

## **Human immunodeficiency virus type 1-infected women exhibit reduced interferon-gamma secretion after Chlamydia trachomatis stimulation of peripheral blood lymphocytes**

Cohen, CR; Nguti, R; Bukusi, EA; Lu, H; Shen, C; Luo, M; Sinei, S; Plummer, F; Bwayo, JJ; Brunham, RC

<http://hinari-gw.who.int/whalecomwww.ncbi.nlm.nih.gov/whalecom0/pubmed/11069239>

<http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/29992>

Date: 2000

### **Abstract:**

Epidemiologic, animal, and in vitro models suggest an important role for interferon (IFN)-gamma in the clearance of Chlamydia trachomatis infection. IFN-gamma in the supernatants of in vitro-stimulated peripheral blood mononuclear cells (PBMC) from 22 human immunodeficiency virus type 1 (HIV-1)-infected and 73 uninfected women at high risk for C. trachomatis acute pelvic inflammatory disease (PID) was studied. PBMC were stimulated with C. trachomatis purified major outer membrane protein (MOMP) and whole elementary bodies (EBs) from the 4 predominant serovars (E, F, K, and L2) that circulate in Nairobi. PBMC IFN-gamma secretion after stimulation with C. trachomatis EBs was significantly decreased in HIV-1-infected women. Among HIV-1-infected women, CD4 T cell depletion was associated with lower IFN-gamma secretion from PBMC stimulated with either C. trachomatis MOMP or EB antigen. Decreased antigen-specific IFN-gamma production may enhance the susceptibility of HIV-1-infected women to C. trachomatis PID.