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Chronic loss of PI3Kδ activity

- Reduced magnitude T cell responses.
- Reduced cytokine production by T cells.
- Impaired Treg numbers and function.
- Complete block in B cell development in humans
- No IgG, IgM
- Lack of MZ and B1 cells in mice

↑ Naive T
↑ Tmem
↑ Follicular B
↑ GC B cells in dark zone
↑ CSR and SHM

↑ Teff
↑ Tfh
↑ Treg
↑ TI B cell response
↑ GC B cells in light zone

Chronic elevated PI3Kδ activity

- T cell senescence associated with increased apoptosis and failure to response to stimuli.
- Partial block in B cell development at transitional stage in humans
- Impaired CSR. High IgM, low IgG.
- B cell lymphoma