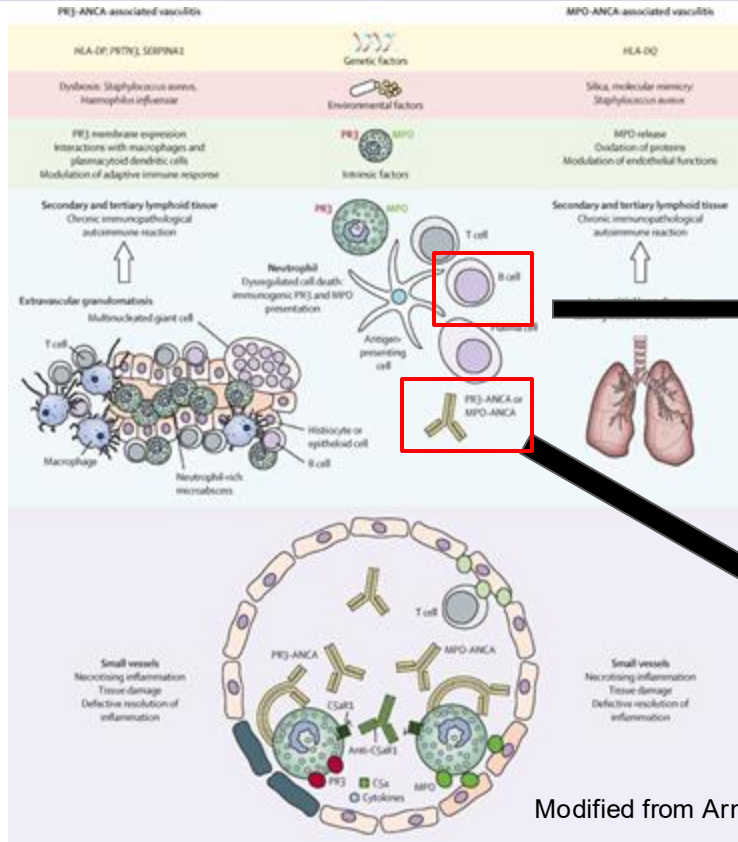


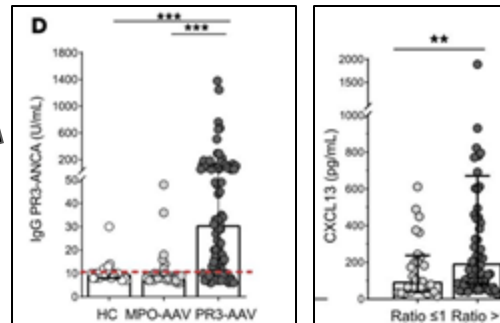
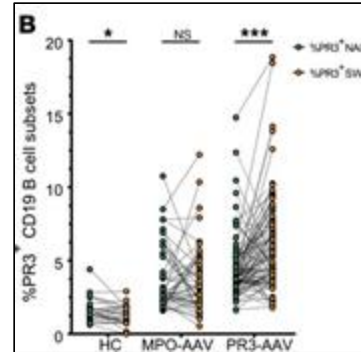
Antigen presenting role of B cells in PR3-AAV

Saloni Patel

Breach of peripheral tolerance in PR3-AAV patients



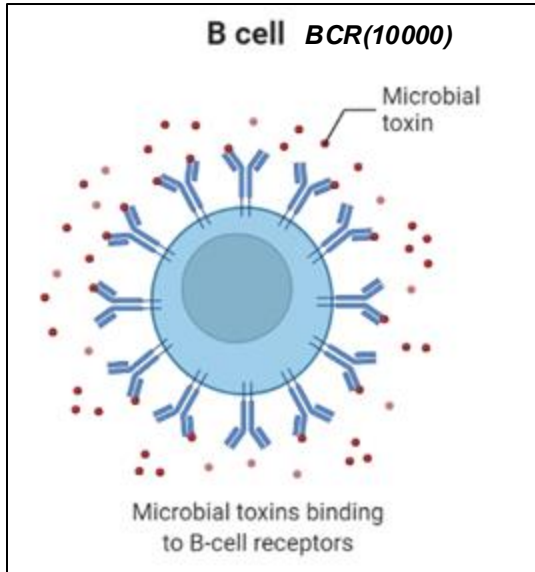
Modified from Arnold et al., 2024



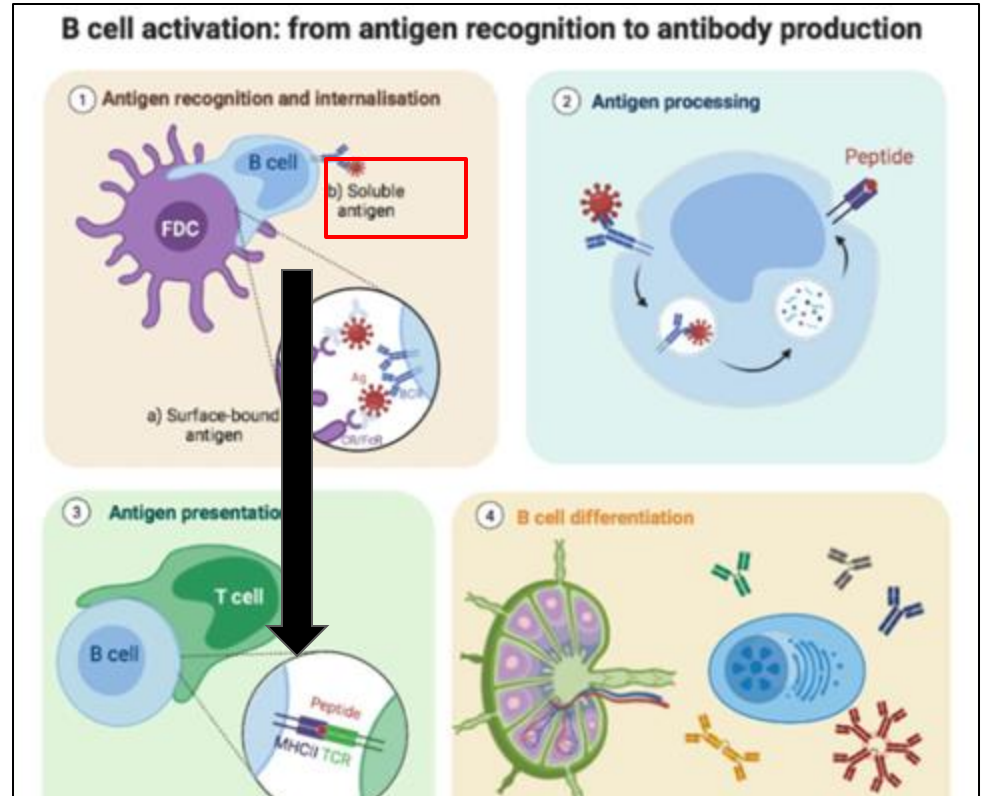
Berti et al., 2021

Why PR3-specific B cells in PR3-AAV produce pathogenic ANCA and not in healthy individuals ?

B cells as antigen presenting cells



Autoimmune disease - *autoantigen*
initially may be available at *low amounts*

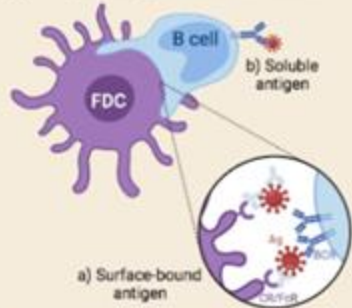


B cells present antigen to T cells in PR3-AAV to produce ANCA ??

Antigen recognition by B cells

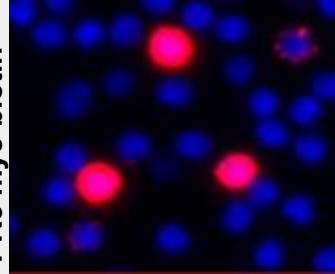
B cell activation: from antigen recognition to antibody production

1 Antigen recognition and internalisation

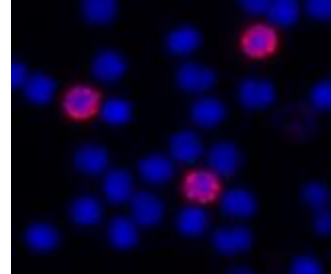


Phenotype A
(Cell surface)

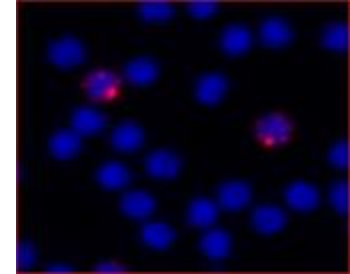
PR3-myc-biotin



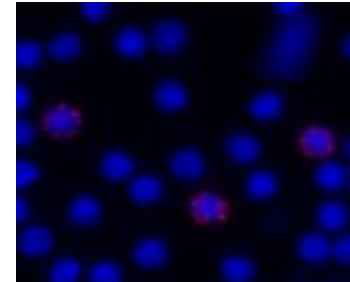
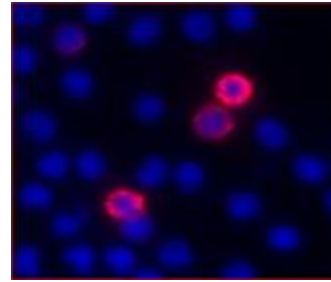
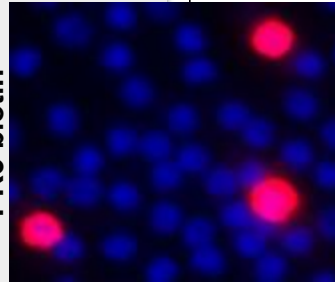
Phenotype B
(rim)



Phenotype C
(focal point)



PR3-biotin

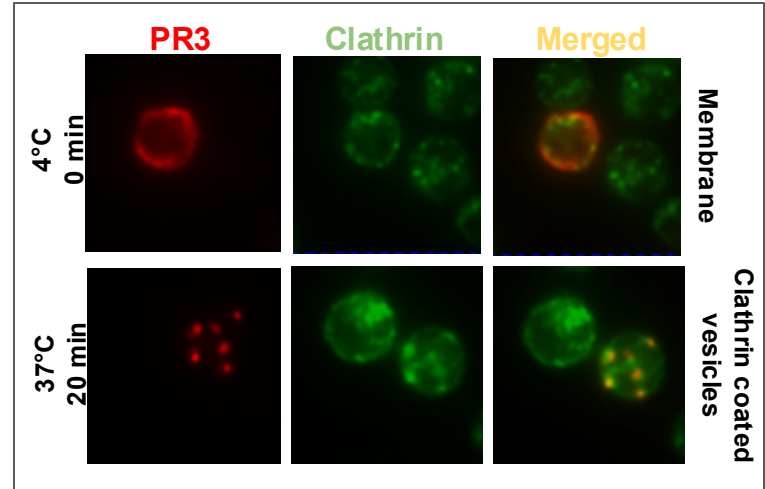
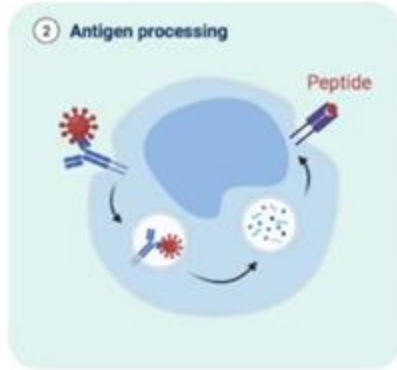


Created with Biorender

B cells bind PR3 antigen

Antigen internalization by B cells

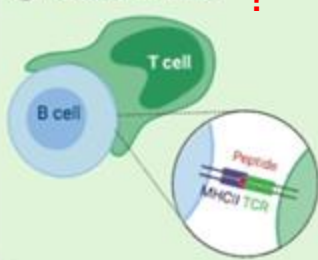
B cell activation: from antigen recognition to antibody production



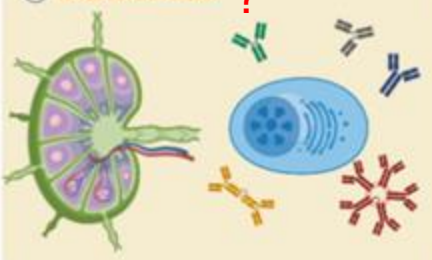
Future plans

B cell activation: from antigen recognition to antibody production

3 Antigen presentation ?



4 B cell differentiation ?

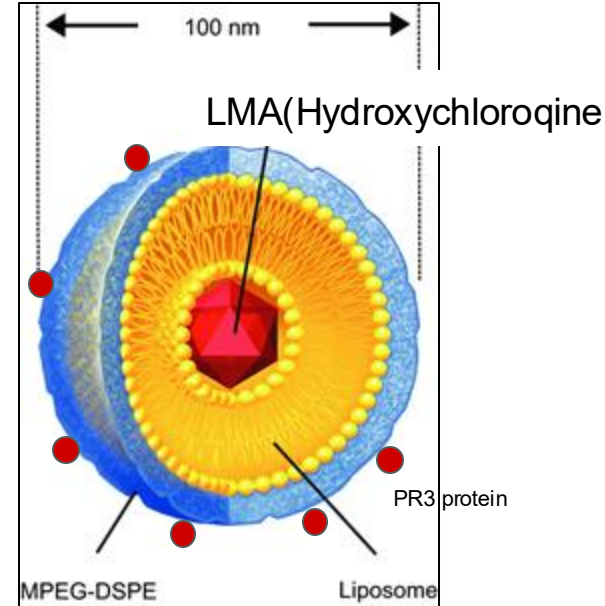
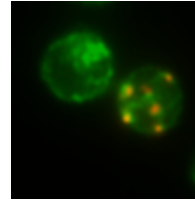


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Targeted therapy using liposomes ??

PR3

Clathrin



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