



**Fig. S4.** Principal coordinate analysis (PCoA) of fungal community composition based on unweighted and weighted UniFrac distances according to clinical parameters. (A) Fungal communities stratified by physician-assessed improvement: baseline (pre-treatment), non-improved (PGAIS 1–2), and improved (PGAIS 3–5). No significant differences in community composition were detected by PERMANOVA. However, dispersion differed significantly on the control side for unweighted UniFrac distance. (B) Fungal communities stratified by subject-reported satisfaction: baseline, non-satisfied (scores 1–2), and satisfied (scores 3–5). No significant differences in community composition were detected by PERMANOVA. However, dispersion differed significantly on both the control and experimental sides for unweighted UniFrac distance.