Role of Invariant Natural Killer T Lymphocytes in Respiratory Viral and Bacterial Infections

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Abstract

Invariant Natural Killer T (iNKT) cells are “innate-like” αβ T lymphocytes expressing markers associated with the NK lineage. These cells express a semi-invariant TCR and rapidly secrete cytokines upon stimulation with certain lipid antigens presented by the non-polymorphic CD1d molecule. Through this unique property, iNKT cells modulate autoimmune diseases, inflammation, resistance to tumours and antimicrobial host responses. Here, we will review how iNKT cells become activated in the context of infection and discuss the role played by these cells in respiratory viral (influenza A virus) and bacterial (streptococcus pneumoniae) (co-)infection.

References:


