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Supplemental Information

Integrating Transcriptome and Experiments

Reveals the Anti-diabetic Mechanism

of *Cyclocarya paliurus* Formula

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Supplemental figures

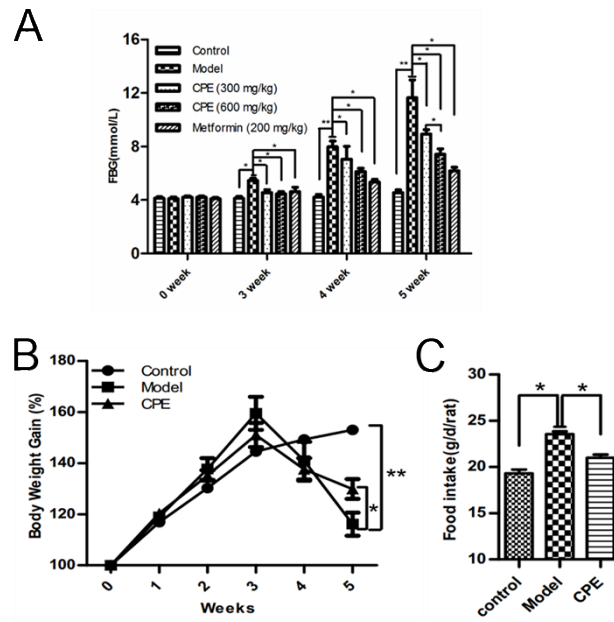


Figure S1. The effects of CPE on FBG, body weight and food intake. (A) The level of FBG at the beginning of the experiment and at the end of the 3 weeks, 4 weeks and 5 weeks. (B) The body weight gain. (C) The food intake of each rat per day. All data are presented as means \pm SEM ($n=6$), * $p<0.05$, ** $p<0.01$.

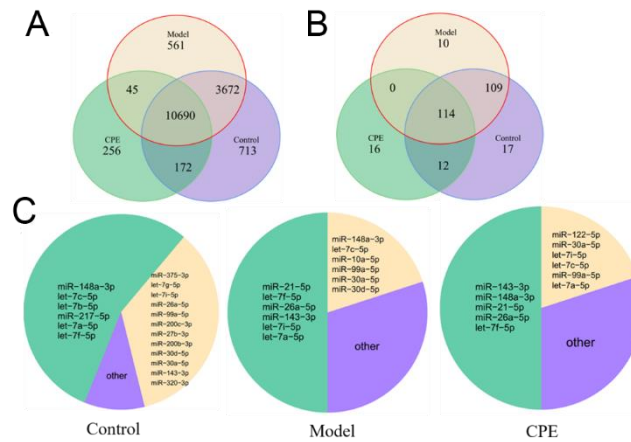


Figure S2. Differential gene and miRNA expression of pancreas tissue. (A) Venn diagram depicting differential gene expression among the control, model and CPE treated groups. (B) Venn diagram depicting differential miRNA expression among the control, model and CPE treated groups. (C) The percent of expressed miRNA among the control, model and CPE treated groups.

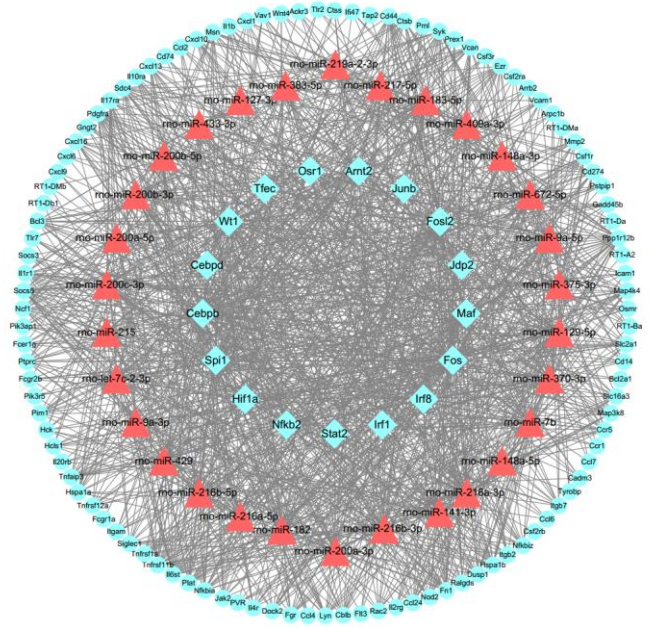


Figure S3. The miRNA-TF-genes network involved in the effects of CPE on alleviating inflammation and apoptosis in the pancreas. Blue rectangles: TFs; red triangles: miRNAs; blue cycles: genes.

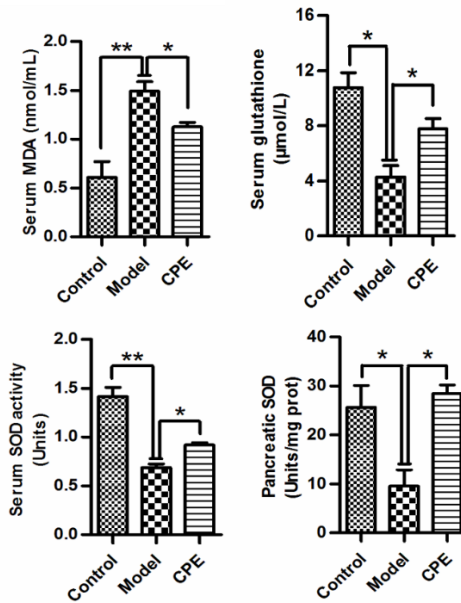


Figure S4. The level of serum MDA, concentration of serum glutathione, and enzyme activities of SOD in the serum and pancreas tissue. All data are presented as means \pm SEM (n= 6), *p< 0.05, **p< 0.01.

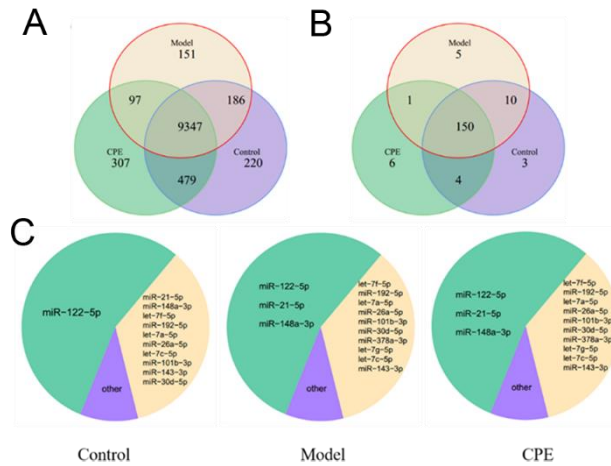


Figure S5. Differential gene and miRNA expression of liver tissue. (A) Venn diagram depicting differential gene expression among the control, model and CPE treated groups. (B) Venn diagram depicting differential miRNA expression among the control, model and CPE treated groups. (C) The percent of expressed miRNA among the control, model and CPE treated groups.

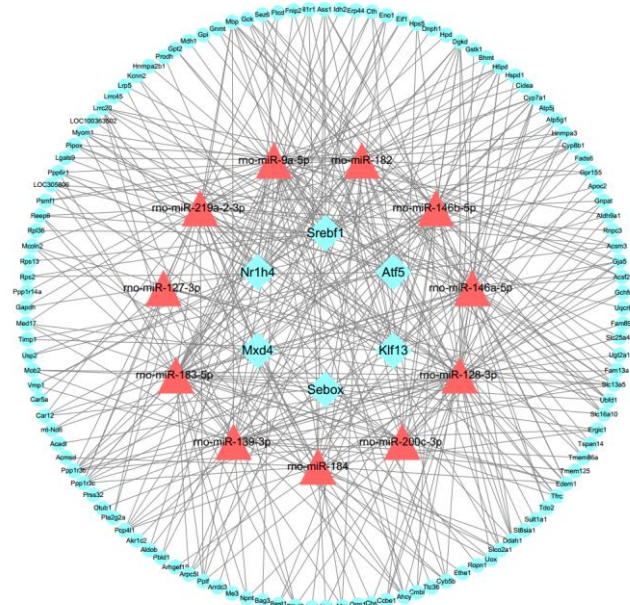


Figure S6. The miRNA-TF-genes network involved in the effects of CPE on glucose and lipid metabolism in the liver. Blue rectangles: TFs; red triangles: miRNAs; blue cycles: genes.