

Conclusion In a context of low malaria transmission, adding monthly IPTp- DHA-PPQ to CTXp in HIV-pregnant women is safe and it is associated with a decreased risk of clinical malaria and overall Plasmodium infection in pregnancy.

OA-102 REACTIVATION OF ONCOGENIC HERPESVIRUSES IS ASSOCIATED WITH CO-INFECTIONS CAUSING SEVERE INFLAMMATORY PRESENTATIONS IN HIV-INFECTED PATIENTS FROM GUGULETHU, SOUTH AFRICA

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Background The gamma-herpesviruses Kaposi's sarcoma-associated herpesvirus (KSHV) and Epstein-Barr virus (EBV) both have oncogenic potential, particularly in immunosuppressed patients such as in Human Immunodeficiency Virus (HIV)-infected individuals. Both oncogenic viruses display latent and lytic lifecycles with differing outcomes for associated pathologies. Co-infection with SARS-CoV-2, the causative agent for Covid-19, poses additional unknown risks of cancer development, affecting already vulnerable populations. Indeed, in South Africa, the Covid-19 pandemic occurs against the backdrop of high HIV, tuberculosis and non-communicable disease burdens as well as highly prevalent herpesviruses infections, such as EBV and KSHV. Mounting evidence points to potential interplay between several co-infections and reactivation of opportunistic herpesvirus infections.

Methods This study therefore assessed the risk of KSHV and EBV lytic reactivation in the context of SARS-CoV-2 and HIV infection in a patient cohort (n=400) enrolled at the Gugulethu ART clinic in Cape Town, South Africa, between September 2020 and April 2023.

Results While almost all patients displayed positive EBV serology, 40% were seropositive for KSHV. About 70% of the cohort was SARS-CoV-2 seropositive already before national Covid-19 vaccination roll-out, demonstrating high prevalence of SARS-CoV-2 in this population. KSHV seropositive patients (with or without positive SARS-CoV-2 serology) were followed up every 6 months to measure reactivation of KSHV and EBV in the peripheral blood. We found that oncogenic herpesvirus reactivation primarily occurred in patients with underlying uncontrolled inflammatory conditions, potentially caused by SARS-CoV-2 infection, which exacerbated clinical outcome.

Conclusion While the design of this study cannot distinguish if disease synergy exists between KSHV and/or EBV and Covid-19 nor if either viral infection is indeed fuelling the other, these data point to potential contributions of oncogenic herpesvirus infection to clinical outcome, particularly in the South African context of high disease burden which warrants further investigation.

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OA-183 DYNAMIC OF MOLECULAR AND RESISTANCE MARKERS PREVALENCE OF PLASMODIUM FALCIPARUM DURING THE SEASONAL MALARIA CHEMOPREVENTION CAMPAIGN IN SCHOOL AGED CHILDREN IN BANDIAGARA, MALI

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Background Recently, the World Health Organization (WHO) has recommended to extend the seasonal malaria chemoprevention (SMC) with Sulfadoxine-pyrimethamine plus amodiaquine (SP-AQ) strategy to school aged children and to use alternative artemisinin-based combination therapies (ACTs). There is less data on the efficacy of ACTs in SMC and their impact on the selection of drugs resistant parasites. The aim of this trial was to assess the efficacy of Dihydroartemisinin-Piperaquine (DHA-PPQ) in school aged children during and after SMCs and to assess the prevalence of resistance markers to ACT, amodiaquine and piperaquine.

Methods We conducted a randomized trial from September to December 2020 including 345 children of 6–15 years old. Study participants were randomized in 1:1:1 ratio to receive monthly 3 consecutive doses of DHA-PQ, SP-AQ or control drug (Albendazole). Study drugs were administered for 3 consecutive days at each SMC round. All drugs were administered under direct supervision of a study pharmacist. Dried blood specimens (DBS) were collected at the start of each SMC round and 7 days after the first dose of SMC. Dynamic of malaria parasites prevalence and the resistance markers to drugs were assessed by molecular assays in DHA-PQ, SP-AQ and control arms over 4 months of SMC and 8 months following SMC using q-PCR assay.

Results Preliminary data from 100 participants showed a significant decrease in the prevalence of Plasmodium falciparum parasites carriage from 67% to 10% at days 1 and 31 after the first SMC round. The prevalence remained low during SMC follow-up period. Molecular assays of resistance markers are ongoing. Full results will be presented at the meeting.

Conclusion DHA-PPQ is suitable for SMC, assessment of parasites prevalence and resistance markers selection is ongoing.

OA-189 BUILDING CAPACITY FOR HIV CURE RESEARCH IN GHANA – THE H-CRIS EXPERIENCE

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Background Cure research is the new frontier in the fight against HIV as prioritized by organizations like the International AIDS Society, the EDCTP and the National Institutes of Health. However, though 70% of people living with HIV are in Africa, the literature shows that very little of the current cure research efforts involve African scientists or patients. Important questions such as how co-infections like malaria,