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Germline *CARD11* mutation in a patient with severe congenital B cell lymphocytosis.

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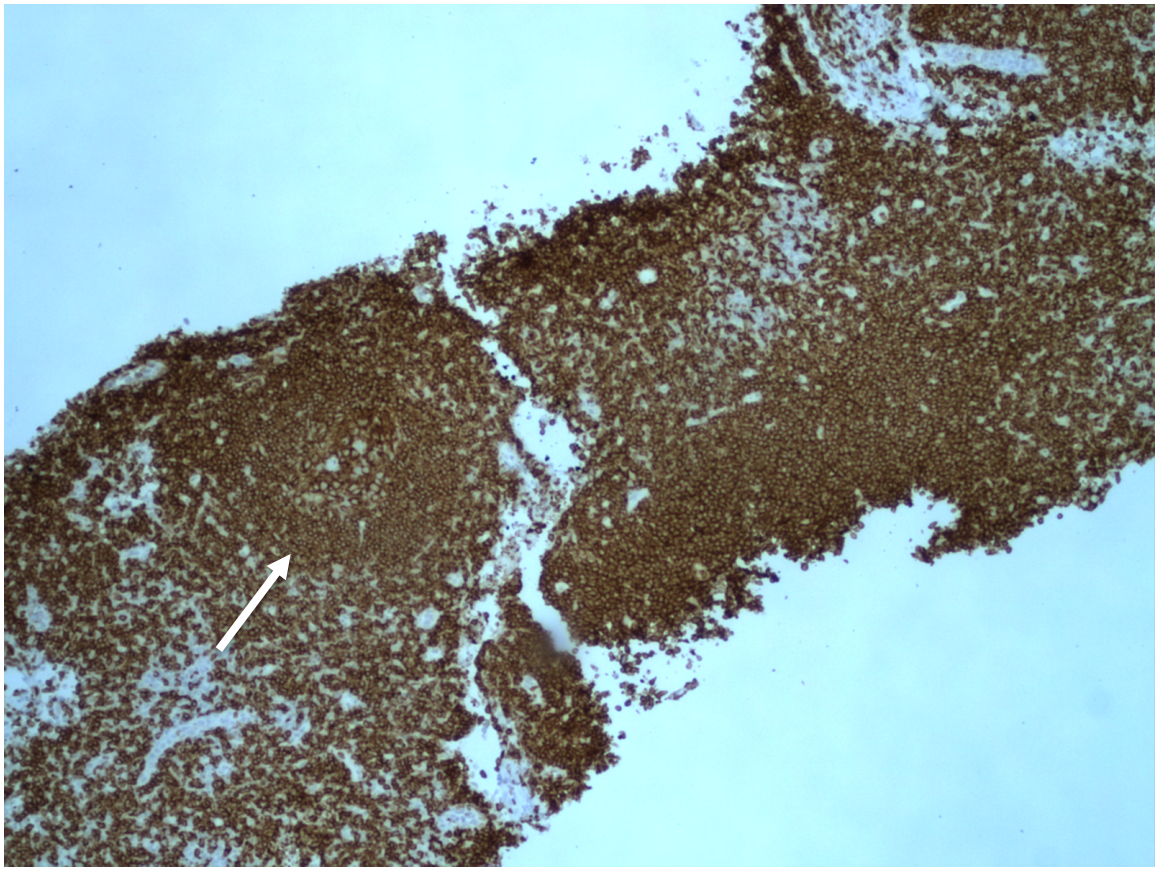
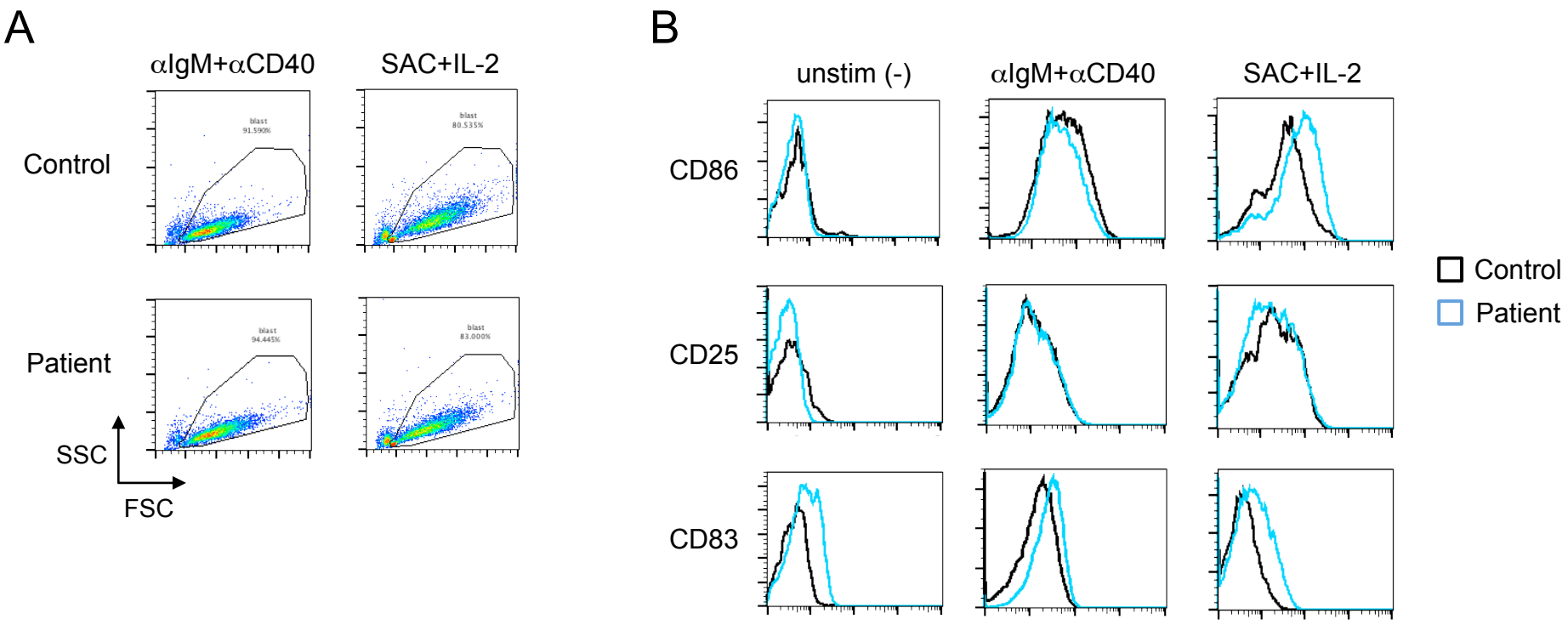
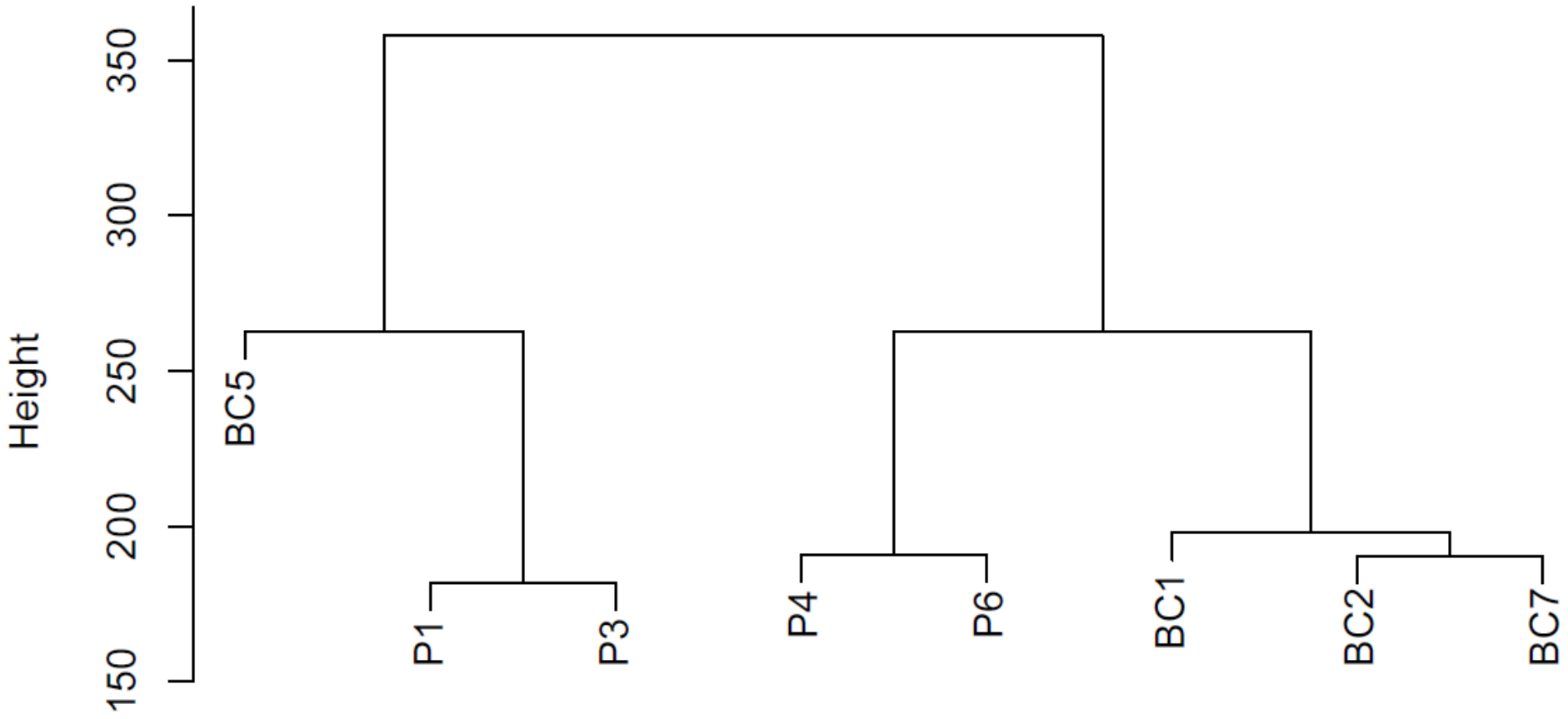


Supplemental Figure 1. Predominant B cell lymphocytosis in patient's lymph node. Resected lymph node tissue from the patient was immunohistochemically stained with anti-CD20 to mark B cells. White arrow indicates a distinct B cell follicle. Power = 100X.



Supplemental Figure 2. Comparable activation status of control and patient B cells following stimulation. (A) Flow cytometric comparison of cell size and shape (forward vs. side scatter) for purified naïve B cells activated for 5 days using the stimuli listed at top. (B) Upregulation of B cell activation markers (CD86, CD25, CD83) was assessed by flow cytometry following 3 days of activation with the stimuli listed at top. Data are representative of three independent experiments.



Supplemental Figure 3. Hierarchical clustering analysis of gene expression in naïve B cells from controls and BENTA patients. Transcriptome expression data (FPKM) was log2 transformed and standardized.Unsupervised clustering was perfomed using Ward's minimum variance agglomeration method. The height is weighted squared distance between cluster centers.