



Supplementary Figure 1 Quality control analysis of the high-throughput sequencing data. A and B: Analysis of mRNA (A) and microRNA (miRNA) (B) expression levels in different groups; C and D: Principal component analysis based on mRNA (C) and miRNA (D) expression levels in different groups.

Supplementary Table 1 Body weight changes of mice in each group within 8 weeks

	Control group (g)	Model group (g)	GTP Group (g)	Oil Group (g)	Treatment Group (g)	P value
Week 0	24.75±1.92	25.23±1.16	25.81±1.70	25.62±1.78	26.91±1.22	0.009
Week 1	25.79±2.31	25.60±1.36	26.06±1.64	26.34±2.02	26.67±1.81	0.542
Week 2	26.01±2.34	25.79±1.44	26.10±1.86	26.45±2.14	26.86±1.67	0.584
Week 3	26.45±2.43	26.35±1.50	26.44±1.84	27.06±2.16	27.05±1.80	0.791
Week 4	26.57±2.46	26.83±1.51	26.13±1.84	27.44±2.06	27.03±1.82	0.614
Week 5	27.09±2.54	27.54±1.53	27.06±1.97	27.96±2.19	27.61±2.12	0.844
Week 6	27.28±2.54	27.91±1.68	27.81±1.94	28.38±2.22	27.39±2.12	0.742
Week 7	28.94±1.91	28.37±1.67	27.82±2.10	28.85±2.10	27.65±2.28	0.434
Week 8	27.97±2.98	28.02±1.79	28.15±2.03	29.23±2.15	27.69±2.40	0.564

Supplementary Table 2 Liver mass and organ index of mice in each group

Group	Liver mass(g)	Organ index
Control	0.94900 ± 0.12767	0.03722 ± 0.00328
Model	1.05667 ± 0.08182	0.04031 ± 0.00305
GTP	0.93900 ± 0.08130	0.03681 ± 0.00274
Oil	0.96800 ± 0.13096	0.03621 ± 0.00299
Treatment	1.03533 ± 0.10528	0.03954 ± 0.00287