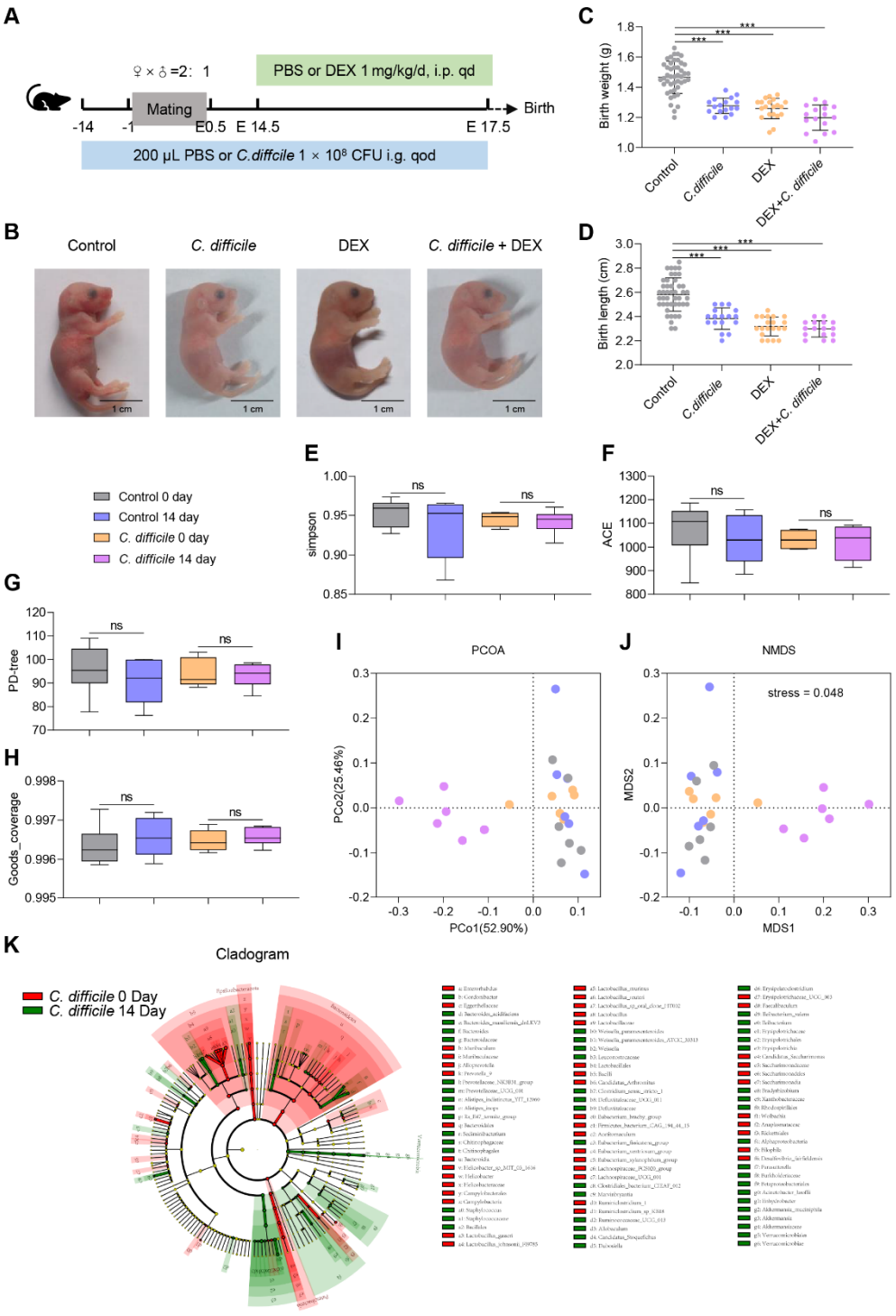
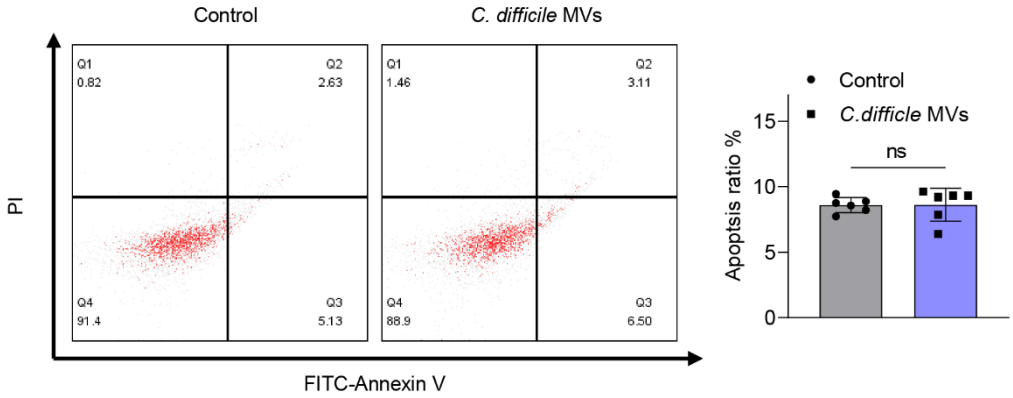


Supplementary Figure 1 The effect of *C. difficile* in FGR mice. (A) Schematic diagram showing that the process of PBS, DEX and *C. difficile* treatment. (B) Representative mice images of the groups control, *C. difficile*, DEX, *C. difficile* +DEX. (C, D) Compared with the control group, birth weight(C) and birth length(D) of the other three groups decreased significantly (control, n=45; *C. difficile*, n=17; DEX, n=20; *C. difficile* +DEX, n=16). (E-H) Four indexes (E Simpson's diversity index; F ACE index; G PD-tree index; H Good's coverage index) were calculated to represent the α-diversity from four groups (control 0

day, n=6; control 14 day, n=6; *C. difficile* 0 day, n=6; *C. difficile* 14 day, n=6). Data was analysed using ANOVA with Tukey's post hoc test, ns, p>0.05; *p<0.05; **p<0.01; ***p<0.001. (I, J) The samples from four groups were separated based on PCoA (I) and NMDS (J) according to weighted UniFrac distances. Data was analysed using Permanova test. (K) The structural characteristics of the gut microbiota changed after 14 days of *C. difficile* supplementation.



Supplementary Figure 2 The effect of *C. difficile* MVs on the apoptosis of HTR-8/SVneo cells. The proportion of apoptotic in HTR-8/SVneo cells treated with *C. difficile* MVs 5 μg/ml for 24 h were analysed by fow cytometry. Data are represented as mean ± SD and analysed using t-test. ns, P > 0.05.