SUPPLEMENTARY MATERIAL

Figure E1. Intestinal immune factors. A. tIgE levels in patients' sera (red) vs. feces (brown). **B.** Correlation matrix (red, negative; blue, positive); CED, cumulative eliciting dose; AP, abdominal pain. **C.** Fecal IgA levels in patients (pink) vs. controls (blue). **D./E.** Fecal cytokine levels in patients (pink) vs controls (blue)/patients' sera (red) vs. feces (brown). Stars, *P*-values. sIgE, specific IgE. tIgE, total IgE.
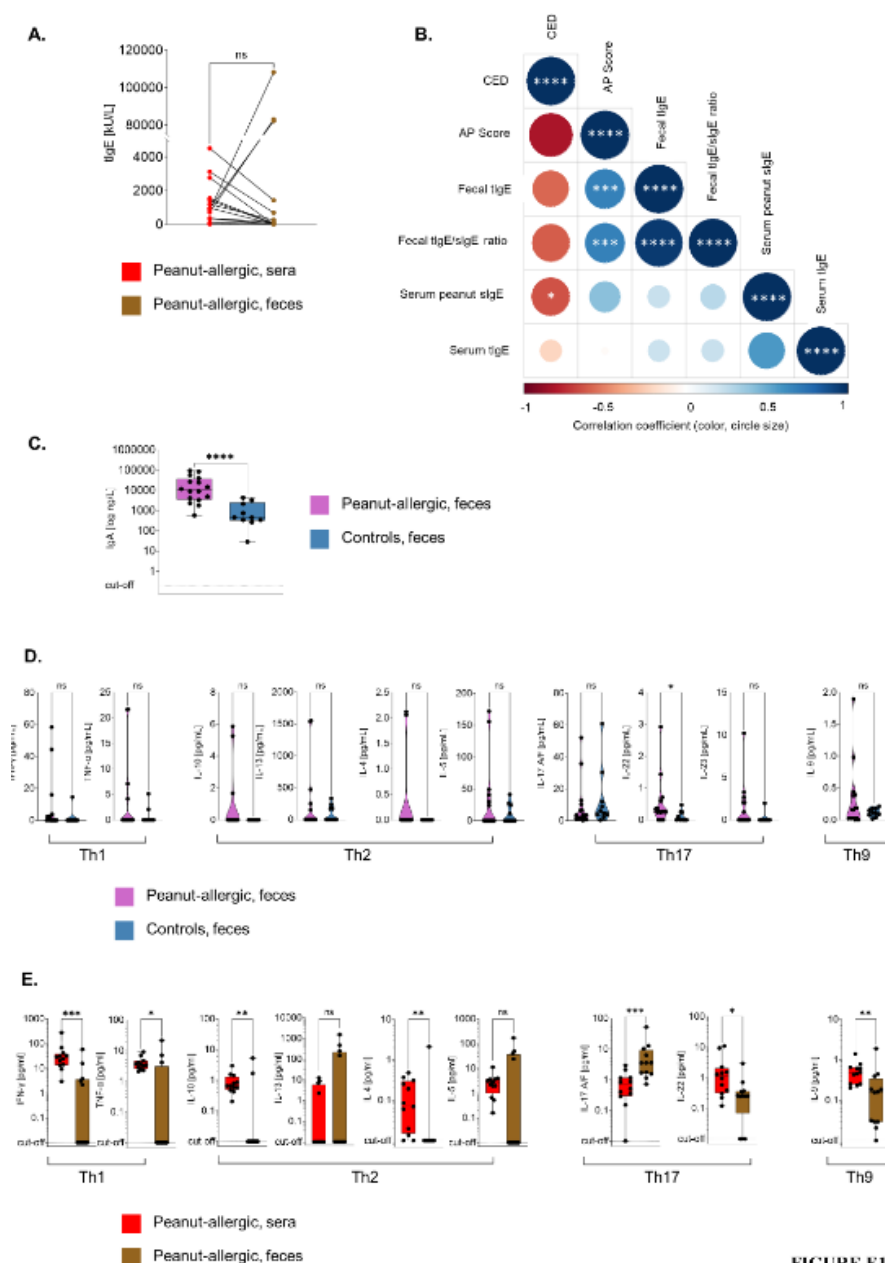
Figure E2. Gut microbiome composition. A. Bacterial richness, microbial alpha-diversity and evenness in patients (pink) vs. controls (blue). **B.-C.** Abundance of main phyla in patients (pink) vs. controls (blue). **D.** Abundance of bacterial strains in patients (pink) vs. controls (blue). **E.** Volcano plot with abundance of bacterial strains (single dots) in patients vs. controls, while strains lying to the left of the vertical dashed line are overrepresented in patients and strains lying to the right of the dashed line are underrepresented in patients compared to controls. Stars, *P*-values.