

SUPPLEMENTARY FIGURE LEGENDS

Fig. S1 The alternations of body weights of rats. (A) The body weights of control mice and CUMS rats at indicated time points during CUMS. (*t*-test, Day 0: $P = 0.5402$, $n = 41$; Week 3: $P = 0.0150$, $n = 41$; Week 4: $P = 0.0490$, $n = 41$; Week 5: $P = 0.0359$, $n = 41$; Week 6: $P = 0.0260$, $n = 41$). **(B)** The body weights of rats in five groups. CON+V, control rats with vehicle treatment. (two-way ANOVA, $P = 0.9957$). **(C)** The values of SPR for each corresponding rat in the two groups at week 6 and week 11 were compared. (Two-way ANOVA, CON+V: $P=0.9073$; CON+GQD: $P=0.2361$). **(D)** The delta values of SPR for each corresponding rat in the two groups at week 11 and week 6 were calculated and compared. (*t*-test, $P=0.400$, $n=16$). CON+GQD, control rats with GQD administration. CUMS+V, rats with CUMS followed by vehicle treatment. CUMS+GQD, rats with CUMS followed by GQD treatment. Baseline, day 0. *, $P < 0.05$ versus the control group.

Fig. S2 The absolute abundance of the indicated gut bacteria at the genus level. The absolute abundance of the indicated bacteria significantly upregulated **(A)** or downregulated **(B)** in the gut of CUMS+V rats, compared to CON+V rats. The absolute abundance of the indicated bacteria significantly upregulated **(C)** or downregulated **(D)** in the gut of CUMS+GQD rats, compared to CUMS+V rats. CON+V, control rats with vehicle treatment. CUMS+V, rats with CUMS followed by vehicle treatment. CUMS+GQD, rats with CUMS followed by GQD treatment. The asterisks following the bacteria names indicated the P value *, $P < 0.05$; **, $P < 0.01$ versus indicated controls.

Fig. S3 The untargeted metabolism analysis of the gut in rats. (A) The Pearson correlation analysis indicates the qualified consistency of the obtained data. **(B, C)** The clustered heatmaps of the differential metabolites in CUMS+V vs CON+V or CUMS+GQD vs CUMS+V group. CON+V, control rats with vehicle treatment. CUMS+V, rats with CUMS followed by vehicle treatment. CUMS+GQD, rats with CUMS followed by GQD treatment.

Figure S1

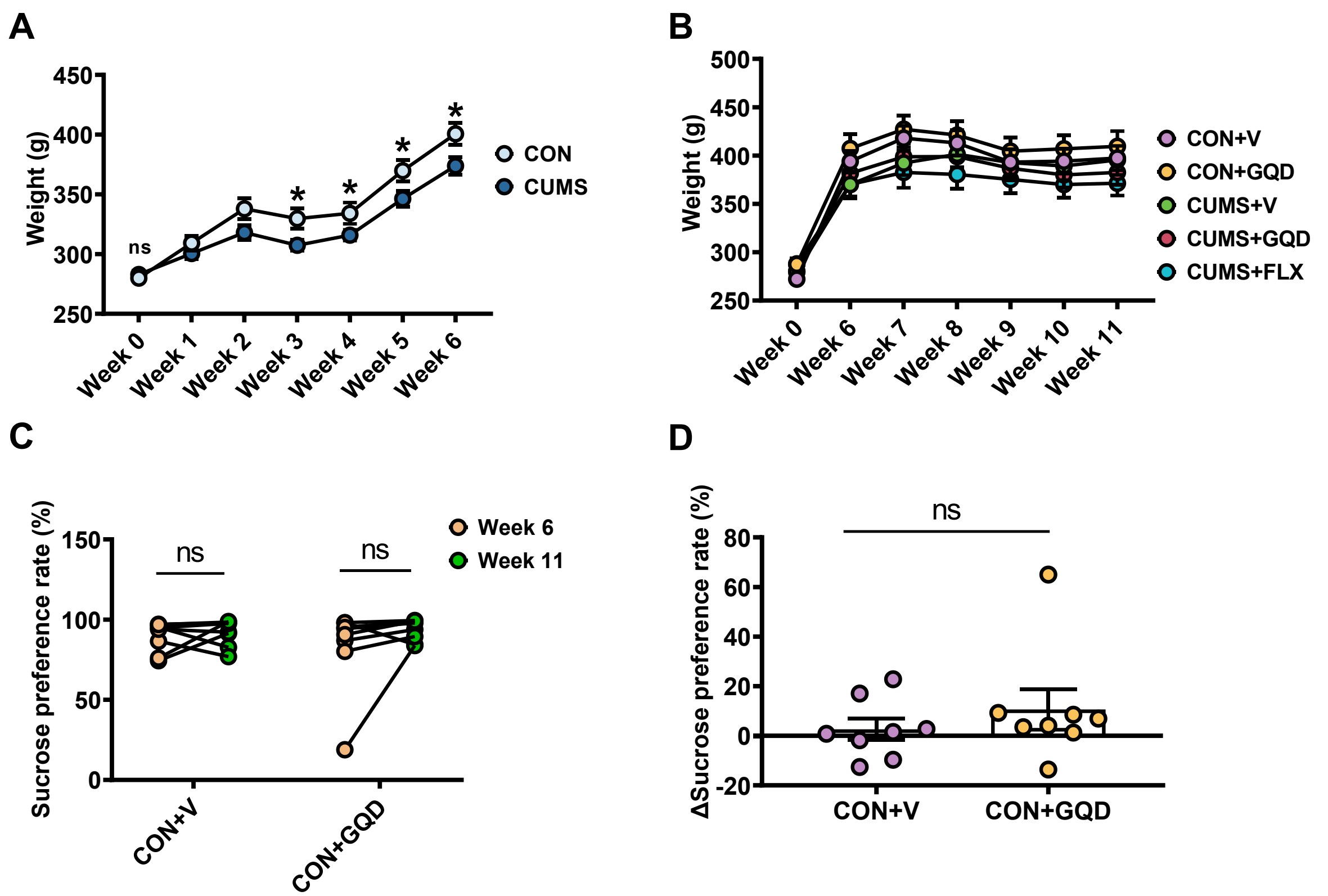
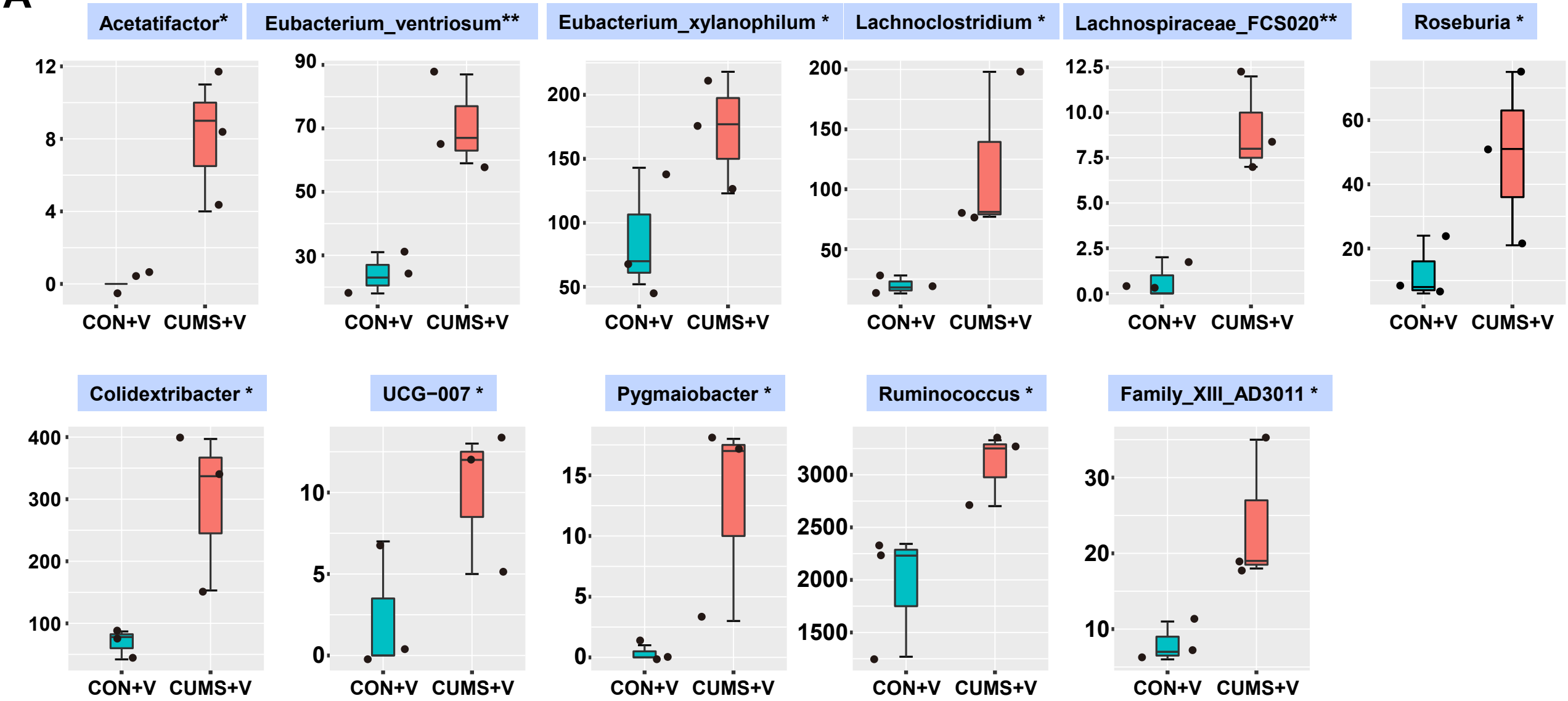
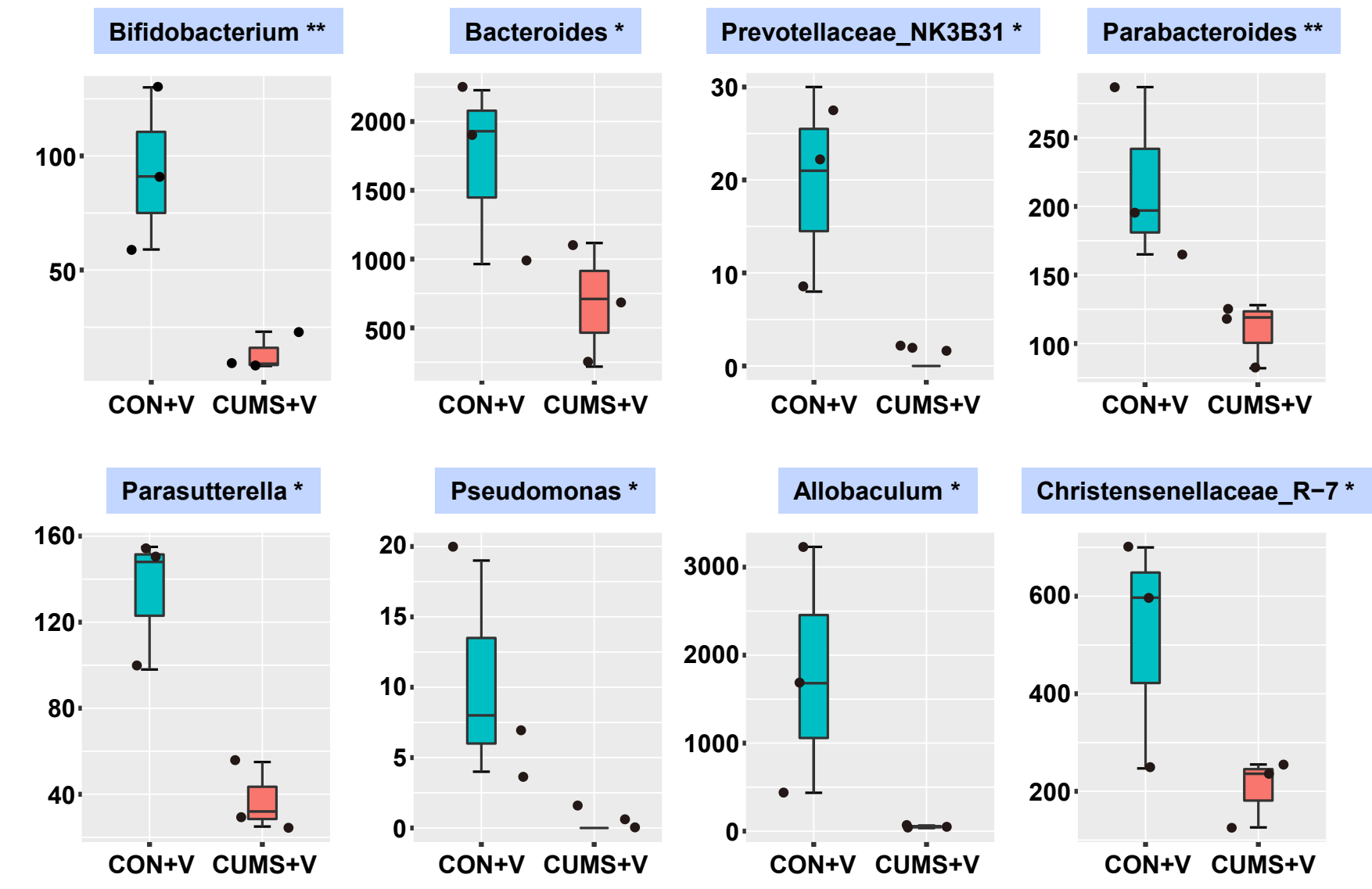


Figure S2

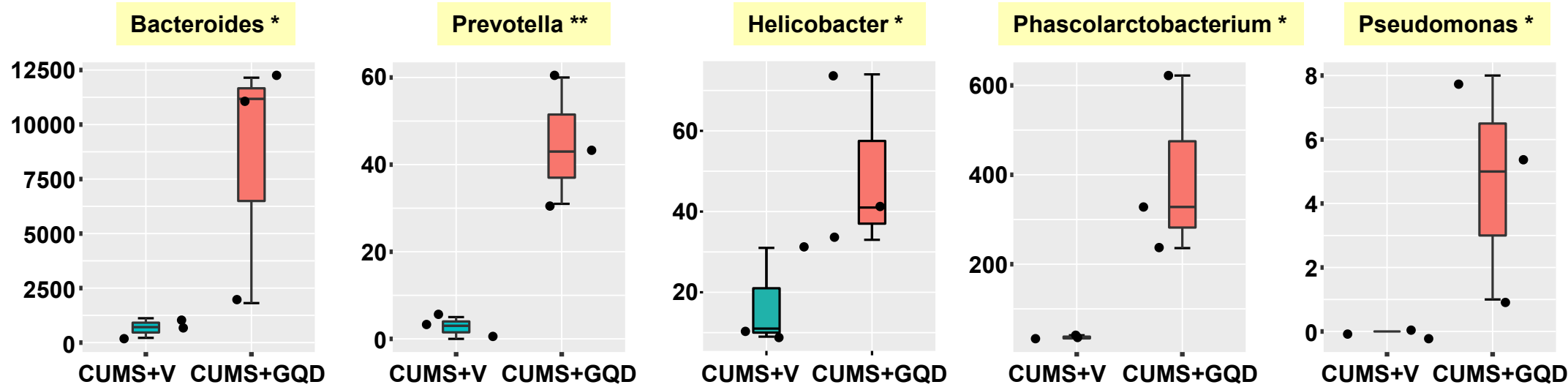
A



B



C



D

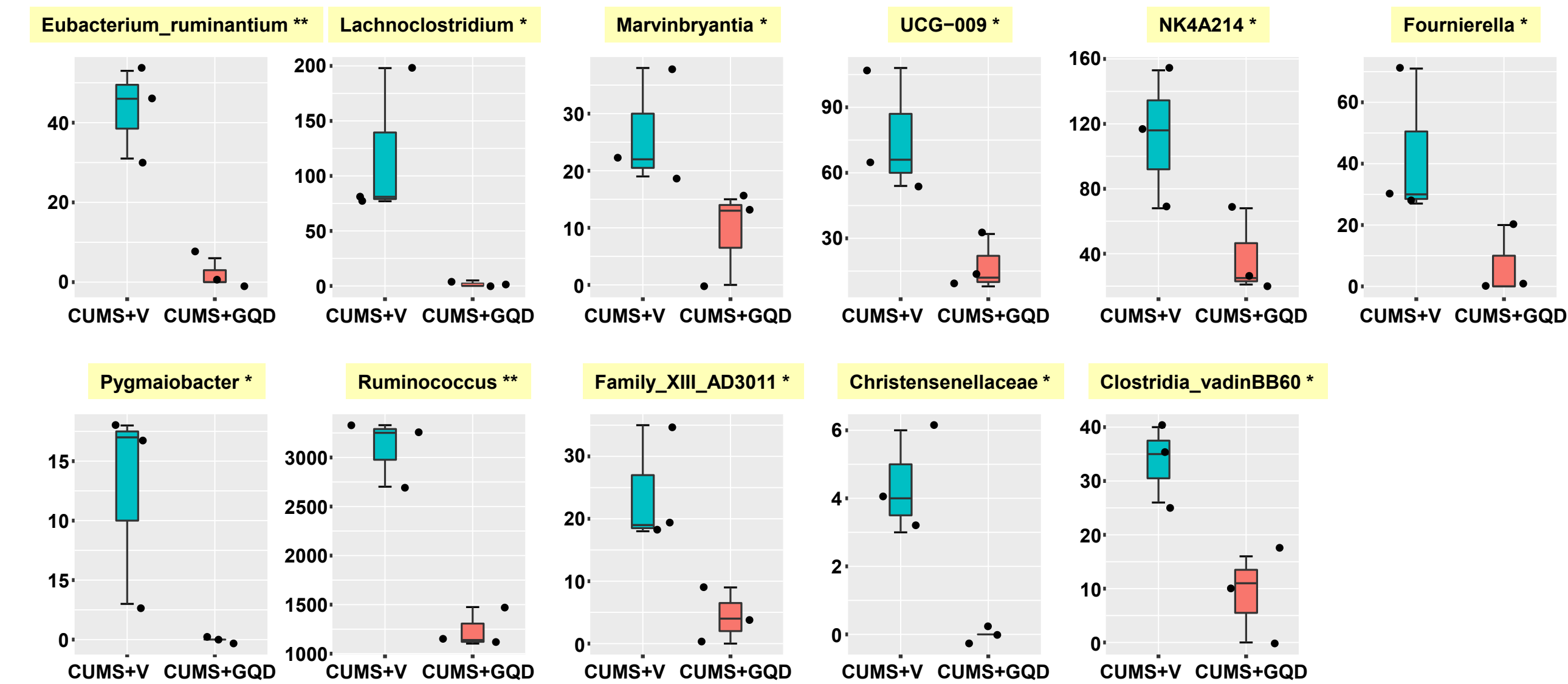
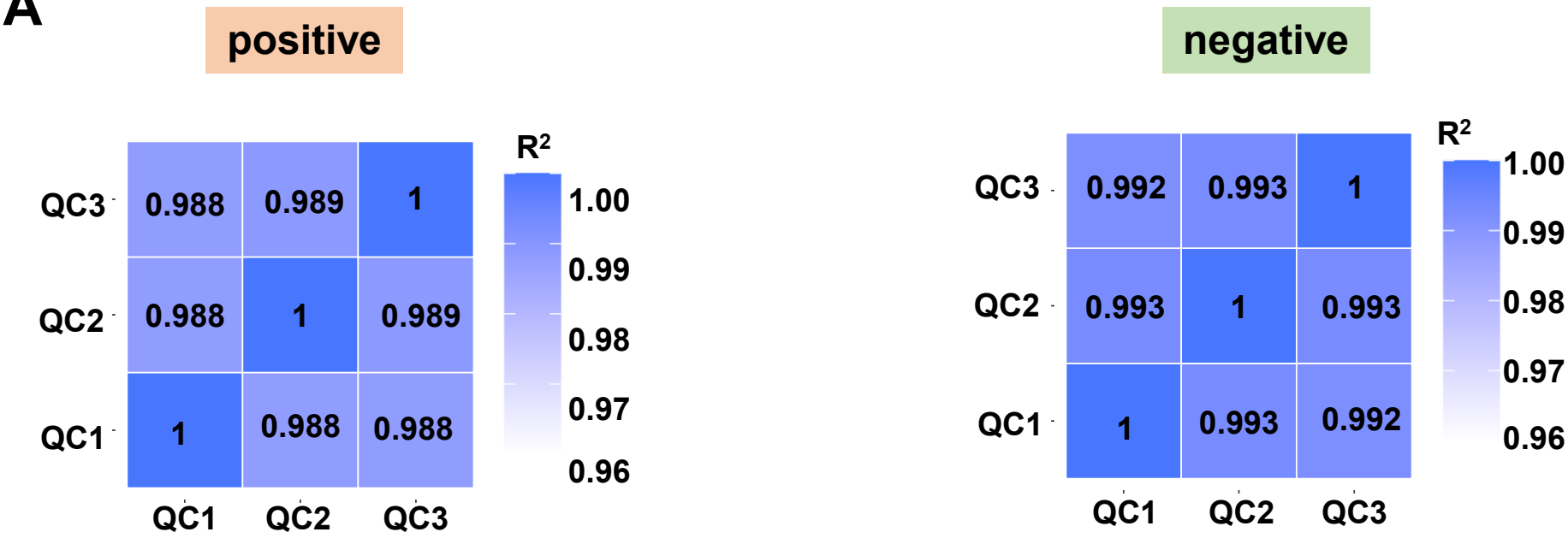


Figure S3

A



B

