

SF compared to WB & these cells expressed the immune amplification receptor TREM1. SF CD141 DC expressed higher levels of CD80/CD86 & CD40 compared to WB & had a heightened response to TLR3 stimulation. To examine the effect of the synovial microenvironment on DC, MoDC were cultured in the presence of SF which induced a significant increase in CD80. Finally DC treated with SF & cocultured with CD4⁺ T cells had enhanced IFN γ production & proliferation. Our data suggests that unique DC subsets can be found in RA. These cells display a more activated phenotype than DC in blood & the inflammatory nature of the joint contributes to this activation.

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Increased circulating follicular T helper (Tfh) cells in children with type I diabetes

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Background: Type 1 diabetes (T1D) is an autoimmune disease resulting from the damage of pancreatic β -cells because of autoreactive CD4⁺ and CD8⁺ T cells activation. In recent years, follicular T helper (Tfh) cells have been recognized as a subpopulation of CD4⁺ T cells providing help for B cells differentiation and antibody production. So far, several studies have been investigated the role of circulating Tfh cells in autoimmune diseases. In this study, we examined the frequency of circulating Tfh cells and aglutamic acid decarboxylase autoantibodies (GAD65) and islet cell autoantibodies (ICA) serum level in children with type I diabetes.

Methods: We analyzed the percentage of Tfh cells within peripheral blood mononuclear cells in T1D patients (\leq 300 days from disease onset; n=20; Mean age 6.8 ± 4.6 years) and healthy individuals (n=18; Mean age 8.8 ± 2.2 years) by flowcytometry. Anti-GAD and islet cell autoantibodies (ICA) level were determined using enzyme-linked immunosorbent assay (ELISA) and indirect immunofluorescence (IF) respectively.

Results: We found that the frequency of CD4+CXCR5⁺ and CD4+CXCR5⁺ICOS⁺ Tfh cells were increased significantly in the peripheral blood of patients, compared with that of healthy controls ($P < 0.0001$); Furthermore, an increased level of Anti-GAD and ICA was seen in Patients compared to controls ($P=0.001$ and $P=0.02$ respectively). There was no correlation between Tfh cells frequency and the autoantibody levels.

Conclusion: Our results demonstrated the possible involvement of Tfh cells in T1D and suggest that Tfh cells could be considered as a therapeutic target in type 1 diabetes.

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Correlation of miR-146a and miR-155 with regulatory T cell in systemic lupus erythematosus patients

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Introduction: Systemic Lupus Erythematosus (SLE) is an autoimmune disease characterized by the presence of pathogenic autoantibodies. Dysregulated number and function of regulatory T cells are implicated in the pathogenesis of SLE. MicroRNAs are small noncoding RNAs that regulate the expression of the genes involved in immune responses regulation. These molecules are concerned as anticipant biomarkers for diagnosis, prognosis and treatment of SLE. In this study we purposed to