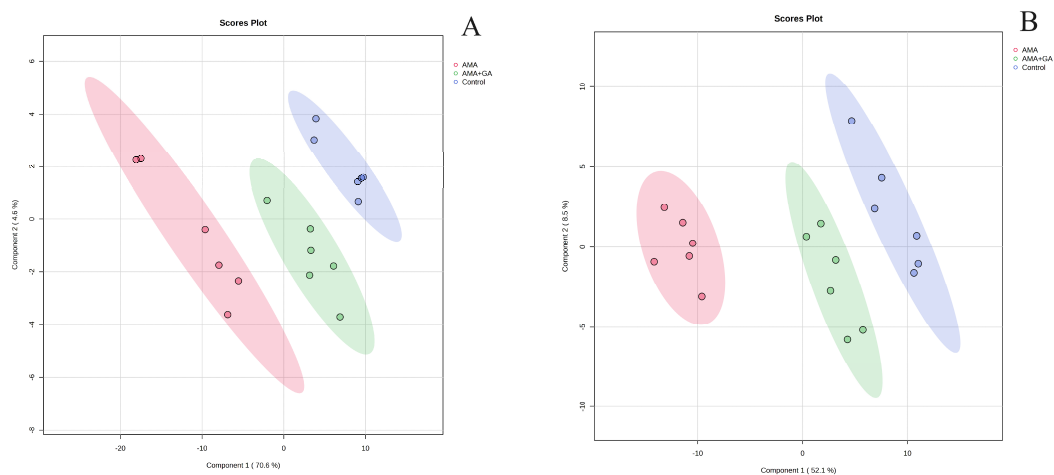
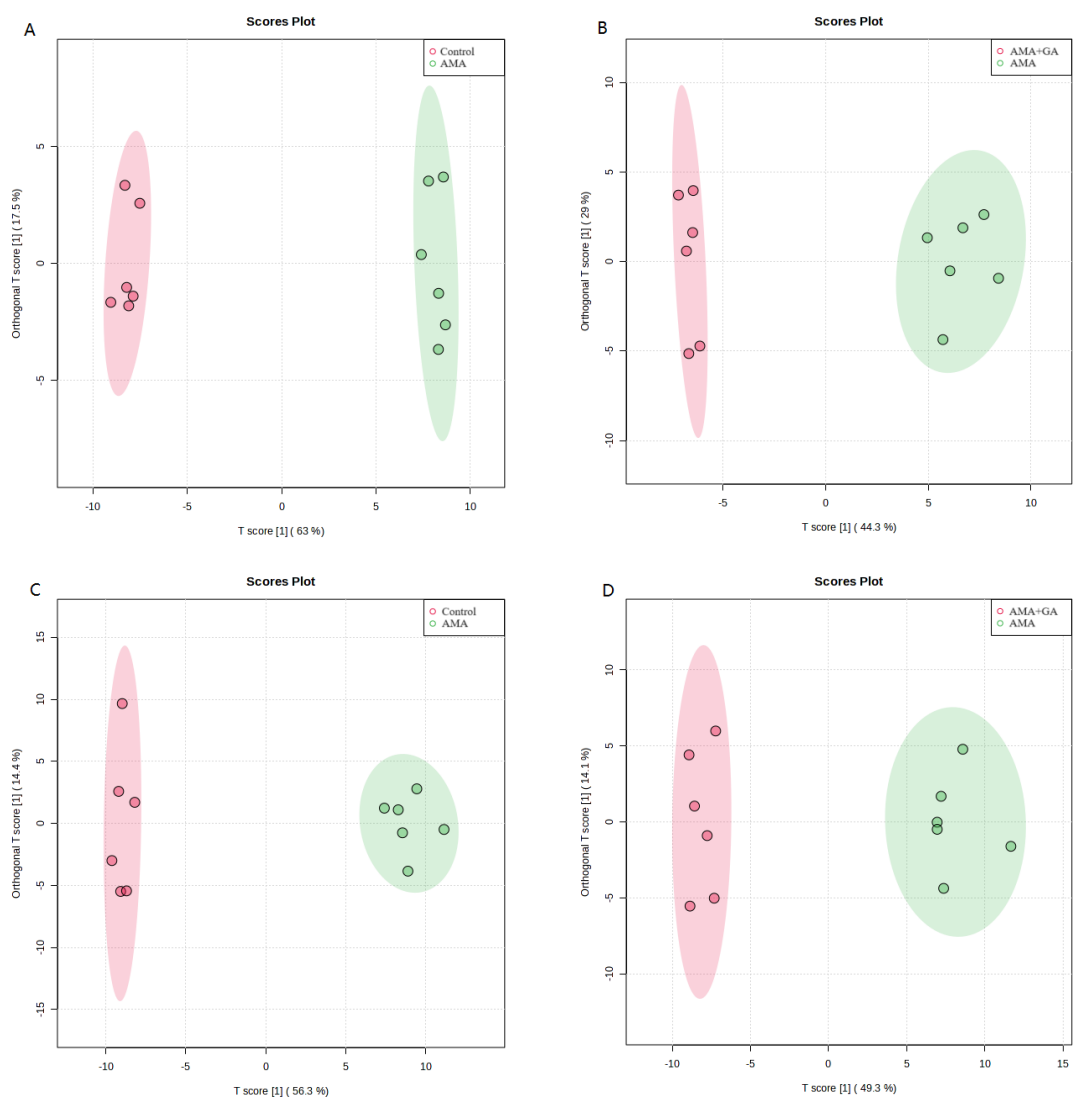


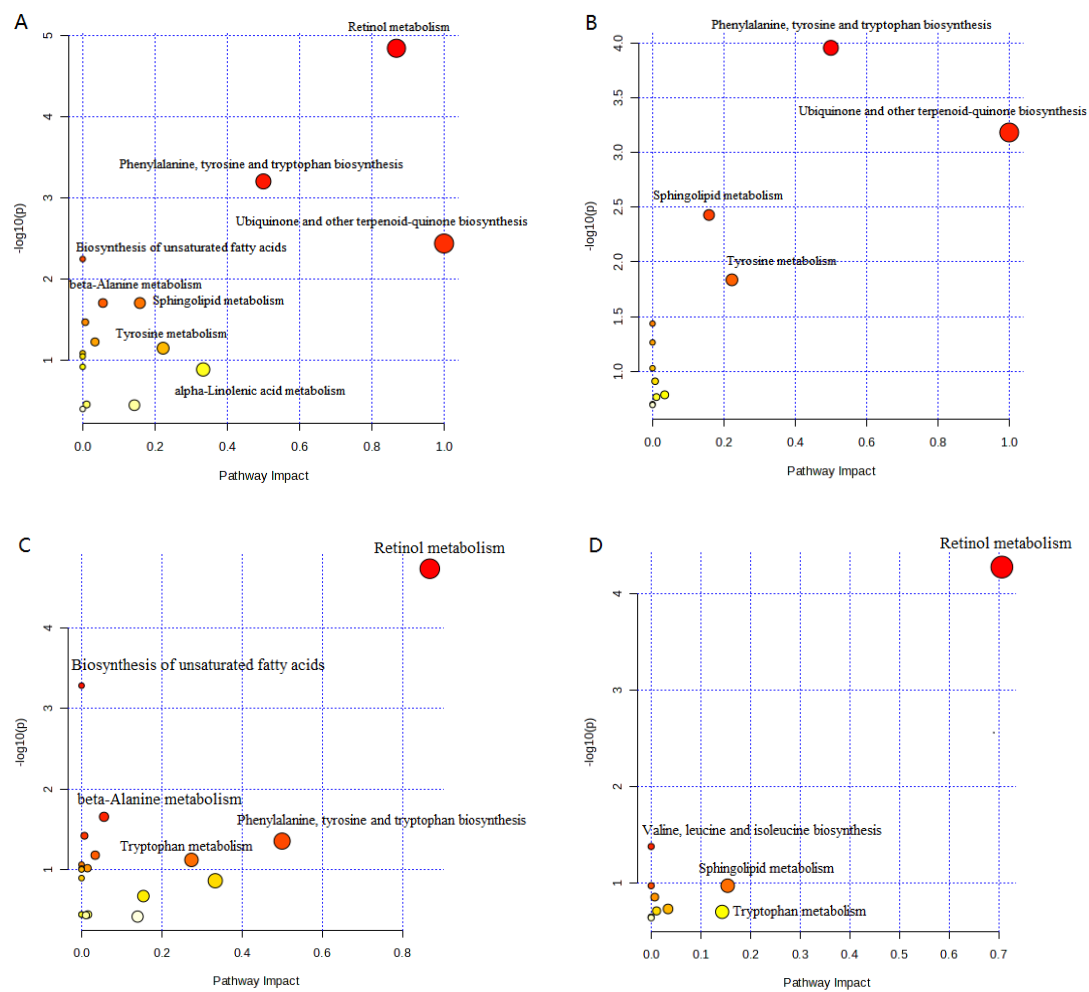
## Metabolomic Insights into the Mechanisms of Ganoderic Acid A Protection Against $\alpha$ -Amanitin-Induced Liver Injury



**Figure S1.** PLS-DA (supervised) analysis of serum metabolites in healthy mice (Control),  $\alpha$ -amanitin-exposed mice (AMA) and GA treatment (AMA+GA). (A) Score plot after 24 hours of GA treatment ( $R^2 = 0.998$ ,  $Q^2 = 0.935$ ). (B) Score plot after 48 hours of GA treatment ( $R^2 = 0.999$ ,  $Q^2 = 0.903$ ).



**Figure S2.** The Orthogonal Partial Least Squares Discriminant Analysis (OPLS-DA) score plots of serum metabolites in healthy mice (Control),  $\alpha$ -amanitin-exposed mice (AMA) and GA treatment (AMA+GA). (A) Score of the 24h control versus AMA ( $R^2X = 0.639$ ,  $R^2Y = 0.849$  and  $Q^2 = 0.815$ ). (B) Score of the 24h AMA versus AMA+GA ( $R^2X = 0.443$ ,  $R^2Y = 0.676$  and  $Q^2 = 0.623$ ). (C) Score of the 48h control versus AMA ( $R^2X = 0.563$ ,  $R^2Y = 0.952$  and  $Q^2 = 0.930$ ). (D) Score of the 48h AMA versus AMA+GA ( $R^2X = 0.493$ ,  $R^2Y = 0.933$  and  $Q^2 = 0.906$ ).



**Figure S3.** Metabolic pathway analysis results. (A) 24h Control versus AMA. (B) 24h AMA versus AMA+GA. (C) 48h Control versus AMA. (D) 48h AMA versus AMA+GA.