

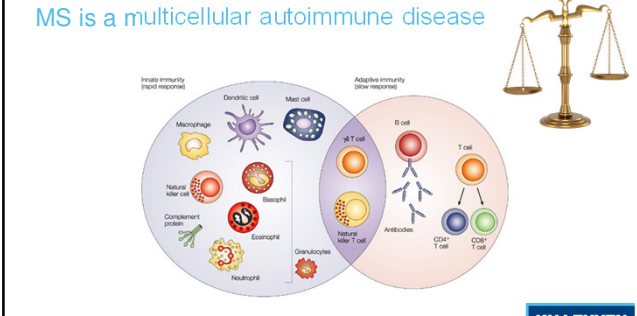
### Multiple sclerosis risk variants alter the expression of co-stimulatory genes in B cells

Ide Simets  
BNS Symposium 8th December 2018



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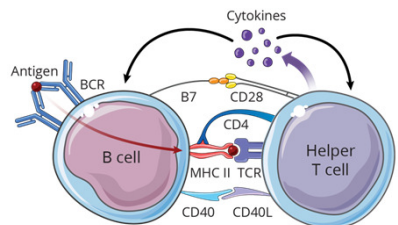
### MS is a multicellular autoimmune disease



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### MS risk SNP in CD40

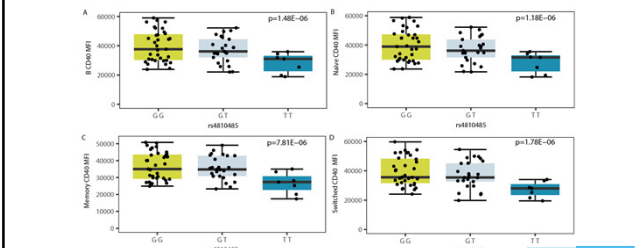
CD40 is an important co-stimulatory molecule in the immunological synapse between T and B cells



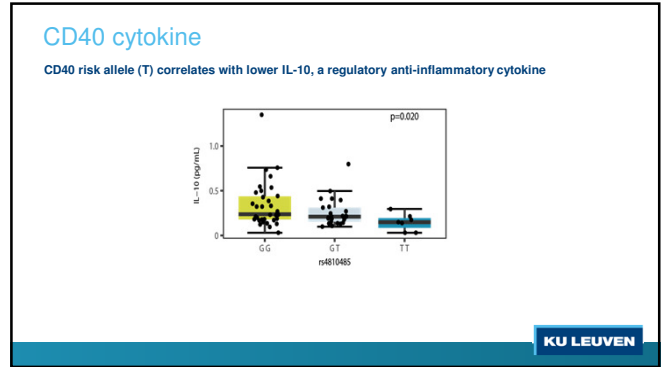
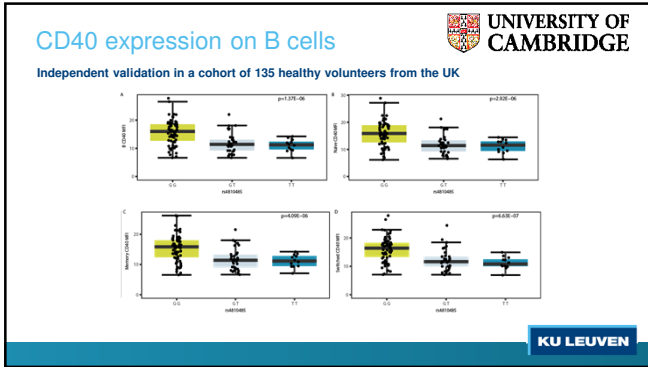
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### CD40 expression on B cells

CD40 risk allele (T) is associated with lower CD40 surface expression on B cells



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### Conclusion CD40

- More CD40 surface expression + IL-10 = beneficial in multiple sclerosis
- Anti-CD40 monoclonal antibodies = mimic of CD40 MS risk SNP

→ Beneficial as an MS treatment?

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