T-lymphocyte phenotype and function triggered by Aggregatibacter actinomycetemcomitans is serotype-dependent

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& Sons Ltd. Background and Objective: Based on lipopolysaccharide (LPS) antigenicity, different Aggregatibacter actinomycetemcomitans serotypes have been described. Serotype b strains have demonstrated a stronger capacity to trigger cytokine production on dendritic cells (DCs). As DCs regulate the development of T-lymphocyte lineages, the objective of this investigation was to study the response of T lymphocytes after being stimulated with autologous DCs primed with different bacterial strains belonging to the most prevalent serotypes of A. actinomycetemcomitans in humans: a-c. Material and Methods: Human DCs were primed with increasing multiplicity of infection (10-1-102) or the purified LPS (10-50 ng/mL) of A. actinomycetemcomitans serotypes a-c and then used to stimulate autologous naïve CD4+ T lymphocytes. The T-helper (Th) type 1, Th2, Th17 and T-regulatory transcription factors T-bet, GATA-3, RORC2 and Foxp3, which are the master-switch genes implied in their specific differentia