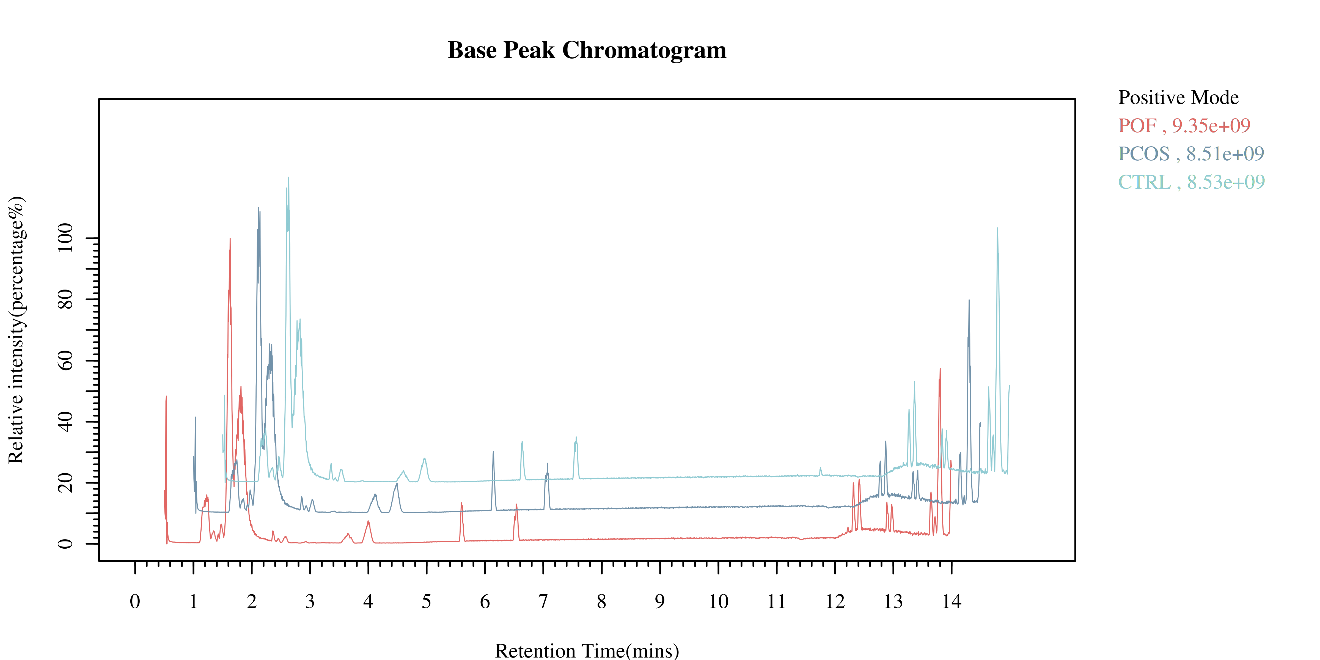
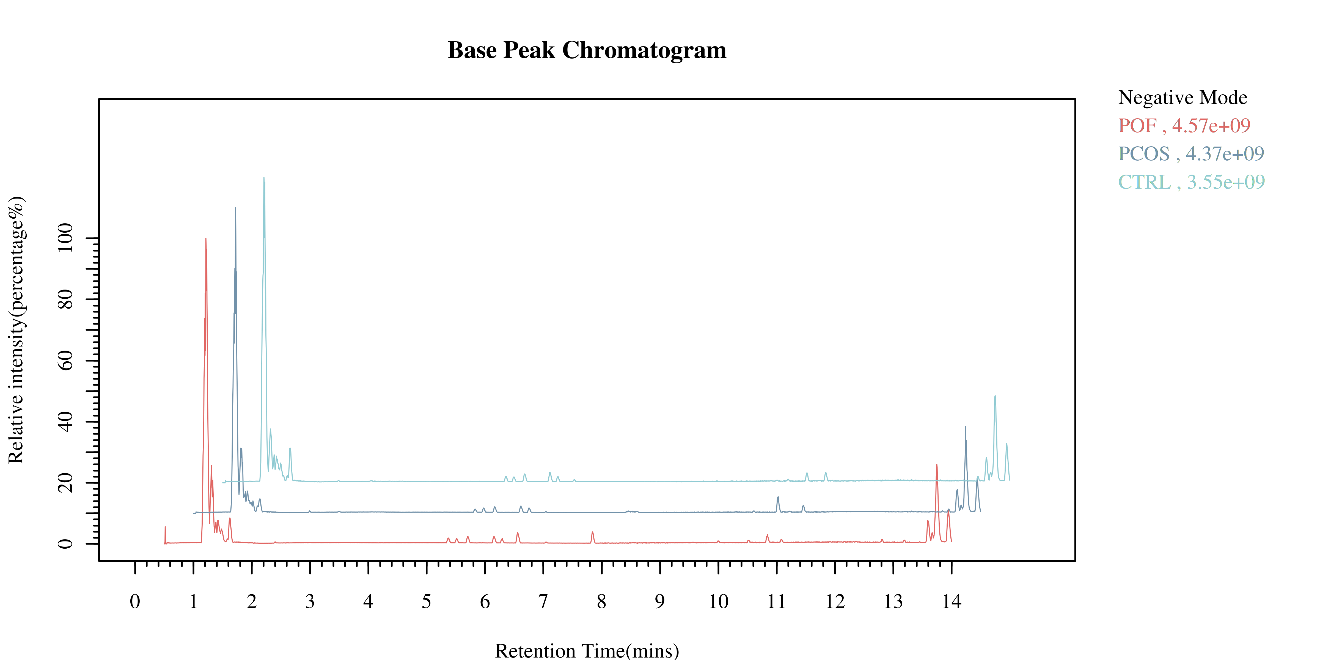
**Supplementary Figures**

**A**

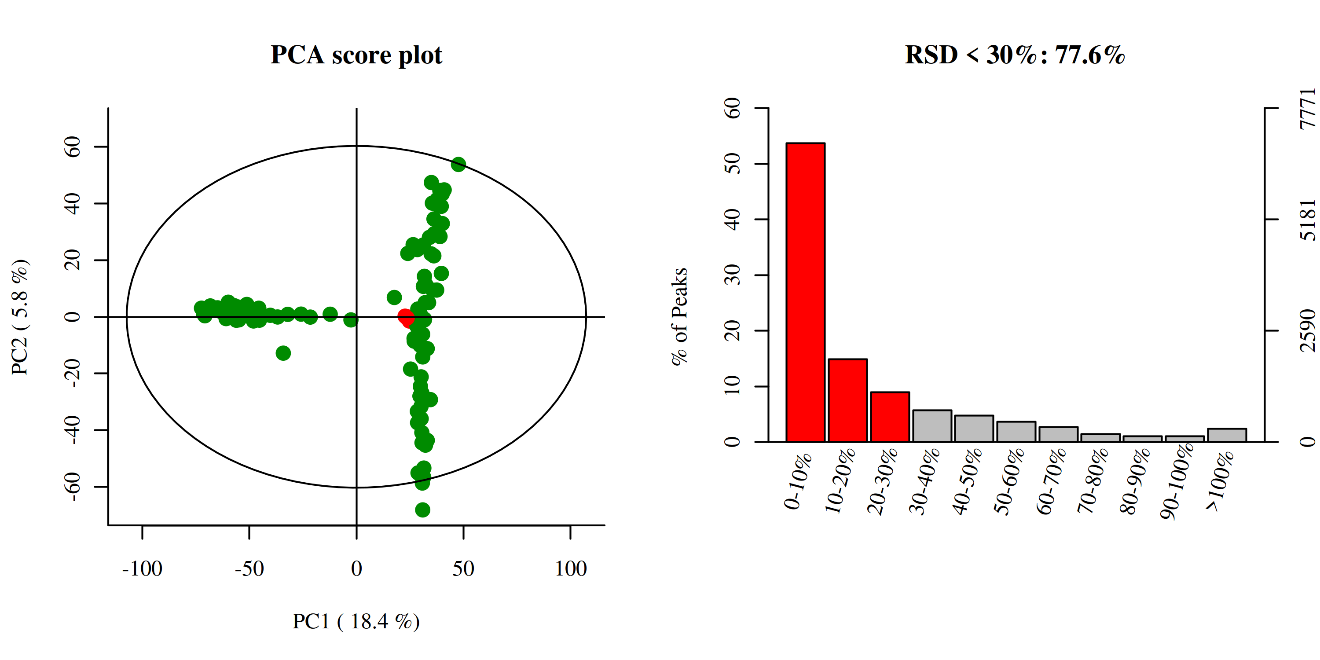


**B**

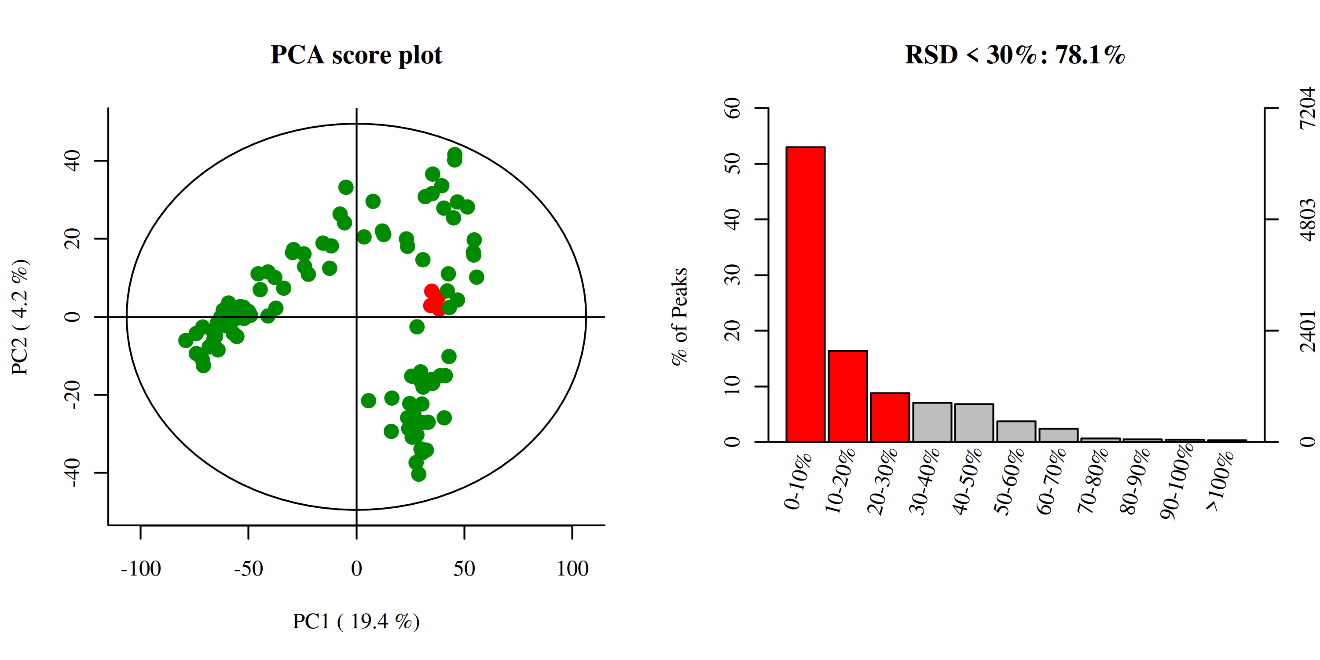


**Figure S1. Base peak chromatogram analyzed the ion ESI+ and ESI- specific intensity of three groups**. (ESI+), and ESI-(negative modes)

**A C**

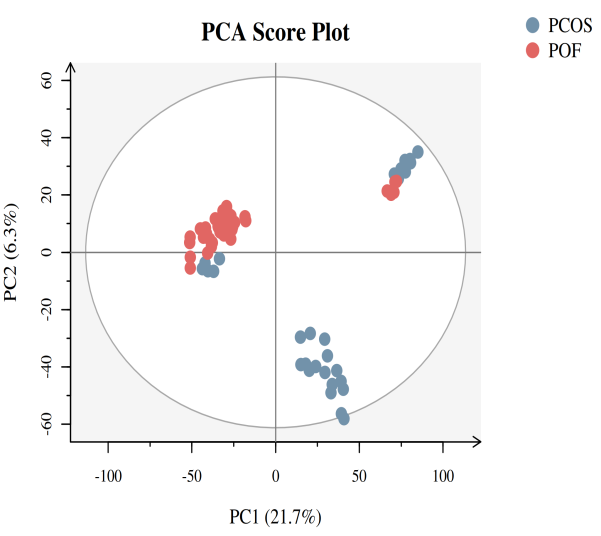
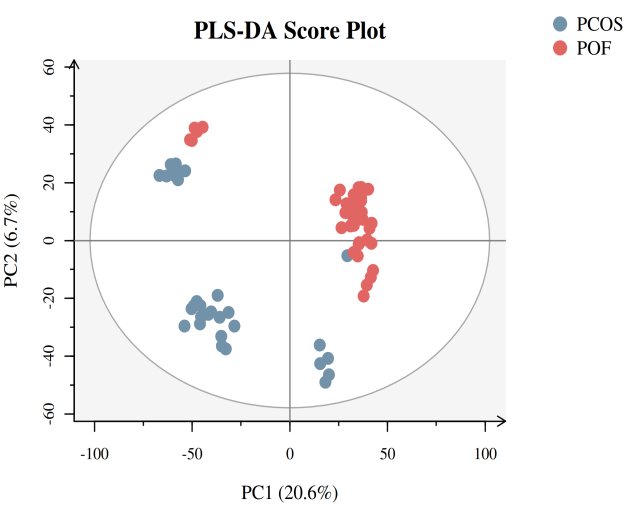


**B D**

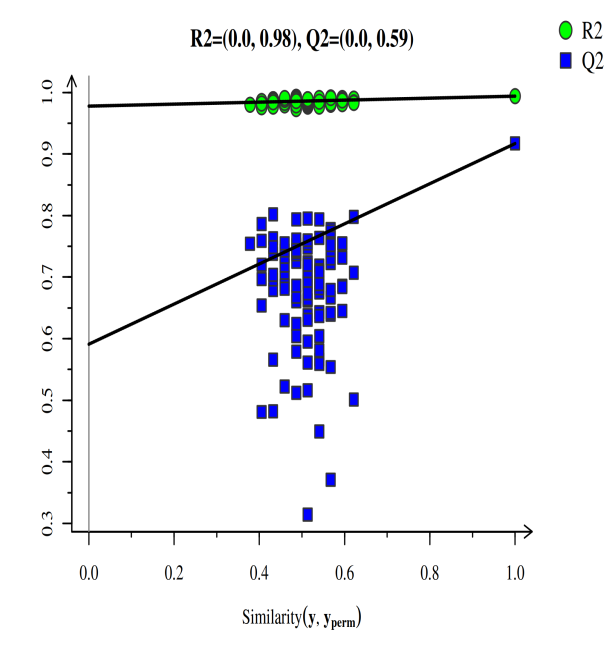
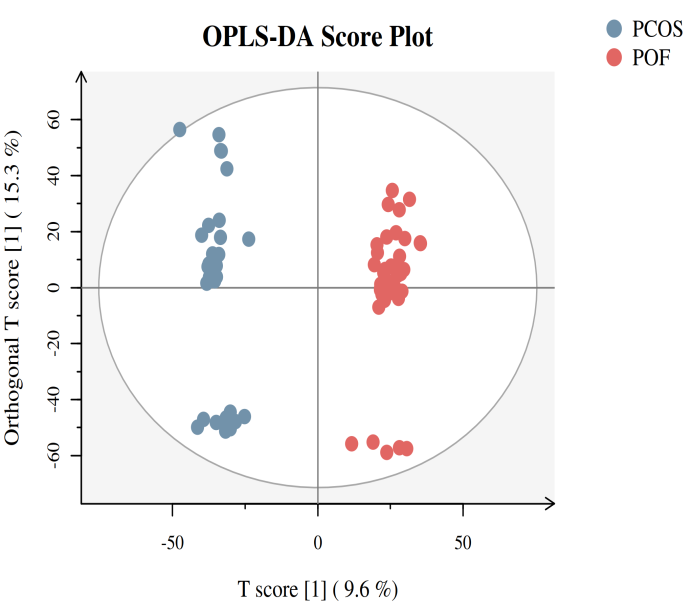


**Figure S2. Quality check and quality assurance were assessed before metabolomics.** (A,B) Principal component analysis of positive and negative modes. (C,D) Relative standard deviationtops at a coefficient of variation by histogram.

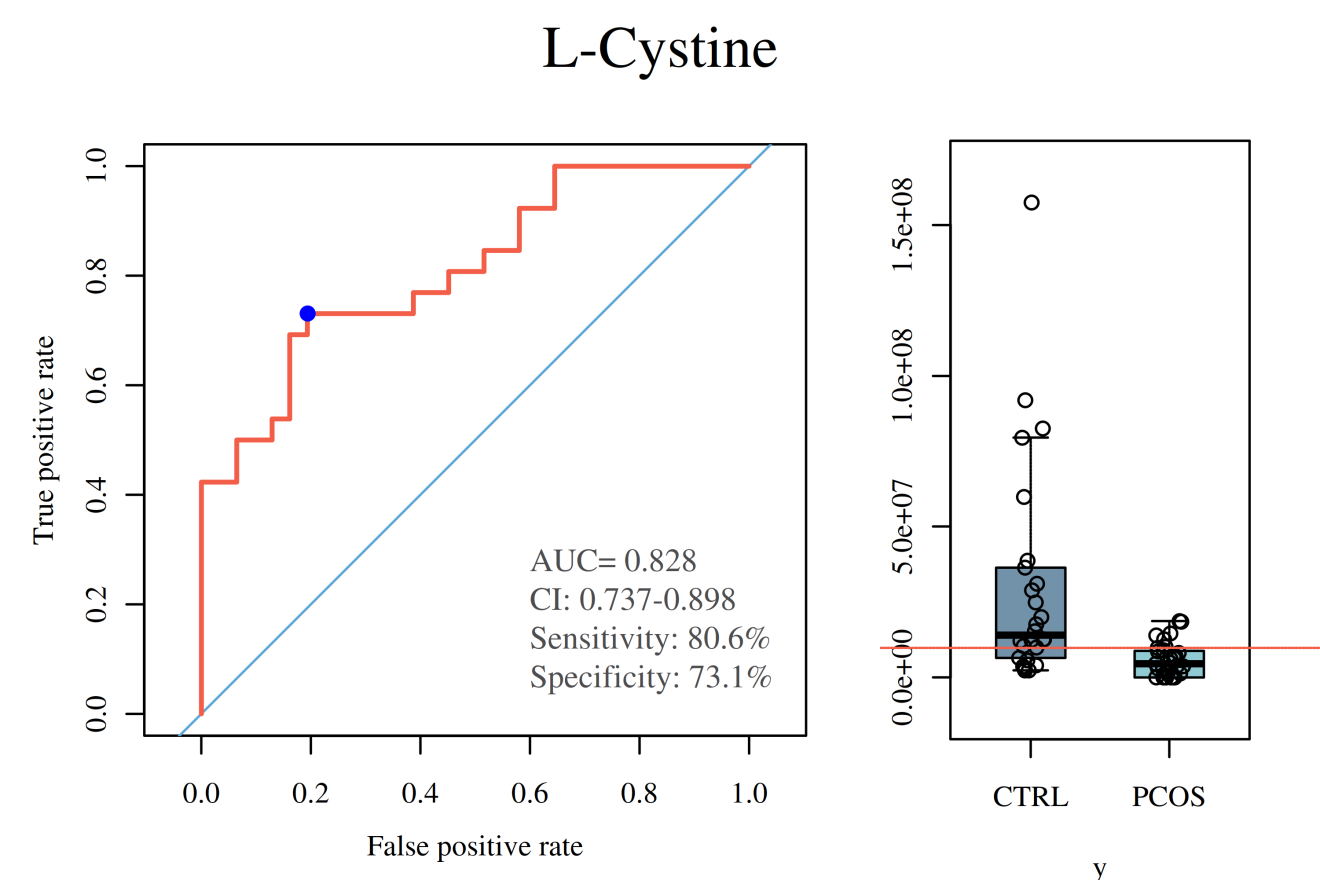
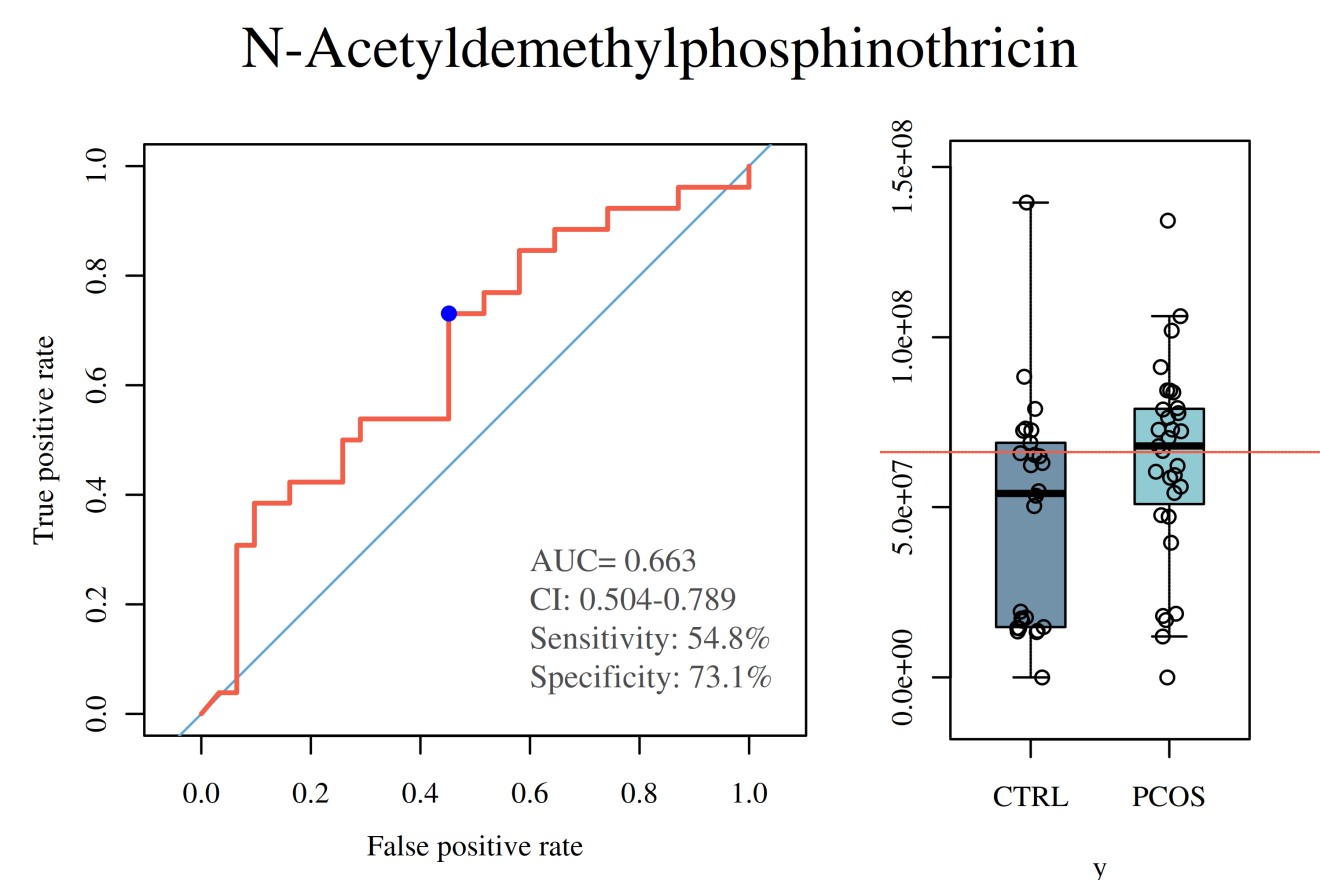
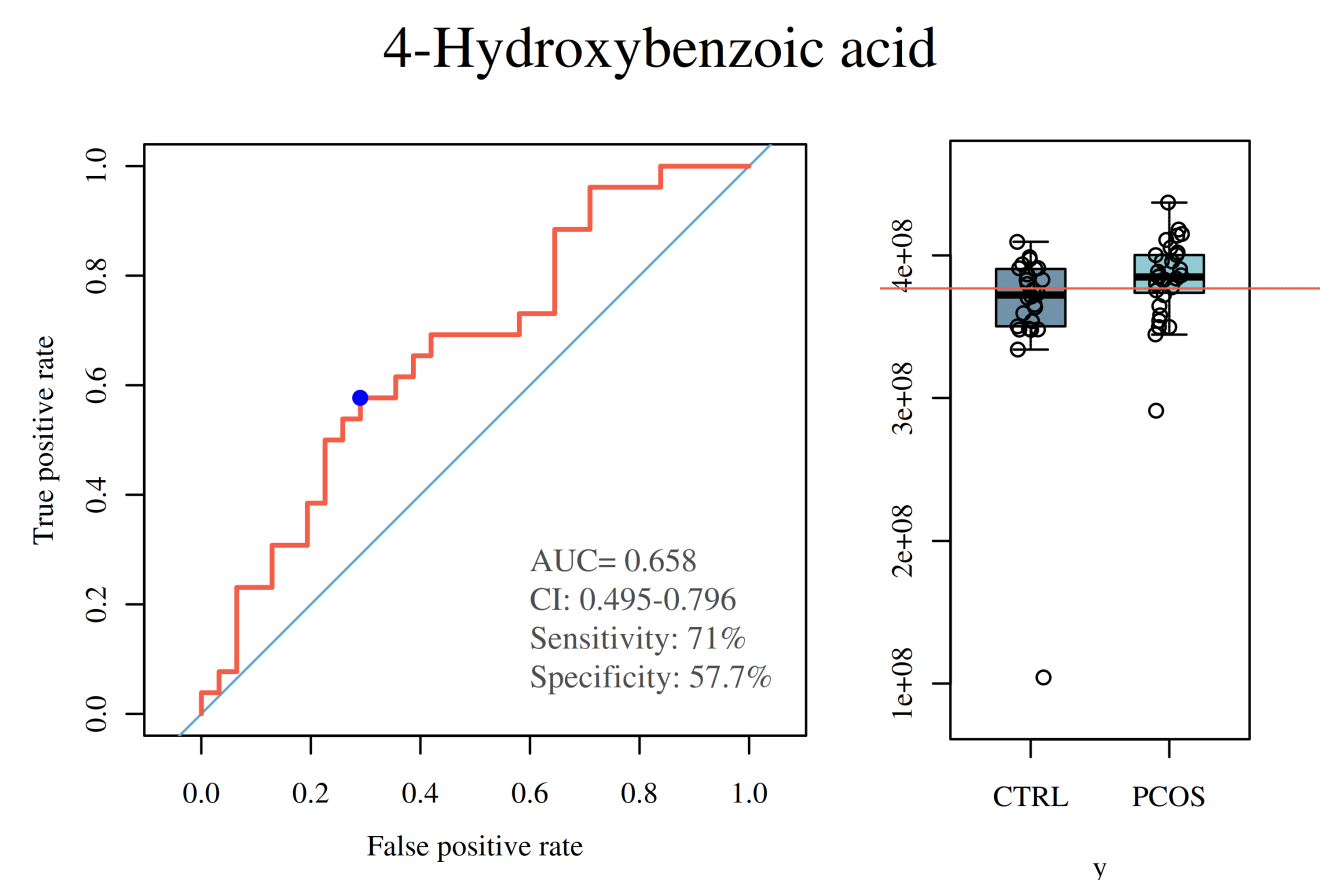
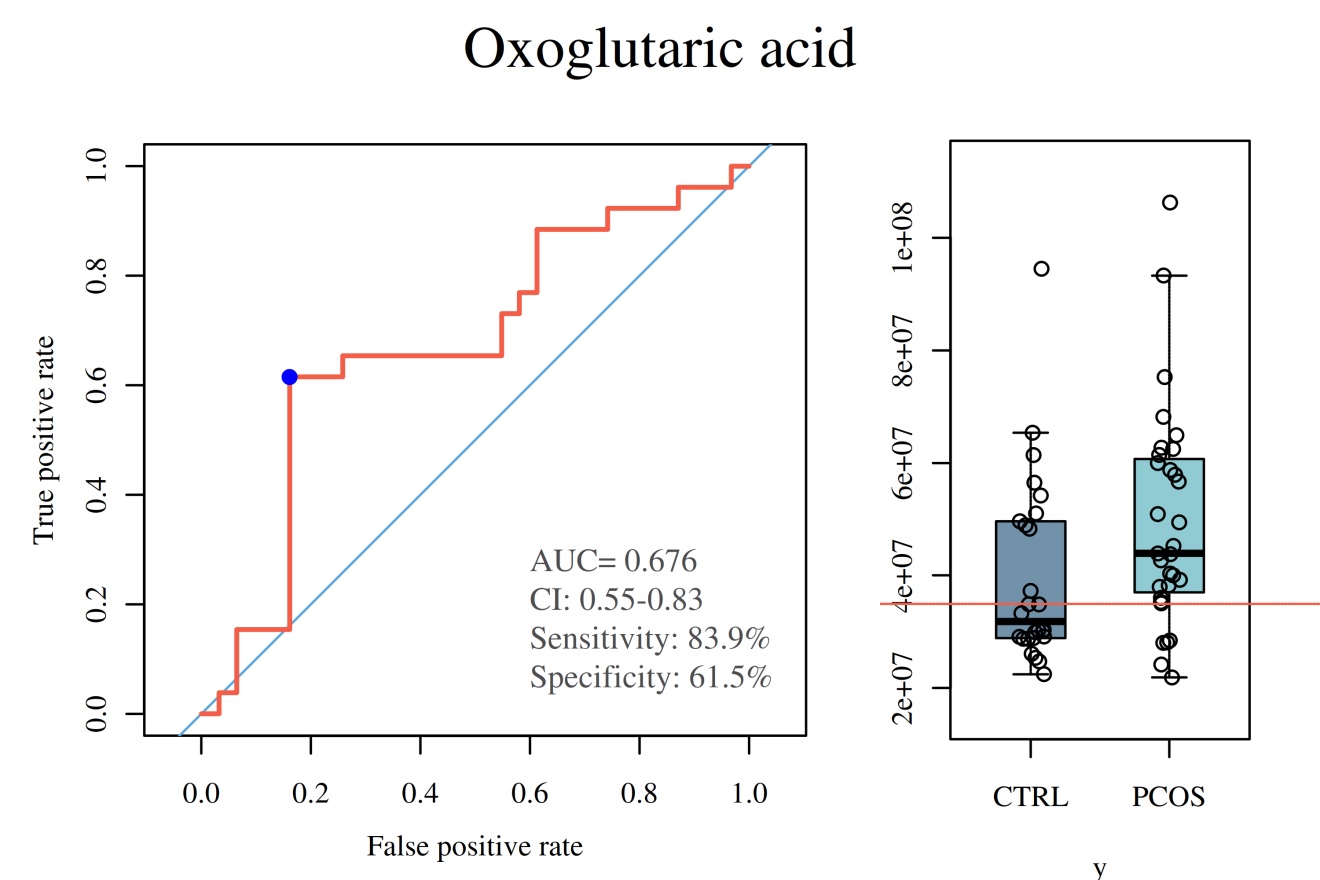
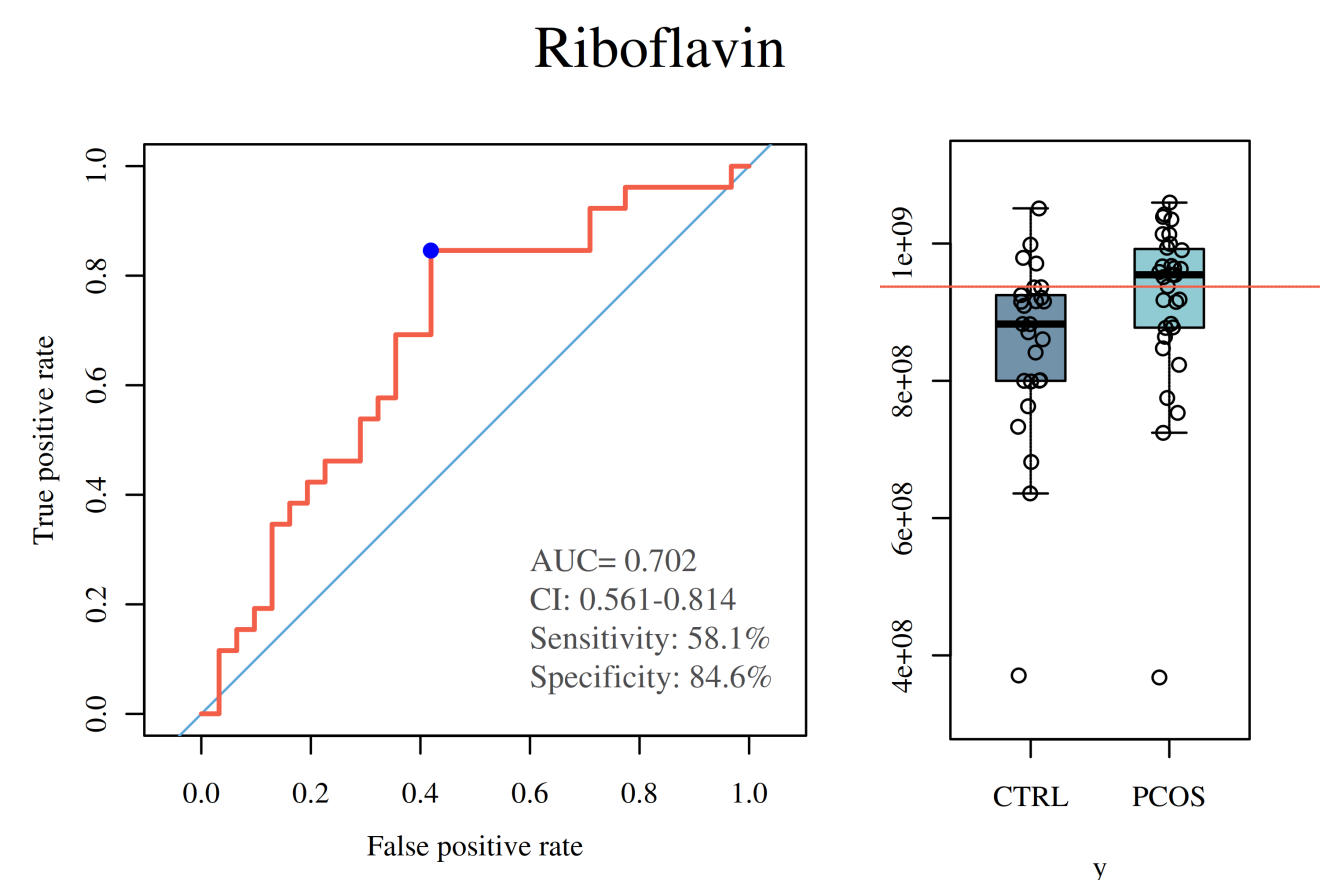
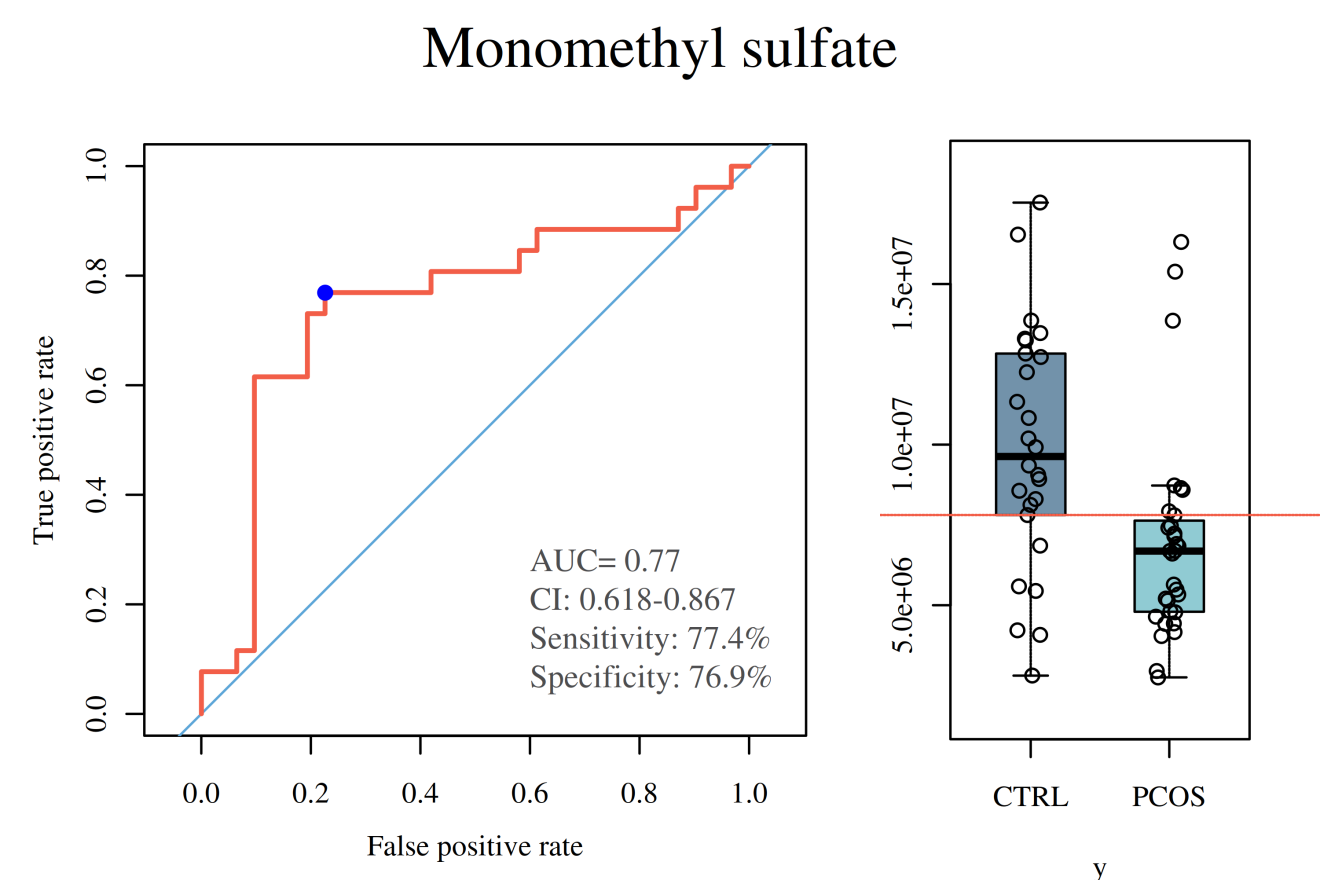
**A B**

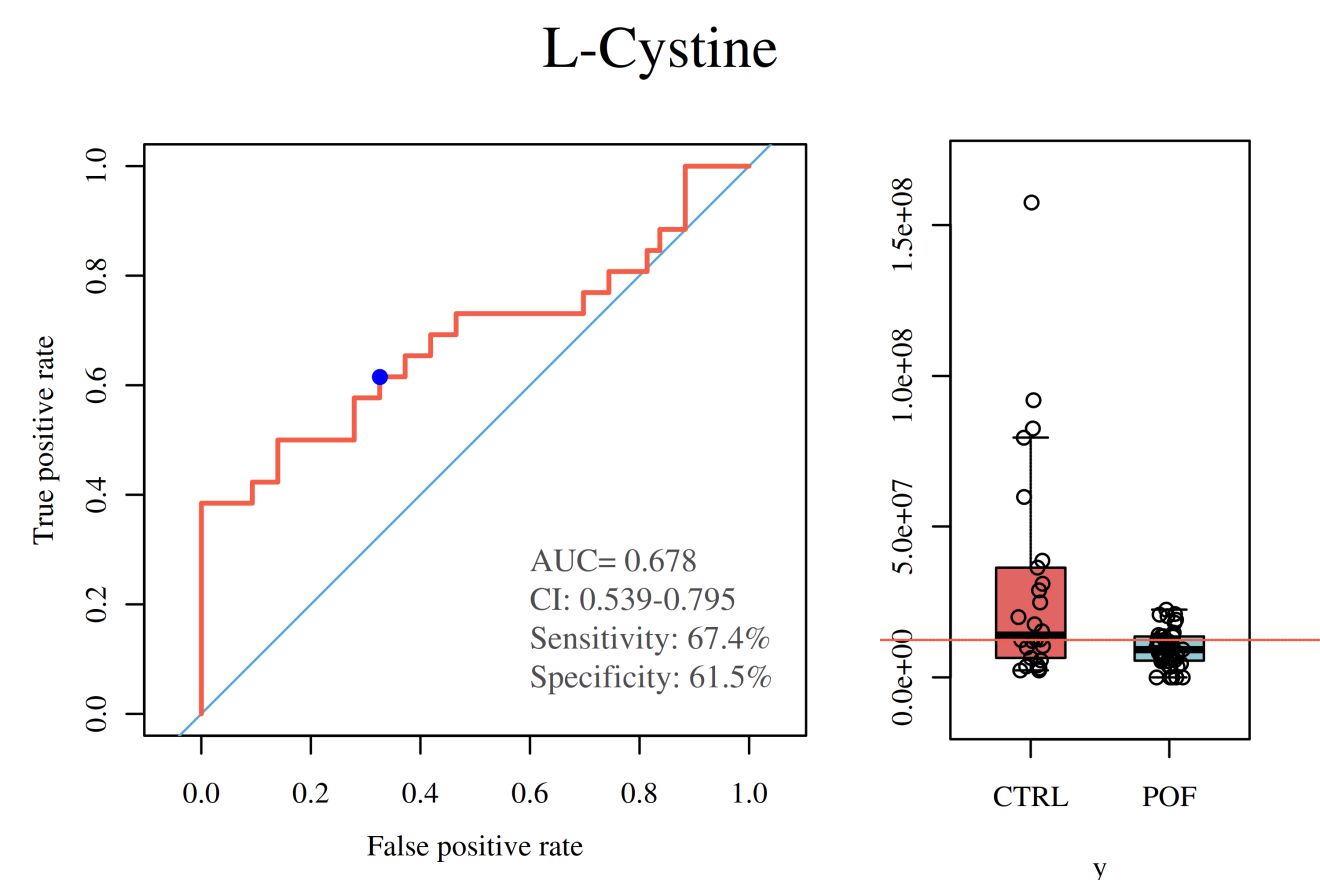
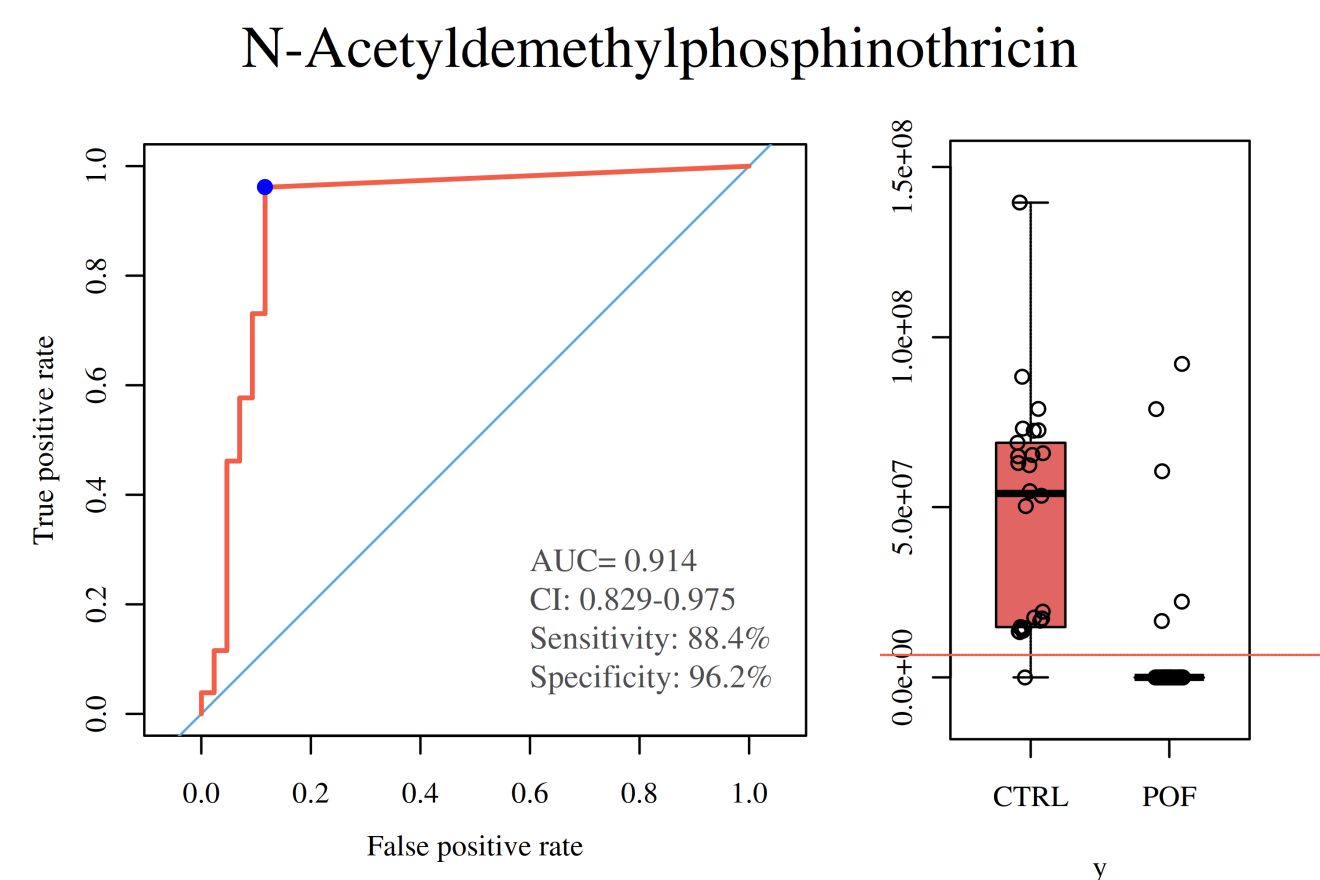
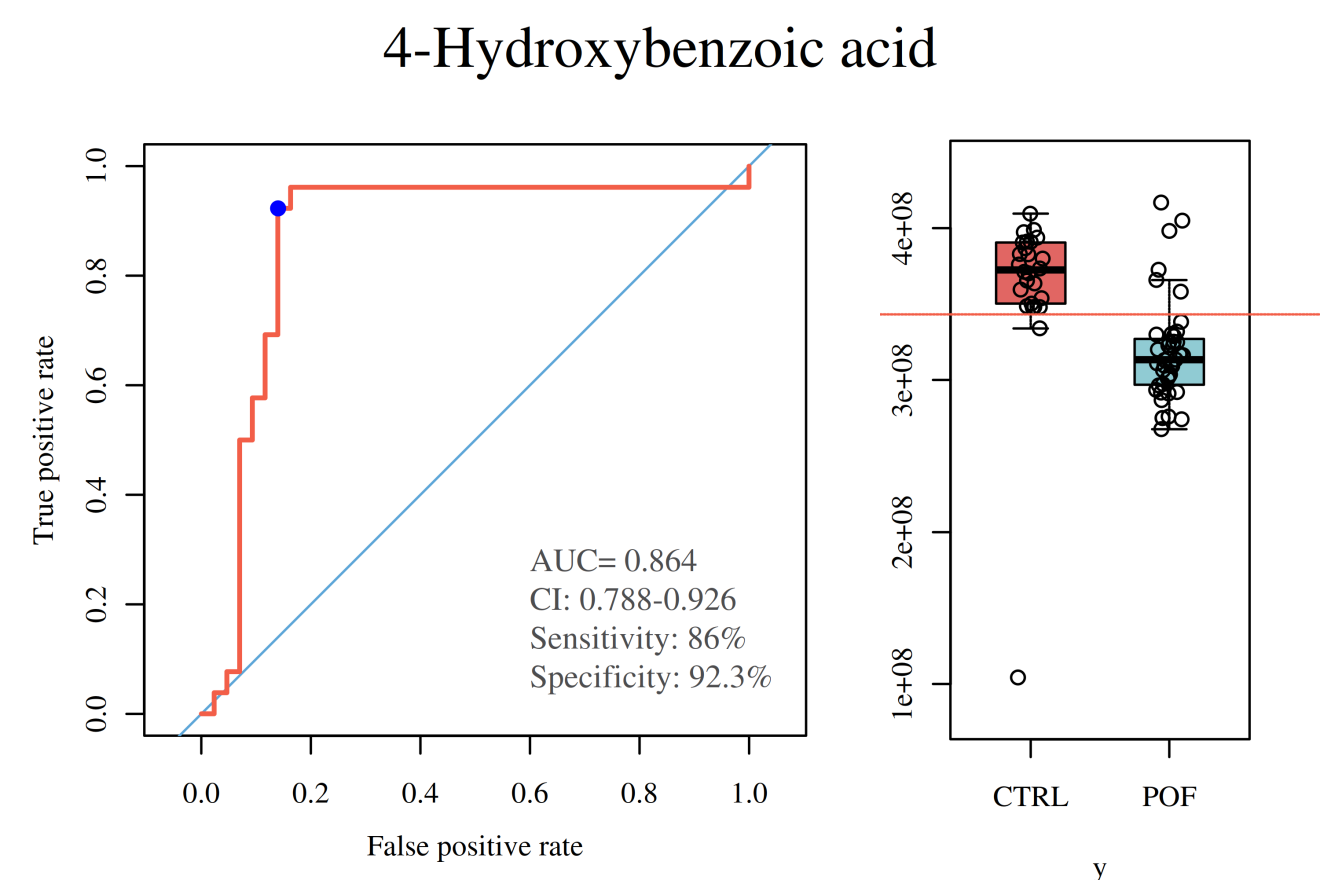
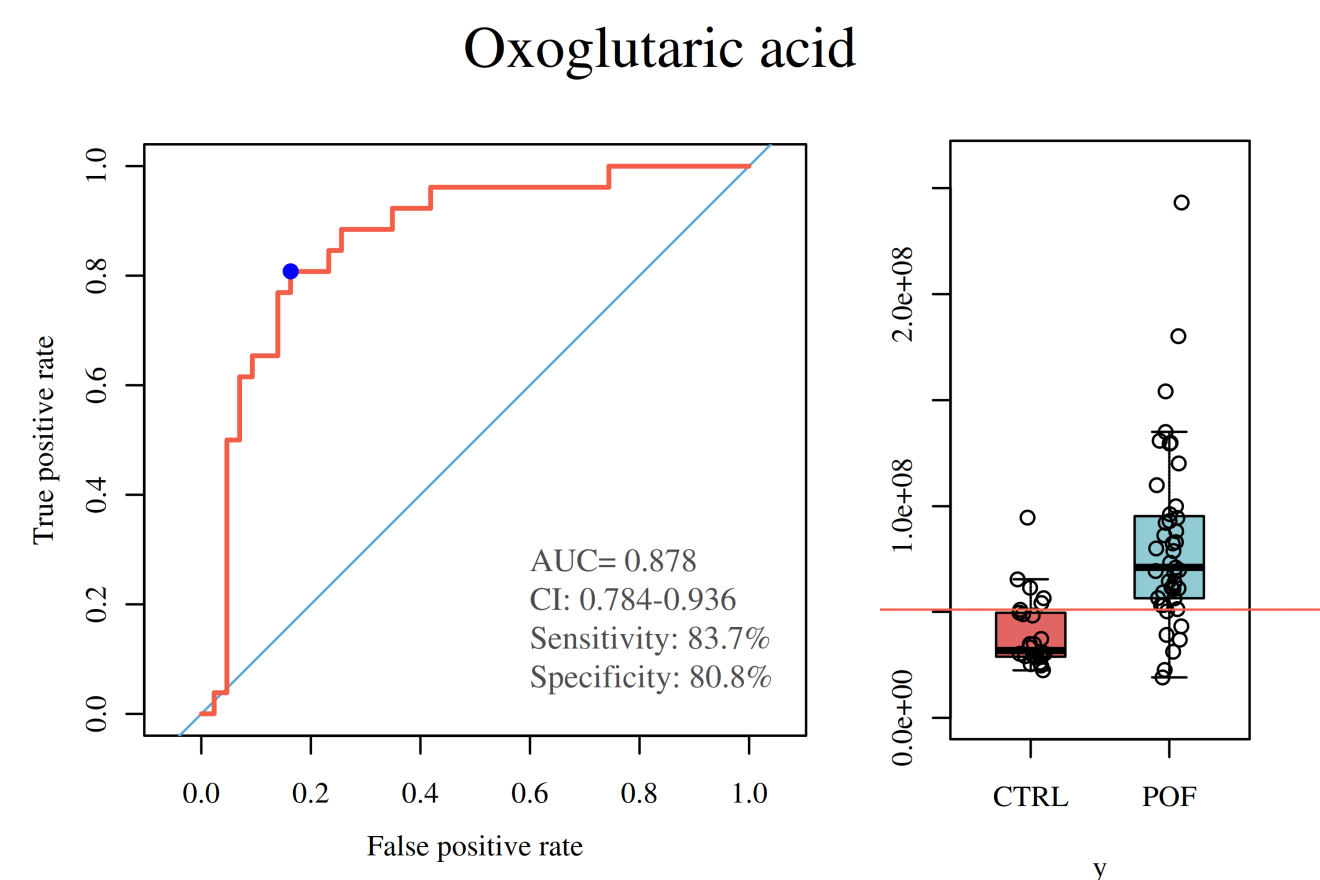
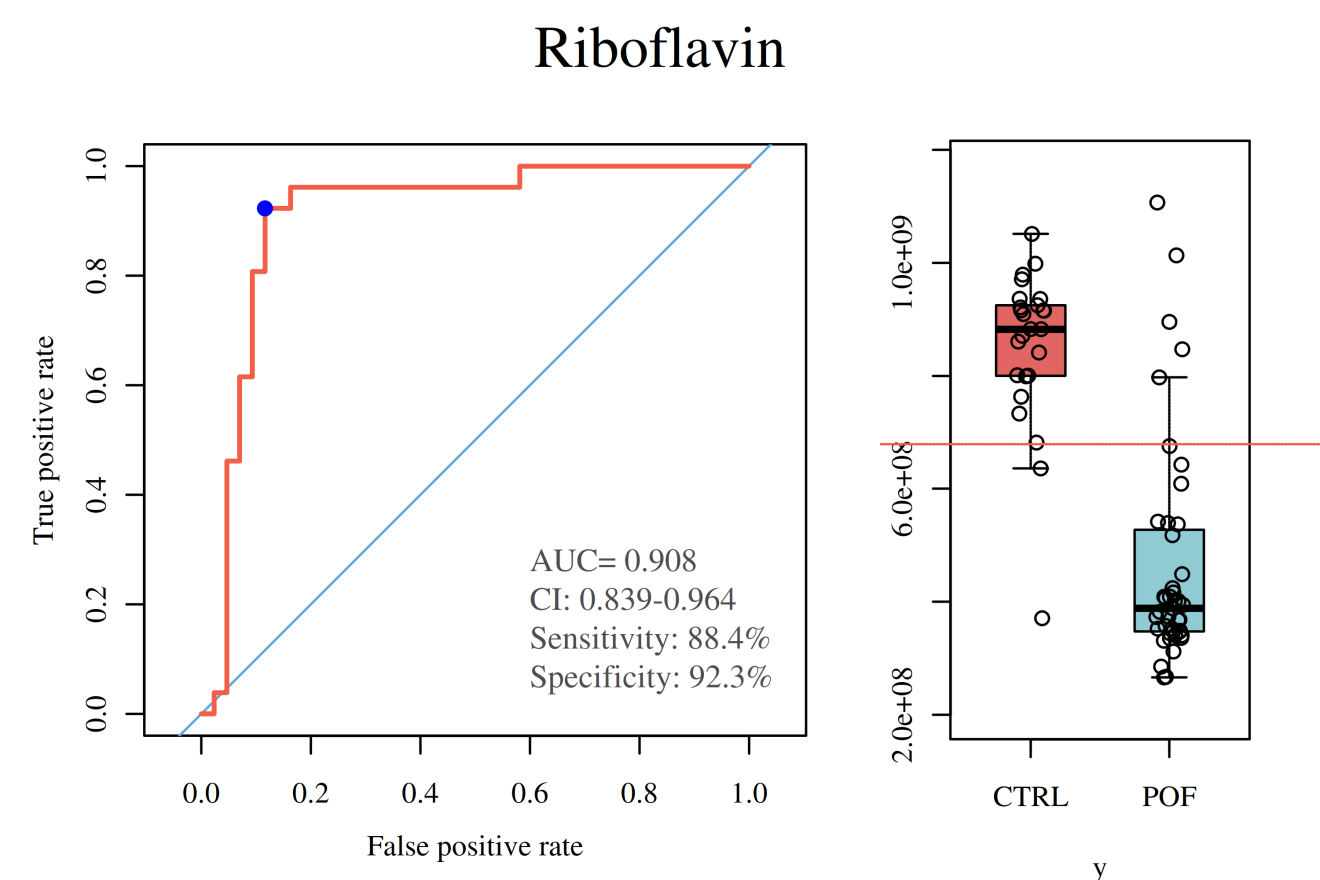
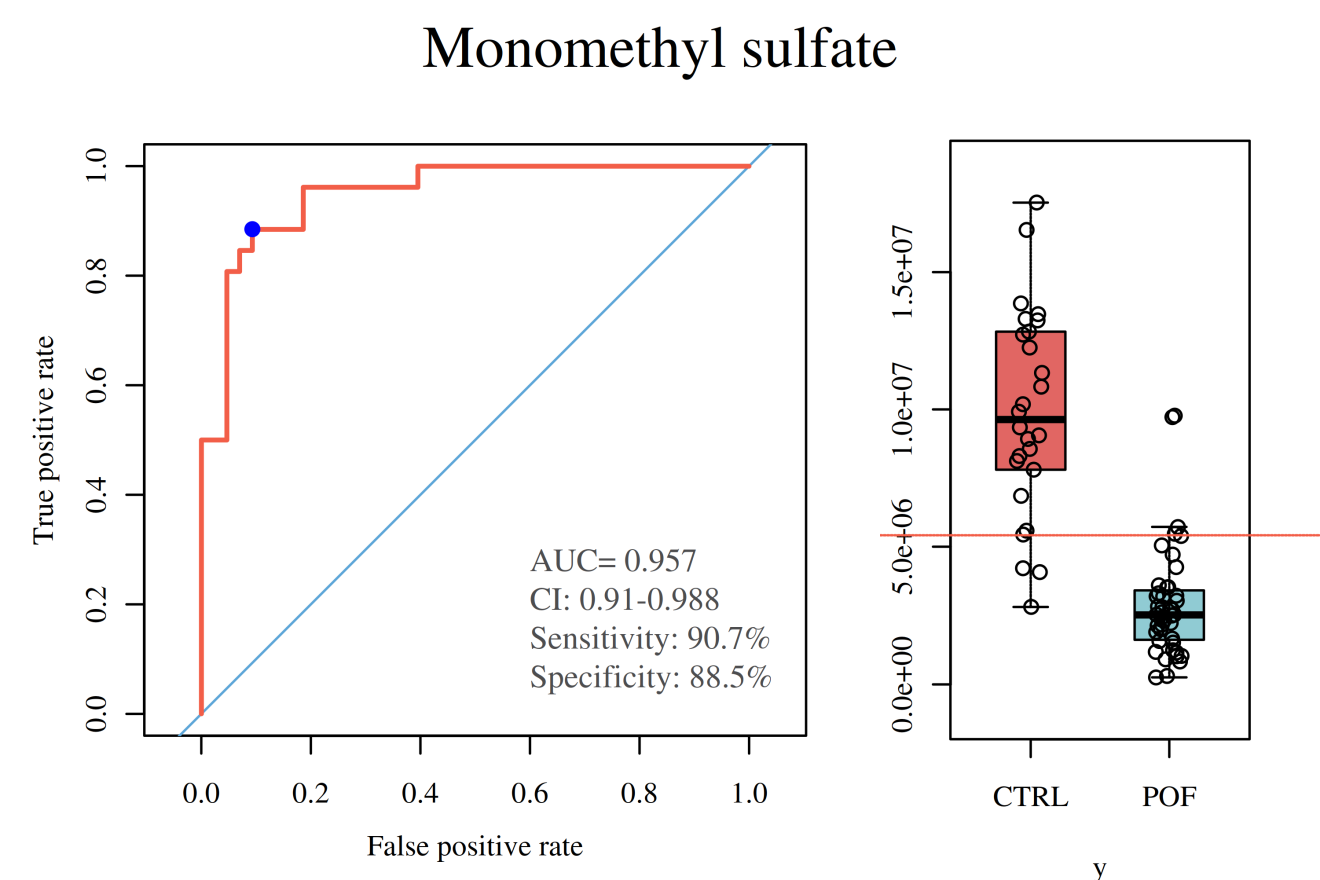
**C D**

**Figure S3. Score plots of three different analyses based on ESI- mode in PCOS and POF.** (A)Principal component analysis (PCA), (B,C) Partial least discriminant analysis (PLS-DA) (D) Orthogonal partial least square discriminant analysis (OPLS-DA) was used for displaying PCOS and POF subjects.



**Figure S4. ROC curves of six metabolites in PCOS vs CTRL group.**



**Figure S5. ROC curves of six metabolites in POF vs CTRL group.**