Th17 cell-mediated responses in type 1 diabetes pathogenesis

Yaochite J. N. U and Carlos D
Department of Basic and Applied Immunology, Medical School of Ribeirão Preto, University of Sao Paulo, Brazil

Type 1 diabetes (T1D) is an autoimmune disease characterized by a selective destruction of insulin-producing pancreatic beta cells. In general, Th1 cytokines are involved in the development of autoimmune diseases, whereas Th2 and regulatory cytokines result in disease prevention. More recently, a new population of IL-17-producing CD4+ T cells has been proposed to represent a distinct T helper cell lineage, named Th17 cells. Th17 cells are critically involved in the development of many autoimmune diseases, however the exact role of this T cell subset in T1D pathogenesis remains controversial. Here, we review the conflicting evidences about a possible participation of Th17 cells in T1D development and progression, both in diabetic patients and experimental diabetes models.

ueda.juliana@gmail.com