**Bartonella henselae** and **Bartonella quintana** seroprevalence in HIV-positive, HIV-negative and clinically healthy volunteers in Gauteng, South Africa

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**Bartonella** is a genus of opportunistic, Gram-negative bacilli transmitted from animals to human hosts. Bartonellae are newly emerging pathogens that can cause a variety of clinical manifestations in both immunocompromised and healthy persons.

The aims were to determine the IgG and IgM seroprevalences of **Bartonella henselae** and **Bartonella quintana** in immunocompromised and immunocompetent individuals using an immunofluorescence assay (IFA).

A total of 382 HIV-positive outpatients of the Chris Hani Baragwanth HIV-clinic, 382 retrospective residual samples from HIV-negative antenatal patients, and 42 clinically healthy volunteers were tested using a commercially available IFA kit to determine the prevalence of IgG and IgM antibodies to **B. henselae** and **B. quintana**.

The IgM and IgG seroprevalences for the HIV-positive patients were 14% (53/382) and 32% (121/382), respectively, compared to 18% for both IgM (62/342) and IgG (63/342) in the HIV-negative antenatal patients. Similarly, the prevalence for IgM was 17% (7/42) and IgG was 19% (8/42) for the clinically healthy volunteers.

HIV-positivity appears to be a significant risk factor for **Bartonella** infection, compared with healthy subjects. Although IFAs have a high sensitivity for **Bartonella** antibody detection, they have various limitations including cross-reactivity with other closely-related human pathogens.