

NOD.*Cd1*^{-/-} MICE HAVE INCREASED NUMBERS OF CD4⁺CD25⁺FOXP3⁺ T REGULATORY CELLS IN THE PERIPHERY.

Venkat N Vangaveti, Roby J Jose and Alan G Baxter

Comparative Genomics Centre, James Cook University, Townsville, Australia

Recent studies indicate Natural Killer T (NKT) lymphocytes and Regulatory T (Treg) cells interact to regulate immune responses. NOD mice bearing a targeted deletion of the NKT cell restriction molecule, CD1d, lack NKT cells. To determine whether absence of NKT cells has an effect on Treg numbers, NOD/Lt and NOD.*Cd1*-/- mice were examined for differences in their Treg population. Flow cytometric analysis of 10-week old female mice of both strains revealed that NOD.*Cd1*-/- mice have a higher number of CD4+CD25+Foxp3+ T cells in both the spleen and liver. Further studies on differences in regulatory T cells between these strains at different ages and the effect of adoptive transfer of NKT cells on Treg cells would give us a better understanding about interactions of these two populations.