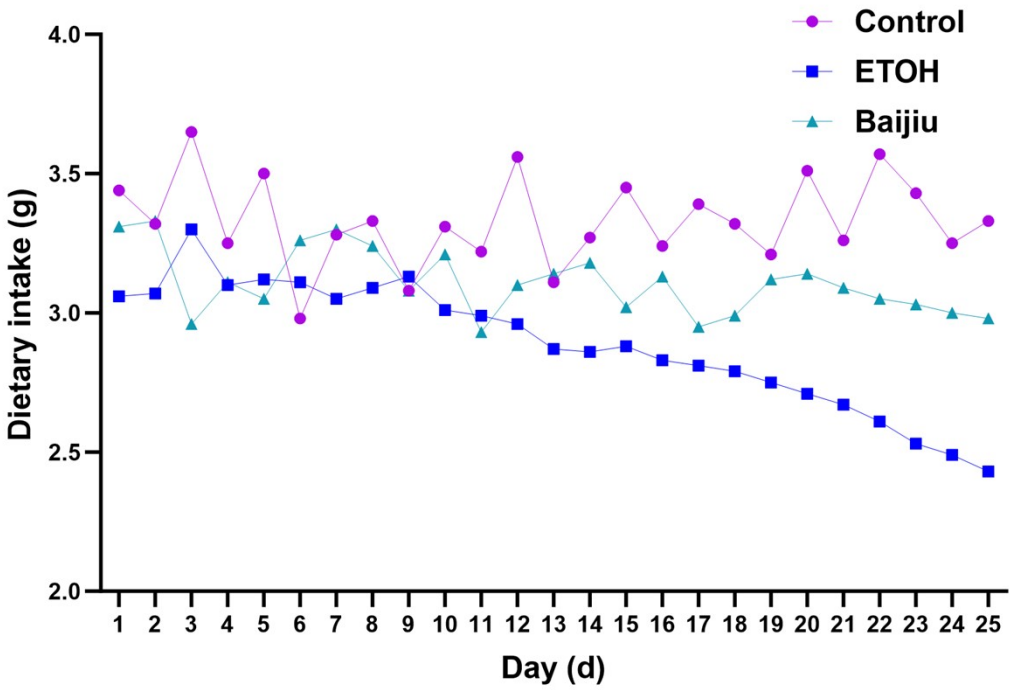

Figure S1 Changes in dietary intake of mice

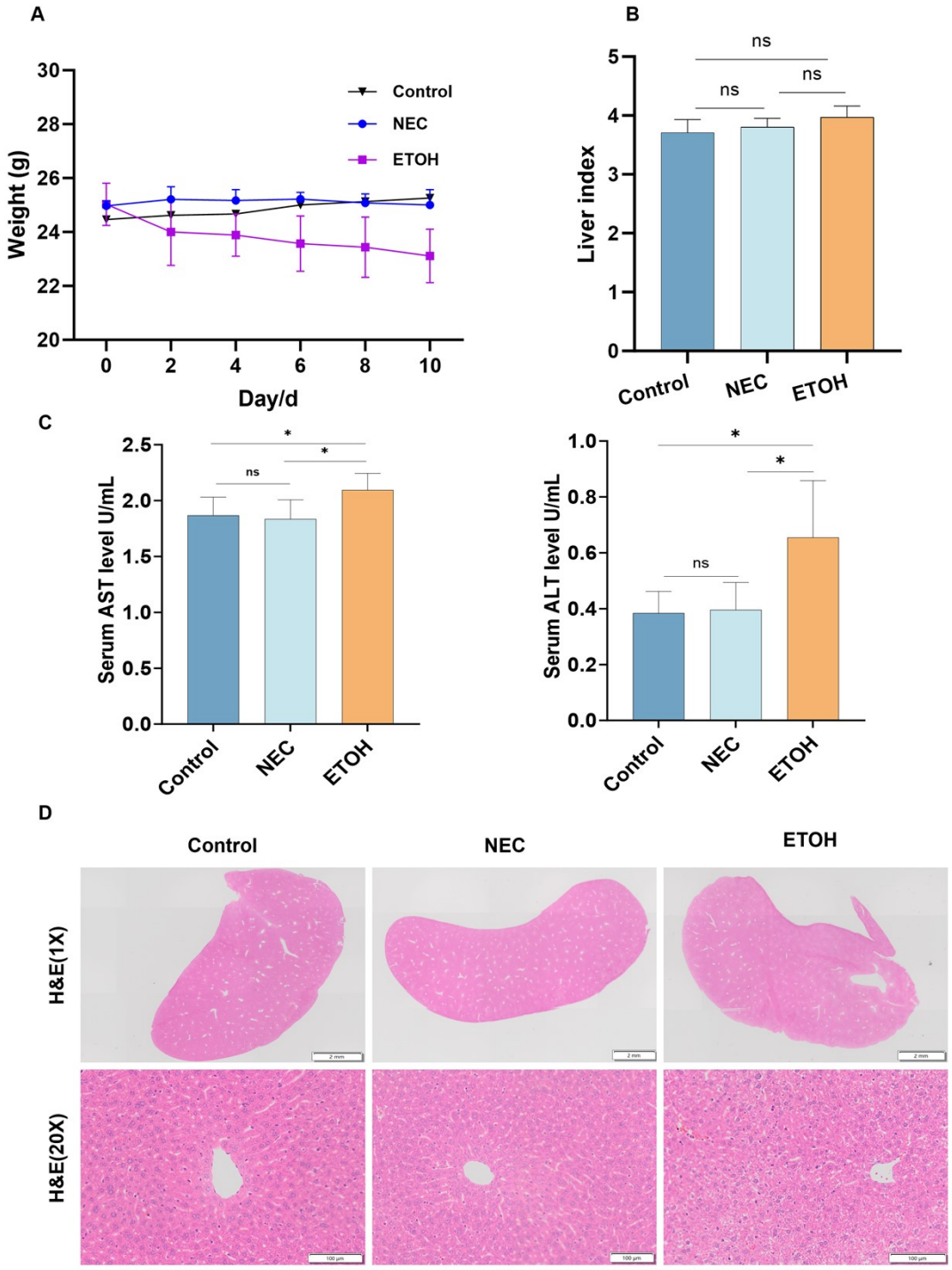

Figure S2 NEC intervention alone did not differ significantly from the control group. (A) Dynamic changes in body weight of mice during the intervention period. (B) Alterations in the liver index among different groups. (C) Serum aspartate aminotransferase (AST) and alanine aminotransferase (ALT) levels. (D) Representative hematoxylin and eosin (H&E) staining photomicrographs of mouse liver sections. Data are presented as the mean ± SD.

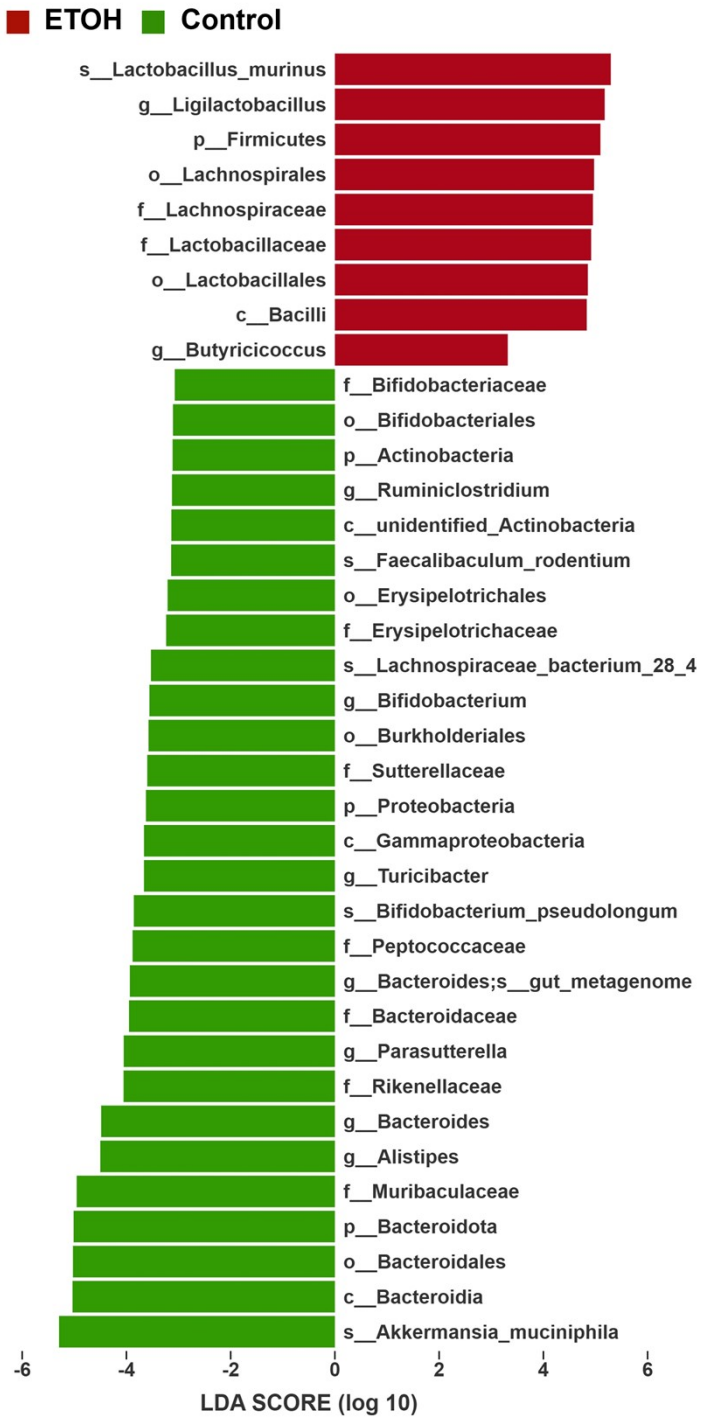

Figure S3 Linear discriminant analysis effect size (LEfSe) analysis of differential microbiota between Control group and ETOH group.

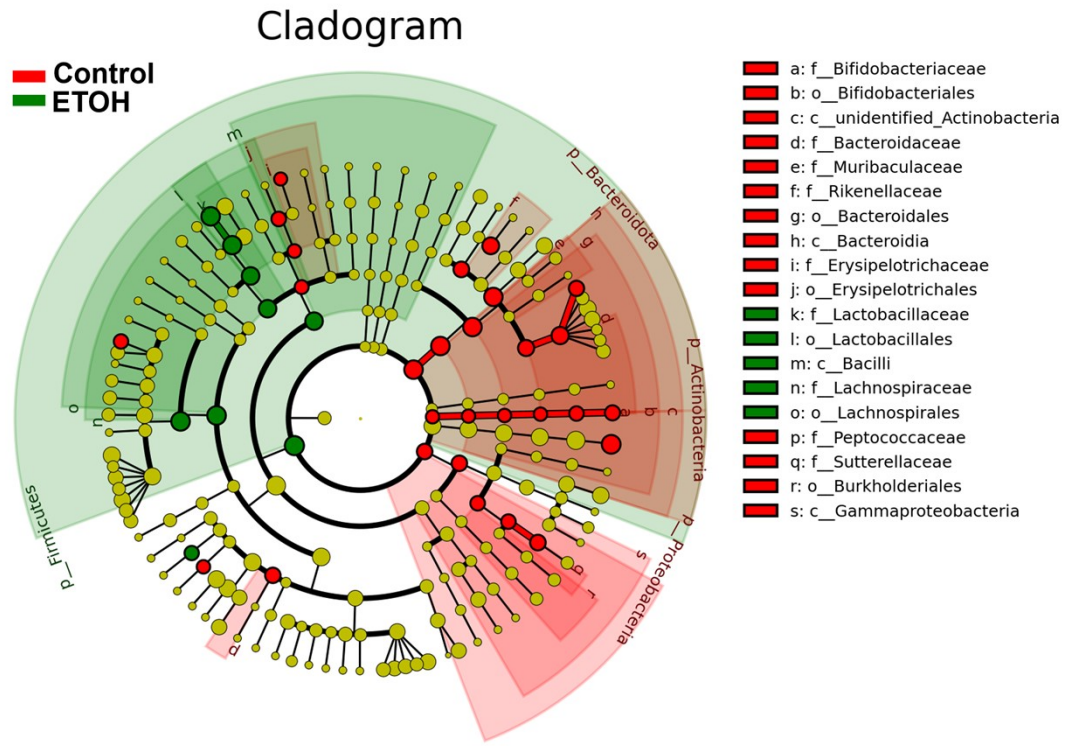

Figure S4 Evolutionary cladogram of differential microbiota between Control group and ETOH group

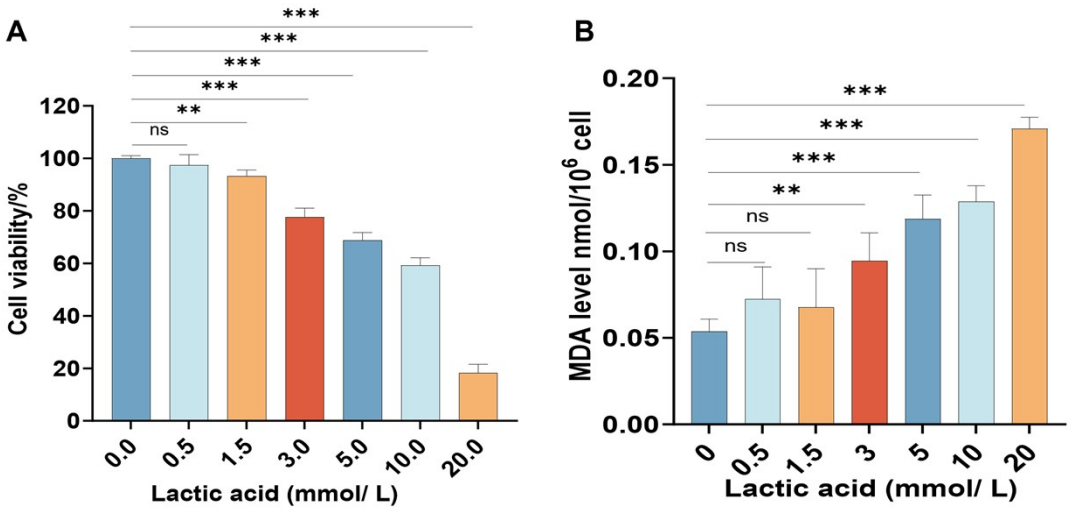

Figure S5 Cell viability and MDA content in AML12 cells treated with different concentrations of lactic acid

Table S1 Ratio of peak areas of energy metabolism-related metabolites to internal standard

No.	Metabolites	Control	ETOH	Baijiu
1	Glucose	6.63±0.34	3.14±0.76	5.84±1.64
2	Glucose-6-phosphate	28.42±3.73	62.25±10.03	33.31±6.26

3	Fructose-6-phosphate	4.44±0.95	15.61±0.78	6.54±1.46
4	1,3-Bisphosphoglycerate	0.0047±0.0013	0.0048±0.0001	0.0047±0.0007
5	Pyruvate	7.62±1.41	1.48±0.12	8.52±1.05
6	Citric acid	2.76±0.25	0.62±0.35	3.22±0.70
7	Cis-aconitic acid	3.05±0.20	1.09±0.62	3.64±1.56
8	Isocitric acid	30.62±4.14	18.10±3.41	24.34±5.31
9	a-Ketoglutaric acid	0.0067±0.0015	0.0030±0.0018	0.0045±0.0006
10	Succinic acid	0.0052±0.0002	0.0044±0.0016	0.0046±0.0010
11	Malic acid	82.80±4.55	46.52±8.28	53.88±2.47
12	lactic acid	308.14±6.70	366.62±9.01	270.18±20.62
13	Oxaloacetic acid	0.0022±0.0002	0.0012±0.0005	0.0017±0.0003
14	Fumaric acid	0.0014±0.0002	0.0011±0.0003	0.0016±0.0001