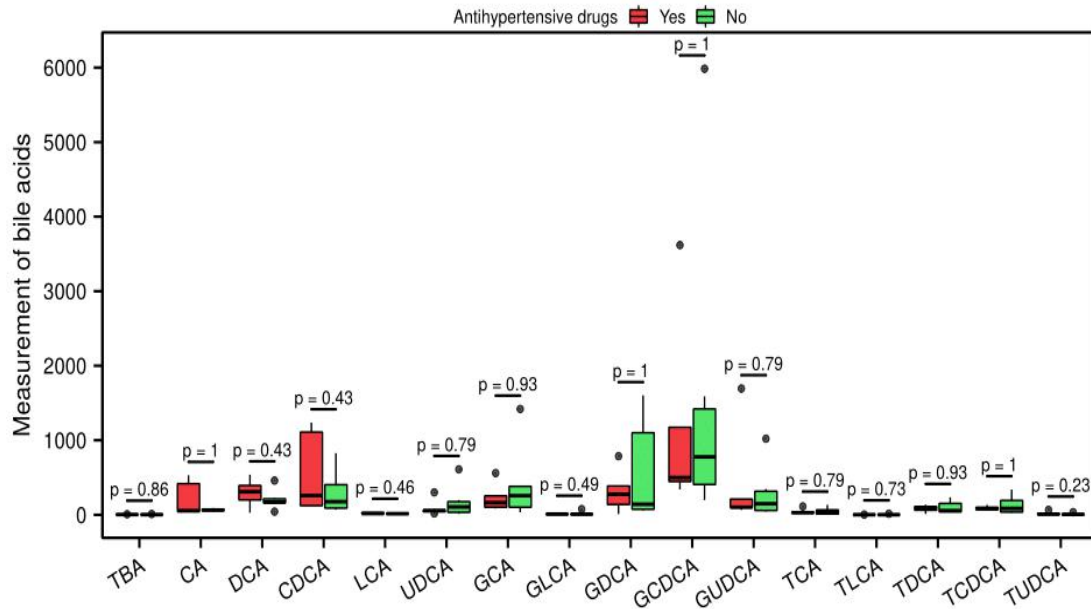


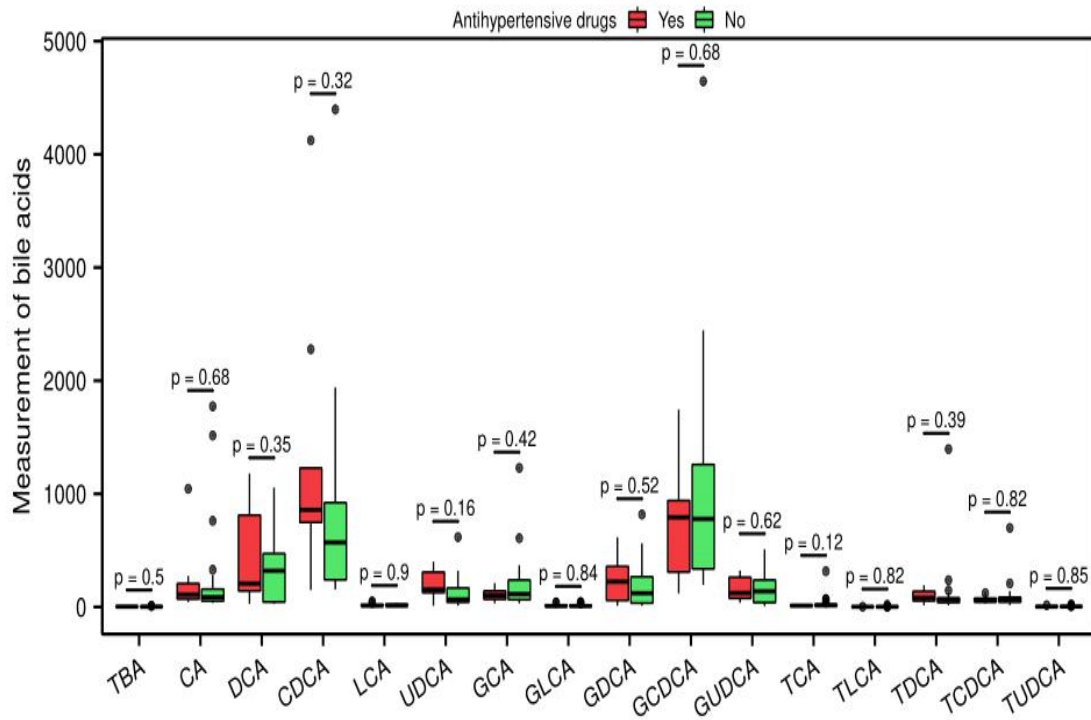
Supplementary Materials

● Supplement Figure 1

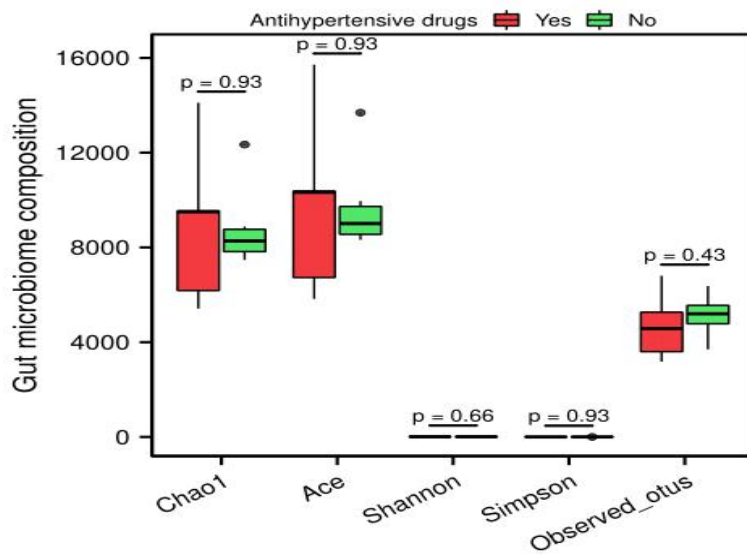
Supplement Figure 1A



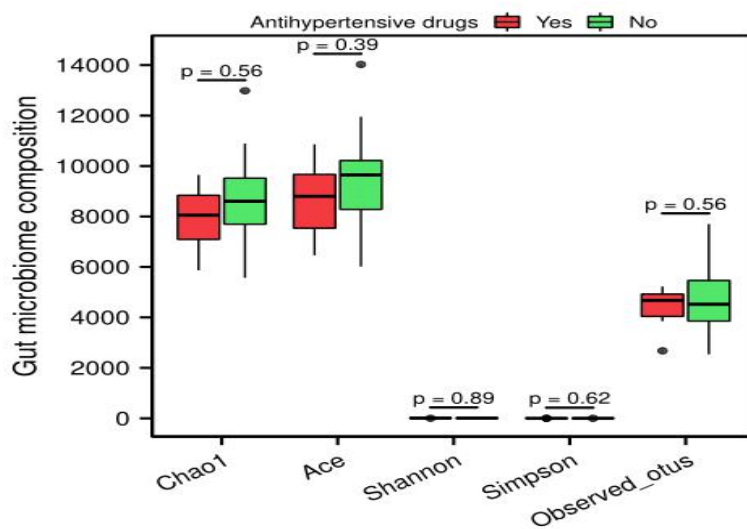
Supplement Figure 1B



Supplement Figure 1C



Supplement Figure 1D



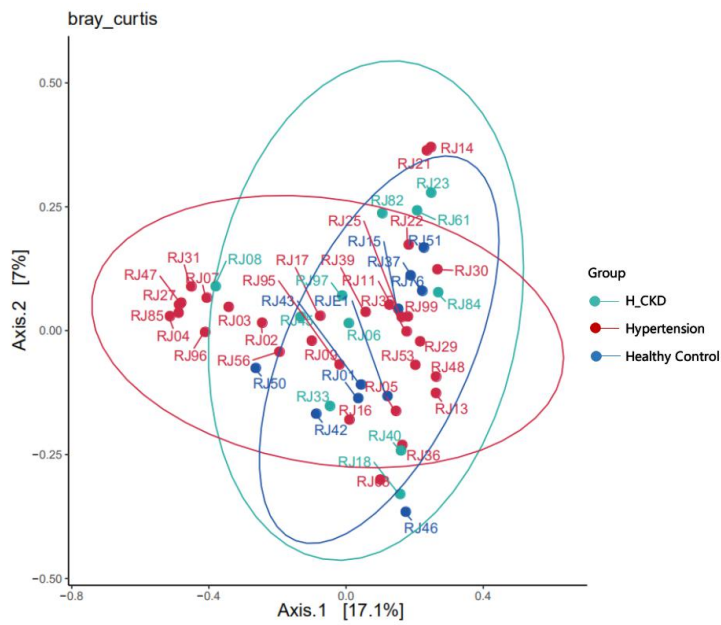
Supplement Figure 1: The Comparison of Bile Acids and Gut Microbiome Composition in Patients with and without Taking Antihypertensive medicines.

(A) The comparison of bile acids in H-CKD patients; (B) The comparison of bile acids in hypertension subjects; (C) The comparison of gut microbiome composition in H-CKD individuals; (D) The comparison of gut microbiome composition in hypertension cases. H-CKD, hypertension-related chronic kidney disease. No

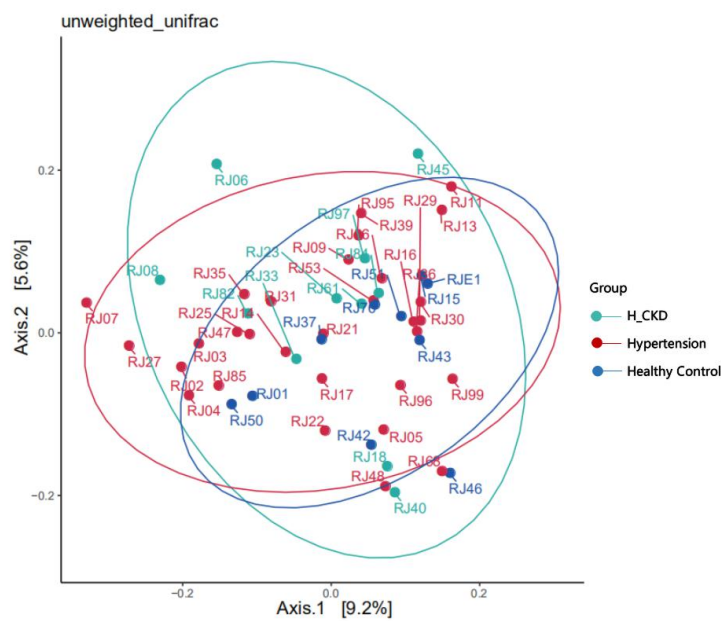
significance differences of bile acids and gut microbiome composition found in patients with/without taking antihypertensive medicines (all $p > 0.05$) in the both hypertension and H-CKD groups.

● **Supplement Figure 2**

Supplement Figure 2A



Supplement Figure 2B



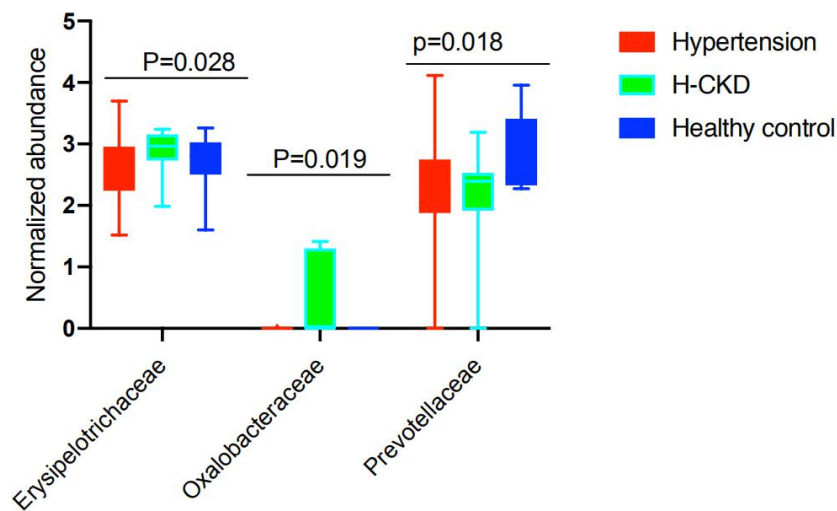
Supplement Figure 2: PCoA Analysis of Gut Bacteria among HC, H-CKD, Hypertension.

(A) Based on the Bray-curtis distance; (B) Based on the unweighted UniFrac distance.

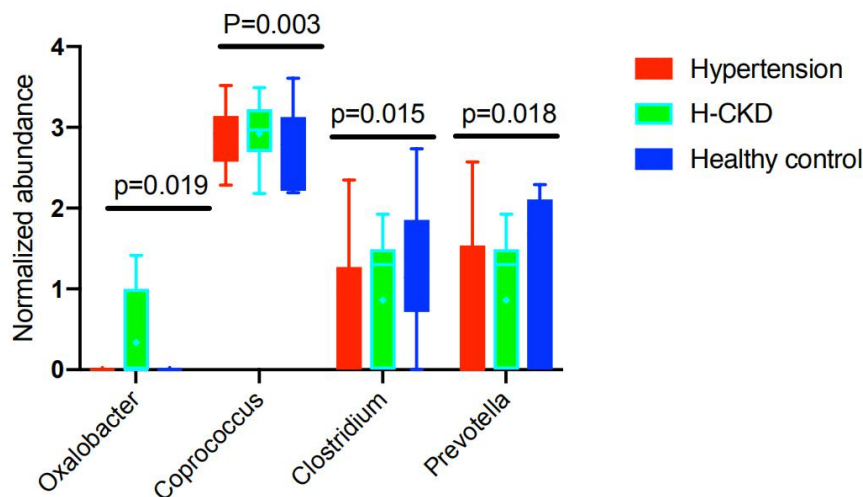
Different points or patterns represented different samples, each circle representing a group. The distance between the points or patterns is on behalf of the microbial structure difference.

● **Supplement Figure 3**

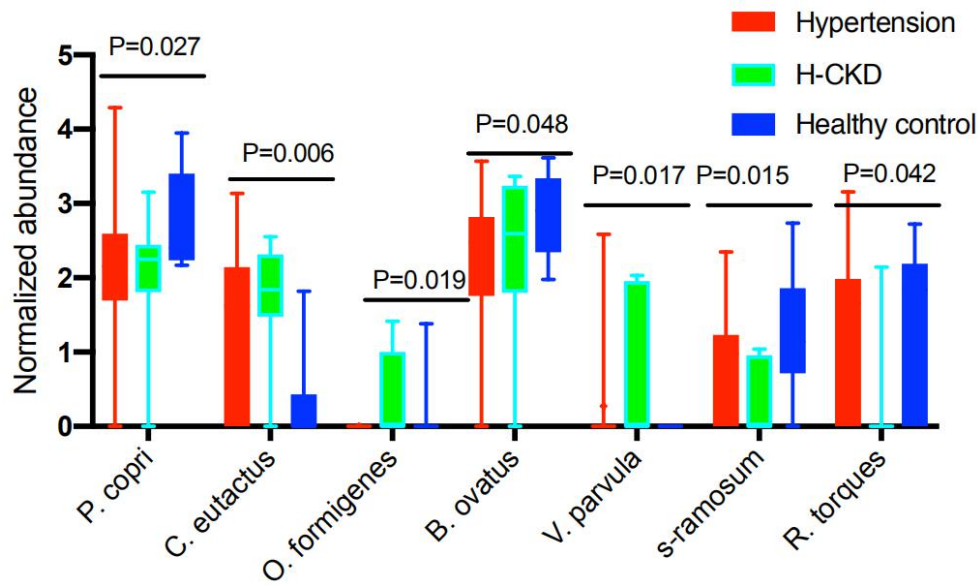
Supplement Figure 3A



Supplement Figure 3B



Supplement Figure 3C



Supplement Figure 3: Normalized Abundance of Feature Bacteria in H-CKD, Hypertension and HC.

(A) Normalized abundance of feature bacteria in H-CKD, hypertension and healthy control at family level; (B) Normalized abundance of feature bacteria in H-CKD, hypertension and healthy control at genus level; (C) Normalized abundance of feature bacteria in H-CKD, hypertension and healthy control at species level. Points represent different samples; Normalized abundance: Log₁₀ transfer; P value calculated by Kruskal-Wallis test.