74	0.71
41	0.65	0.64	0.79	0.71	0.70	0.66	0.64	0.88	0.74	0.68
42	0.68	0.71	0.71	0.71	0.77	0.63	0.63	0.80	0.70	0.69
43	0.72	0.73	0.79	0.76	0.79	0.66	0.65	0.80	0.72	0.71
44	0.79	0.80	0.82	0.81	0.86	0.63	0.63	0.78	0.70	0.68
45	0.62	0.66	0.66	0.66	0.65	0.67	0.66	0.83	0.73	0.69

46	0.68	0.73	0.65	0.69	0.75	0.60	0.61	0.78	0.68	0.66
47	0.68	0.73	0.69	0.71	0.75	0.68	0.67	0.83	0.74	0.71
48	0.75	0.76	0.80	0.78	0.80	0.64	0.63	0.85	0.72	0.66
49	0.70	0.72	0.76	0.74	0.76	0.70	0.67	0.88	0.76	0.67
50	0.75	0.73	0.88	0.80	0.78	0.63	0.62	0.83	0.71	0.67
Mean	0.69	0.71	0.75	0.73	0.75	0.65	0.64	0.83	0.72	0.69