- 48. Autoreactive T cells that target myelin basic protein and myelin oligodendrocytes. An inflammatory reaction occurs and CD4 T cells invade the brain. This causes demyelination of neurones leading to muscle weakness and other neurological symptoms.
- 49. MHC class I is made up if an alpha chain with three subunits and a B-microglobulin (B2M). The B2M is non covalently attached to the alpha3 subunit.
- 50. Endogenous pathway... 8/9 AA long. All nucleated cells to CD8 T cells.
- 51. Complement receptors... Fc receptors
- 52. TLRs, lectin receptors and scavenger receptors.
- 53. They bind large, cationic molecular structures on bacterial surfaces.
- 54. A breakdown of immune tolerance causing an immune response against self.
- 55. Immune regulation, genetic, environment.
- 56. Autoreactive lymphocyte clones... autoantibodies.
- 57. From the constant supply of autoantigens ... leads to sequestration (release of more antigens from damaged tissue).
- 58. Sequestration of autoantigens... deletion of autoreactive lymphocytes in thymus and BM.... Failure to process and present certain self-peptides... T cell anergy through a lack of costimulation.... Suppressive cytokines.
- 59. Autoantigens that have become available, and have become targets after the original attack. T cells specific for self, activate B cells specific for various components of a complex antigen, which can then present many diff antigens and produce a different secreted antibolit for another antigen of self.
- 60. When autoreactive B cells bind self-antigen and a cross-reactive origen. The cross-reactive, non-self-antigen gets processed and presented to to Gaar e Thelper cells which then help and activate the autoreactive B cell.
- 61. Central tolerance deletion a deliting, thymus and 54. Antigen Segregation physical barrier of auto antice is to lymphoid system, eipheral organs. Peripheral anergy cellular marci field by weak signalling and no o-stim, secondary lymphoid tissues. Regulatory cells suppression by cytokines and intracellular signals, SLO + inflam sites. Cytokine deviation differentiation of Th2 cells limiting inflam cytokine secretion, SLO+IS. Clonal deletion apoptosis post-activation, SLO+IS.
- 62. Weakly self-reactive lymphocytes can often also make an immune response to foreign Ags, therefore deleting them would impaired the immune system.
- 63. AIRE is the autoimmune regulator gene which promotes the expression of tissue specific antigens on medullary thymic epithelial cells which are presented to single positive thymocytes. Thymocytes are deleted if they bind to these antigens with high affinity.
- 64. APECED autoimmune polyendocrinopathy candidiasis ectodermal dystrophy
- 65. Viral infn causes damage to the target cell. Innate immune response starts, release of INFa/b. This stimulates the adaptive immune response. If there are T cells that a self-specific for the damaged target cell, then get a virally induce autoimmune disease.
- 66. Natural are produced in the thymus if show relatively high affinity for self. Induced in the periphery when recognise self in the presence of TGF-b.
- 67. Early activation phase involving a few autoantigens. Chronic stage is reached as autoantigens normally can't be cleared, so constant stimulation. This is enhanced by epitope spreading. This leads to chronic inflammation via the attraction of macrophages and neutrophils.