## **Abstract:**

Abstract To determine whether serum antibody to Chlamydia trachomatis antigens alters the risk of C. trachomatis pelvic inflammatory disease (PID), 280 female sex workers were prospectively evaluated over a 33-month period for incident C. trachomatis and Neisseria gonorrhoeae cervical infection and for clinical PID. At enrollment, women were tested for antibody to C. trachomatis elementary bodies by an indirect microimmunofluorescence assay and to recombinant chlamydial hsp60 (Chsp60) by an ELISA format. At each follow-up visit, women were tested for cervical chlamydial and gonococcal infection and were identified as having clinical PID if they complained of lower abdominal pain and were found to have uterine and adnexal tenderness on pelvic examination. The data demonstrate that antibody to Chsp60 predicts a 2- to 3-fold increased risk for C, trachomatis PID.