- Protection against your own tumour but not other tumours from other mice
- Immunoediting Immune system against tumour cells
- Danger signals allows immune system to see tumours
- $\gamma\delta$ T cells, NK cells, NKT cells linking innate to adaptive seem to be the first cells to respond to tumour
- DCs take in tumour Ags & go to lymph nodes & makes memory cells
 - Much quicker & better at responding to cancer
- TAA = Tumour Associated Antigens
- Immune system could be selecting out tumour cells that can avoid destruction by immune system
 - Mutations allowing cancer progression:
 - Production of anti-inflammatory action
 - Decreased IFN-y response --> decreased MHC-I production
 - Block NK cells
 - Etc.
- Tumour Associated Ags Normal Ags but upregulated
 MAGE-C2 = Melanoma Associated Gene
 β2-microglobulin needed to express MHA
 6 MHC alleles
 2×HLAS
 2×HLAS
- Melanoma cells express MHC-II but do not express the costimulation
- MCSF Macrophage Colony Stimulating factor
 - M1 --> M2
 - M1 = pro inflammatory
 - M2 = Healing/repair & anti-inflammatory
- nTregs = Natural T regs
- CTLA-4 can stop co-stimulation by binding to APC
- Anti CTLA-4 drugs can have autoimmune side effects