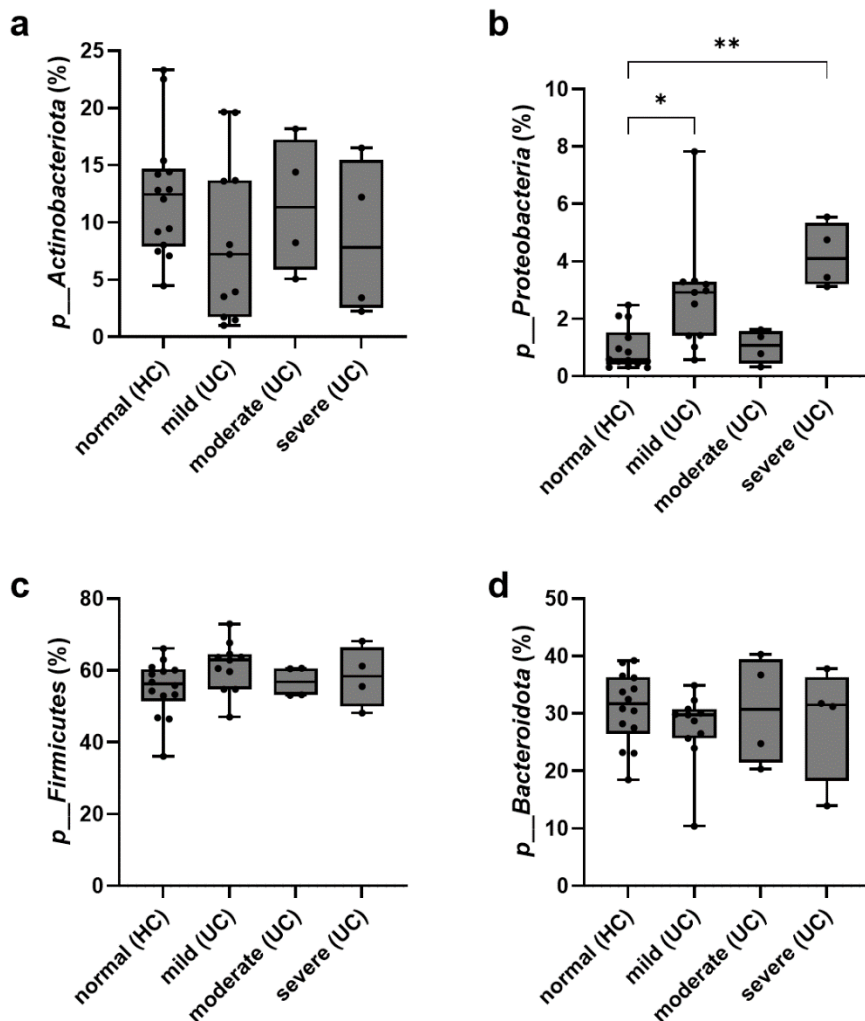


## Additional file 2

**Fig. S1. Relative abundances (%) at phylum level according to the disease severity in the UC**

**group.** The HC group was composed of healthy individuals who had not been diagnosed with other diseases, including IBD, and the severity was classified as normal. The UC group was divided into three severity groups: mild, moderate, and severe, diagnosed based on Truelove-Witts and Mayo indices. One-way ANOVA using the Kruskal-Wallis test was used to calculate statistical significance which is indicated as follows: \* $p < 0.05$  and \*\* $p < 0.01$ . **a**, *Actinobacteriota*; **b**, *Proteobacteria*; **c**, *Firmicutes*; **d**, *Bacteroidota*.



**Fig. S2. Relative abundances (%) at phylum level according to the disease severity in the CD**

**group.** The HC group was composed of healthy individuals who had not been diagnosed with other diseases, including IBD, and the severity was classified as normal. The UC group was divided into three severity groups: mild, moderate, and severe, diagnosed based on Truelove-Witts and Mayo indices. One-way ANOVA using the Kruskal-Wallis test was used to calculate statistical significance which is indicated as follows:  $**p < 0.01$ . **a**, *Actinobacteriota*; **b**, *Proteobacteria*; **c**, *Firmicutes*; **d**, *Bacteroidota*.

