Background The large number of sexually transmitted diseases cases caused globally each year by Chlamydia trachomatis has made this organism a World Health Organization priority for vaccine development. Even after a decade of availability of C. trachomatis genome sequence, no promising vaccine has seen the light of the day. This clearly indicates the challenges in discovering new vaccines against this organism but also suggests a gap in our current understanding of Chlamydial biology. We attempt to bridge this gap by encouraging extensive annotation of hypothetical proteins of C. trachomatis and further identification of candidate genes that might be involved during the immune response against this organism. In this study, we have shortlisted proteins secreted by the general export pathway of C. trachomatis from among the hypothetical proteins of this organism with an aim to identify novel vaccine candidate gene/s.

Methodology Characterization of the proteins was carried out using various Bioinformatic tools, Pfam, Tigrfam, Scanprosite, CDD, Signal P, SigPred, TMpred, TMHMM and Lipo P.

Results 386 hypothetical proteins were deduced from the C. trachomatis genome and were analysed with several software tools for functional annotation. Next we identified the hypothetical proteins are secreted via the general export pathway (GEP) using bioinformatics approach. We were able to classify the shortlisted proteins into three broad categories as outer membrane proteins, secretory proteins and lipoproteins. These shortlisted candidate proteins could possibly induce protective immunity or elicit immune responses of diagnostic value. Few of them can further turn out to be good vaccine candidate gene as well.

Conclusion The identification of novel secreted proteins of C. trachomatis opens the way to studies on their subcellular localization and to the immunological characterization of these proteins to define their potential for immunological diagnosis and/or vaccine design.

Poster presentations

Background Cervical cancer is the second most common cancer diagnosed, and the leading cause of cancer-related mortality among women in Kenya. Kenya’s Ministry of Health has outlined new prevention strategies, including support for vaccination. Formative research is critical to identify information, mobilisation and communication needs for vaccine introduction. To inform vaccine mobilisation and communication efforts in Kenya, this study sought to explore HPV vaccine-related community knowledge, attitudes, beliefs, and acceptability.

Methods We conducted five focus groups (FG) among caregivers of girls aged 9–12 years (n = 56), and 12 interviews with community opinion leaders in four locations of Nyanza Province, Kenya. Information was collected about participant knowledge, attitudes and beliefs regarding vaccines, cancer, cervical cancer and HPV; and perceptions of diagnostic value. Few of them can further turn out to be good vaccine candidate gene as well.

Conclusion The identification of novel secreted proteins of C. trachomatis opens the way to studies on their subcellular localization and to the immunological characterization of these proteins to define their potential for immunological diagnosis and/or vaccine design.

P5.106 CHARTING THE PATH FOR HUMAN PAPILLOMAVIRUS (HPV) VACCINE INTRODUCTION IN KENYA: ASSESSING HPV VACCINE ACCEPTABILITY AMONG CAREGIVERS AND OPINION LEADERS IN NYANZA PROVINCE, KENYA


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Objective To develop a Clinical Practice Guidelines for the Syndromic management of Sexual Transmitted Infections and other Genital Tract Infections in patients between 14 and 75 years old using the current international standards.

Methods The Guidelines developer group (GDG) was composed taking into account a multidisciplinary team as well as user/patients’ point of view. The scope, questions and relevant outcomes were first defined and then a search of available CPGs was done looking for international and regional repositories and also in Medline and LILACS. The CPGs that accomplish the inclusion exclusion criteria were assessed using the AGREE II instrument. None of the evaluated guidelines were suitable to be adapted to the Colombian requirements. Based on this fact, a search for Systematic Reviews, RCT and observational studies was initiated in order to develop the novo CPG. Evidence tables were built and recommendations were elaborated following the GRADE approach using informal and formal consensus.

Results A new GPC for the management of the patients with cervicitis, urethritis, genital ulcer disease, pelvic inflammatory disease and vaginal discharge is presented. The CPG includes 80 recommendations for the diagnosis and treatment of the index patient and its partner and also for the pregnant women with GTI. The implementation plan is based on the administration of a single dose for each of the causal germs in each syndrome.

Conclusion A new evidence-based guideline is presented for Syndromic management of Sexual Transmitted Infections and other Genital Tract Infections which could be suitable for adaptation in settings of constrained resources. Source of funds: Ministry of Health of Colombia and COLCIENCIAS.

P5.108 Atherosclerotic Carotid Disease and Cardiovascular Risk in HIV-infected Patients


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Introduction: Although survival has been improved in HIV-infected patients, the risk for atherosclerotic diseases has increased.