



**Supplementary Fig. 5.** Comparison of the top 10 differences in relative abundance between groups before and after intervention. Bla-Pre-treat, the intervention group before intervention; Bla-1-treat, the intervention group after intervention; Con-Pre-treat, control group before intervention; Con-1-treat, control group before intervention. ab, There was no significant difference between groups with the same letters ( $P > 0.05$ ); the difference between groups with different letters was statistically significant ( $P < 0.05$ ).