• 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

• γδ 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-γ 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 MHC-I

• 6 MHC alleles
  • 2xHLA1
  • 2xHLA2
  • 2xHLA3

• 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