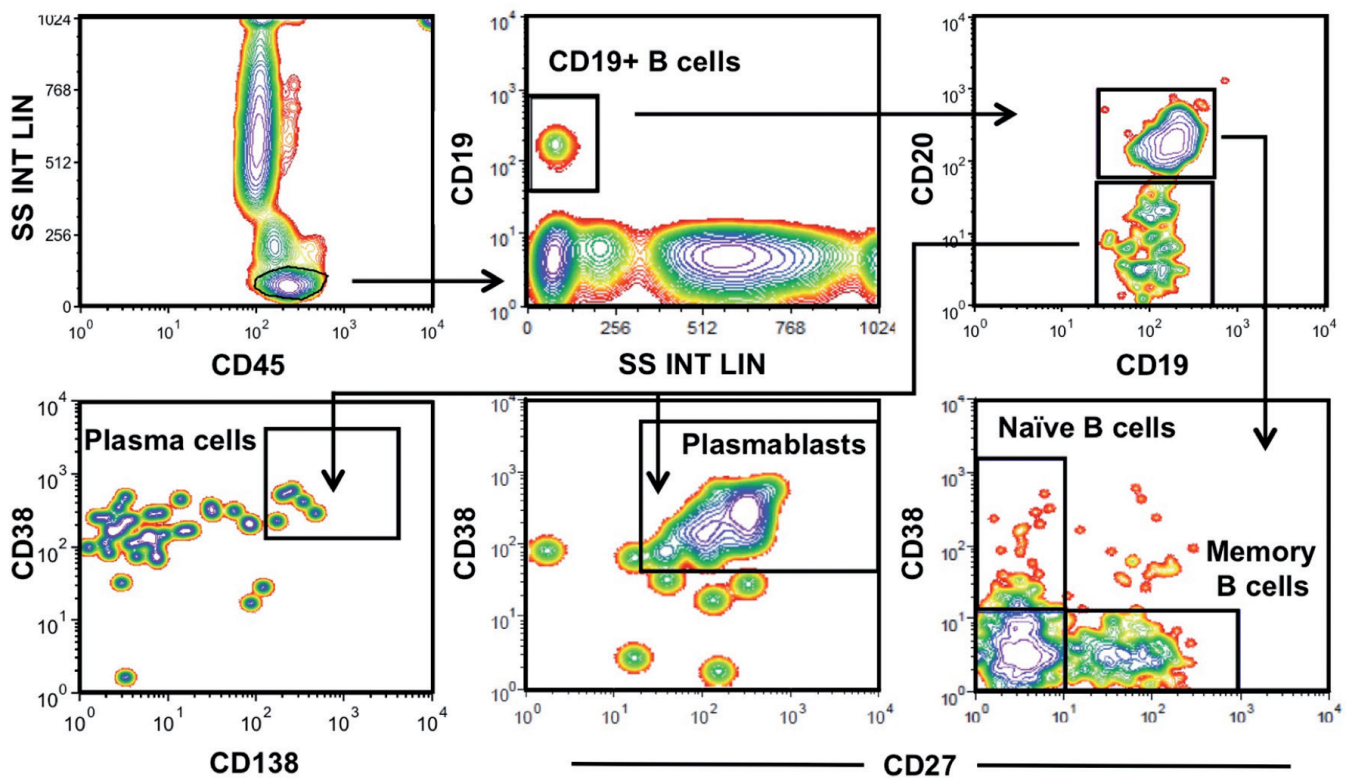
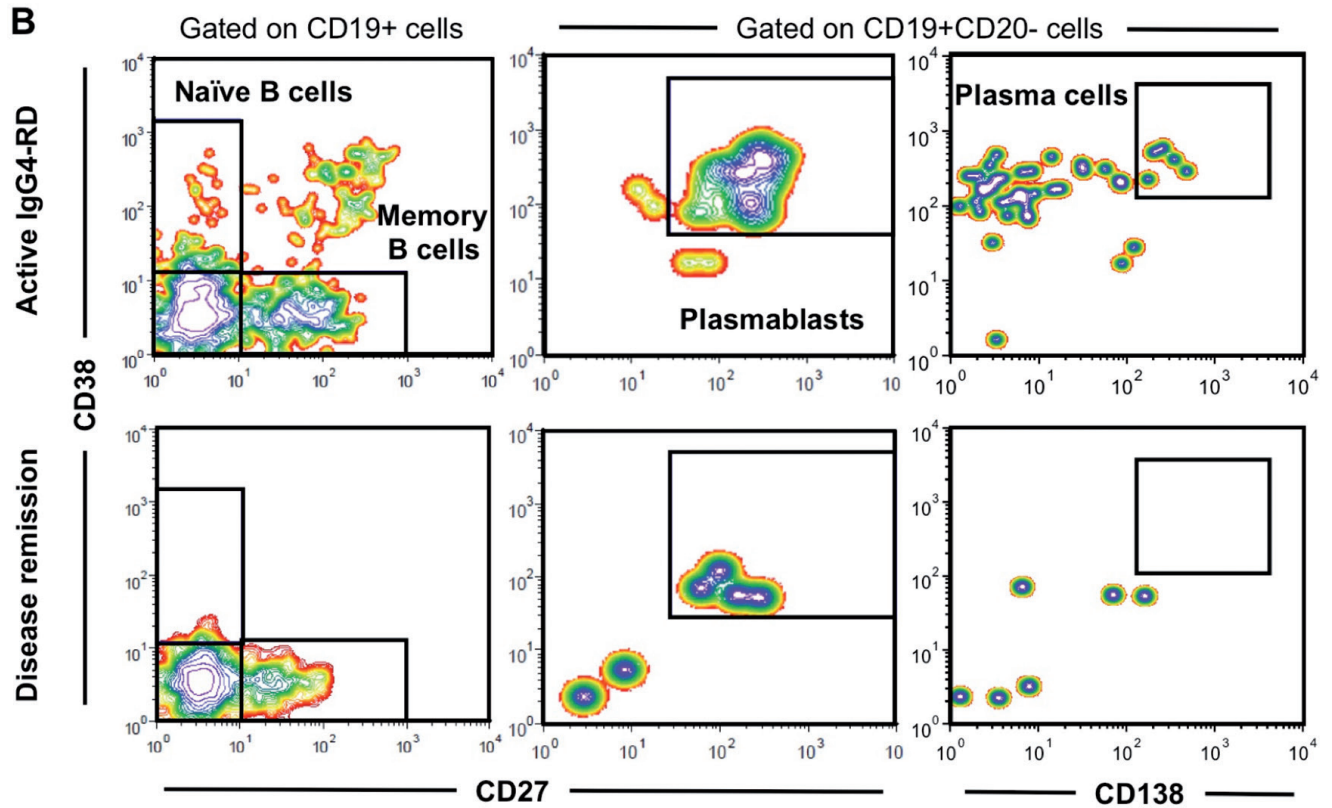
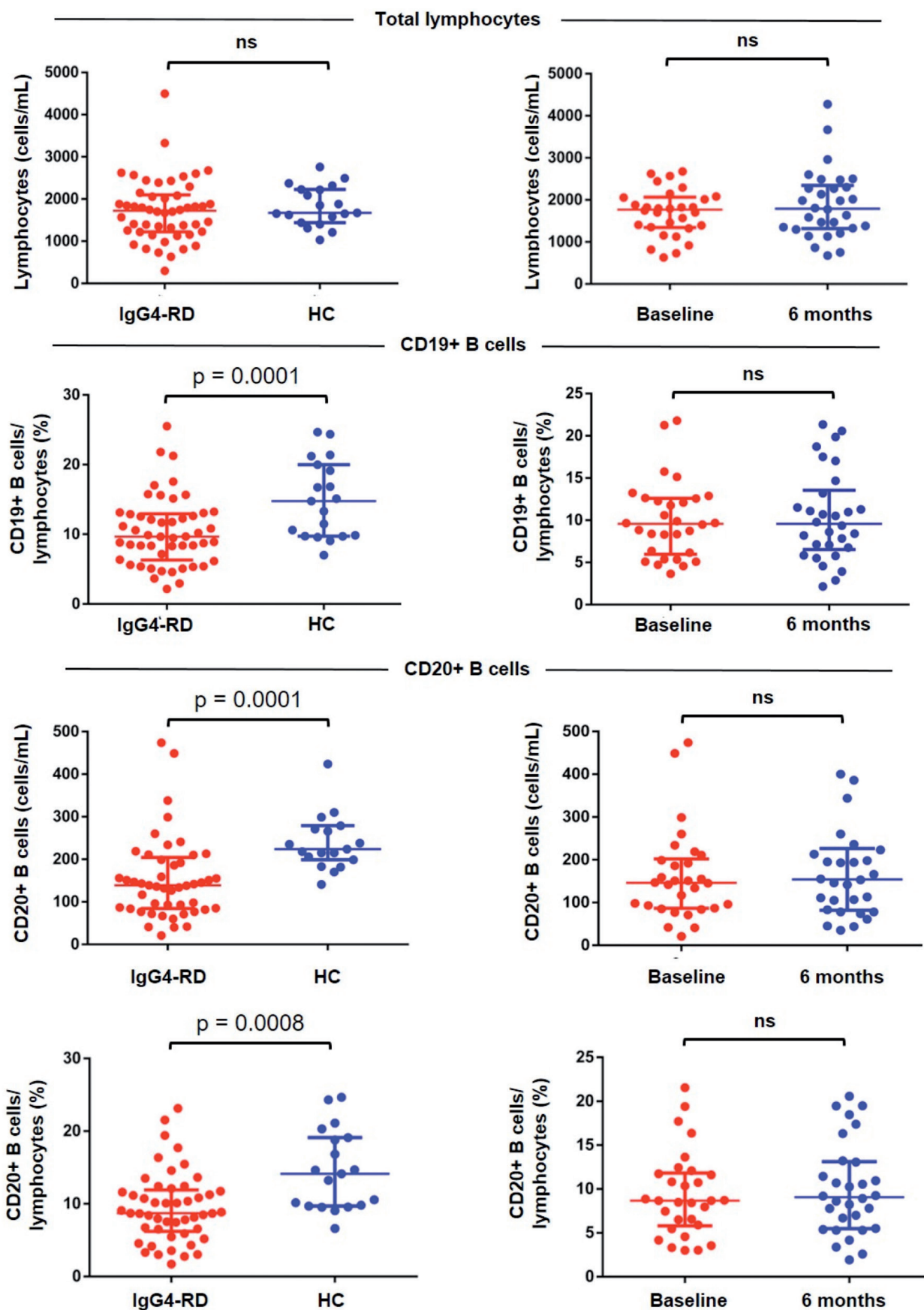
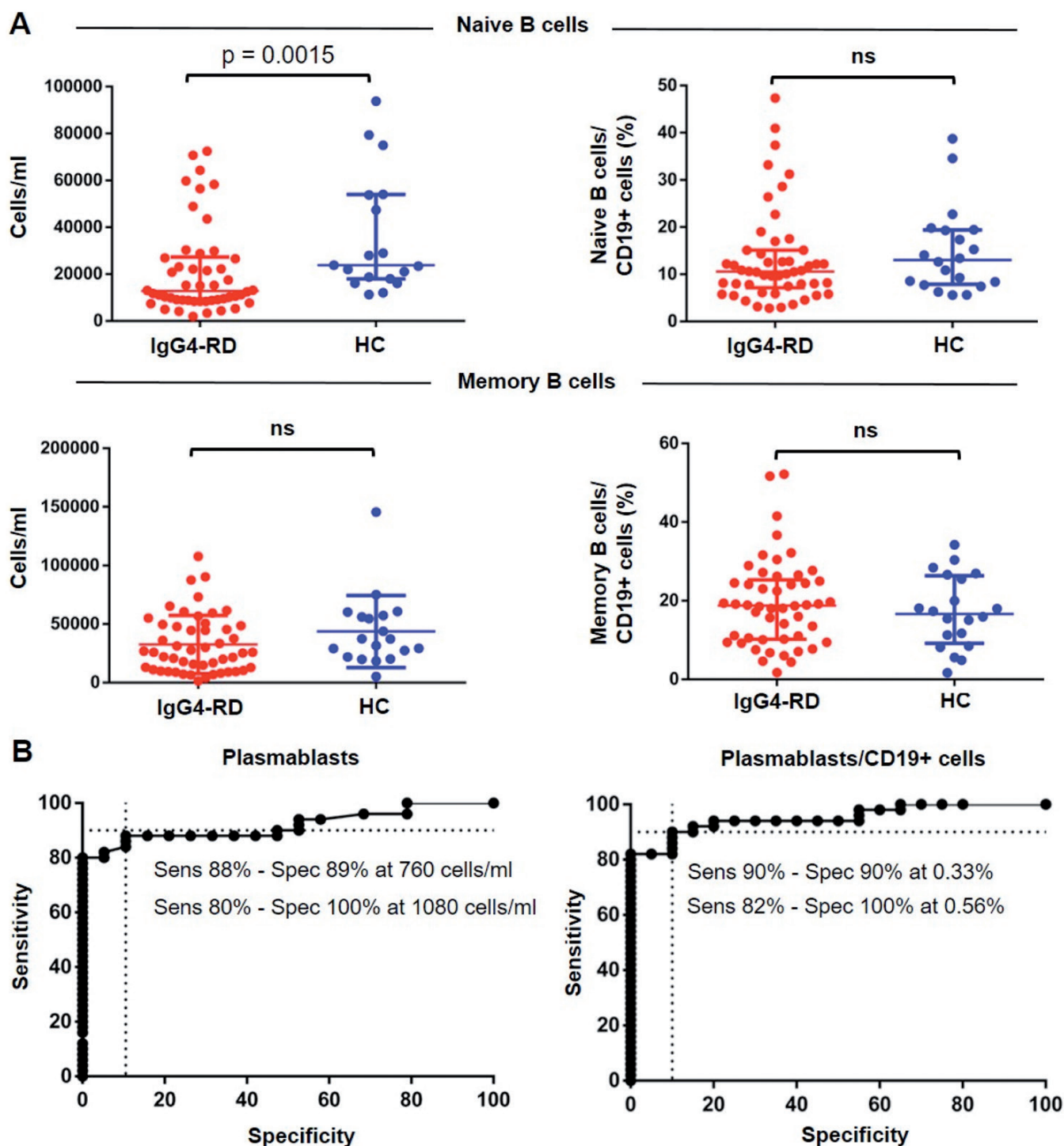


A**B**

Supplementary Fig. 1. Gating strategy for flow cytometry analysis. (A) Gating strategy for the identification of different B-cell subpopulations. (B) Contour plots showing the effects of glucocorticoids on different B-cell subpopulations in a representative patient with IgG4-RD.



Supplementary Fig. 2. Total lymphocytes count, CD19⁺ and CD20⁺ B-cells counts in healthy controls, IgG4-RD patients at baseline, and after glucocorticoids treatment.



Supplementary Fig. 3. (A) Flow cytometry analysis of naïve and memory B-cells in IgG4-RD patients at baseline compared to healthy controls. (B) Performance of circulating plasmablasts in absolute counts and percentage of CD19⁺ B-cells for the differentiation between IgG4-RD patients and healthy controls.