

Comparison of immune cells subsets, *ex-vivo* and *in-vivo* expression of T cell activation and memory marker between LNC and corresponding PBMC from Calves Exposed to Natural *Mycobacterium bovis* Infection

Fekadu Desta^{1,3,4}, Gobena Ameni¹, F Javier Salguero Bodes² awleigh Howe³

Cell-mediated immunity and development of necrotic granulomas in *Mycobacterium bovis* (*M. bovis*) infected lymph node (LN) is pathognomonic for bovine tuberculosis (BTB). This delayed hypersensitive host response involves a complex interaction of cellular and immune mediators within systemic circulation and LN. Hence, tuberculosis immunological response should be independently investigated at the peripheral blood and LN tissue level. The objective of this study was, therefore, to compare the cell surface and cytokine expression between immune cell from peripheral blood and lymph node cells (LNC) from calves on BCG efficacy trial. Twenty pairs of peripheral blood mononuclear cells (PBMC) and LNC from *M. bovis* naturally infected calves during BCG vaccine experiment trial were isolated and investigated in two phases of the flow-cytometry experiment. In the first phase of a flow-cytof telomphe sita1 (f t)sNen10 (e)4 (lo)ksNen10 fe8 0 0 33oothe .915 0 Td[(ex-v)-13 (An IL-4 n10 (e)4 (lo)k-9 (d)12 (ucin)8 (g ce)4.1 (l)-5 (l wa)3 (s n)4 (o)11(e)vid(h)4 (e)in PBMC and LNC. During the second phase of c

Notes: