

in public health programs, mainly due to the lack of a child-friendly formulation. In 2012, the Pediatric Praziquantel Consortium was established to provide a treatment tailored for PSAC.

This work has resulted in the development of arpraziquantel: a novel (oro)dispersible tablet containing L-PZQ, the biologically active PZQ enantiomer. The 150 mg tablets are small, allow precise dosing and have improved taste properties. **Methods** The new formulation was developed by Astellas (Japan) and Merck KGaA, Darmstadt, Germany. Farmanguinhos (Brazil) has established drug product production while Universal (Kenya) is preparing for local manufacturing. Phase I, II and III clinical trials have been completed. The latter was conducted in Côte d'Ivoire and Kenya in PSAC (3 months to 6 years) infected with *Schistosoma mansoni* or *Schistosoma haematobium*. 288 PSAC were treated with a single dose of arpraziquantel or PZQ. The primary endpoint was clinical cure at week 3.

Results High cure rates close to or above 90% were achieved in *Schistosoma mansoni*-infected children at a dose of 50 mg/kg, and in *Schistosoma haematobium*-infected children at 60 mg/kg. Egg reduction rates were very high (~99%) across all groups. The safety profiles of arpraziquantel and PZQ were similar, and no new safety issues were identified.

Conclusion Phase III results indicate that arpraziquantel is efficacious, well-tolerated, and shows improved palatability among PSAC. Through Merck KGaA, the Consortium has applied for a scientific opinion from the European Medicines Agency under the EU-M4all procedure for high-priority medicines intended for markets outside the European Union. A positive opinion would facilitate the inclusion of arpraziquantel in the WHO list of prequalified medicinal products as well as regulatory approvals in endemic countries.

PA-328 DESCRIPTIVE EPIDEMIOLOGY OF MPOX OUTBREAK IN BAYELSA STATE, NIGERIA

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Background Mpox disease formally known as Monkeypox is an ongoing public health emergency of international concern associated with high morbidity/mortality with current global burden of 88122 cases, 1,211 probable cases with 148 deaths and CFR =0.17%. In Nigeria, Bayelsa State reported the first mpox case in 2017. However, there is limited information on the epidemiology of mpox in the State. This study therefore aimed to explore the overall prevalence, trends of mpox disease in Bayelsa State.

Methods We reviewed surveillance data on mpox cases from the Bayelsa State Ministry of Health, between November 2017 to March 2023. Data was cleaned and analysed using Stata (v15.0) while results were presented with Descriptive statistics and charts.

Results A total of 242 Mpox cases were reported in eight local government areas (LGA) of Bayelsa State, with majority (64.9%) being males, and below age twenty (34.6%) and from Yenagoa (64.2%), the state capital. The mean age (\pm SD) was 24.4 (\pm 14.7). Meanwhile, 97.9% of patients did not travel

out of their LGA in the two weeks preceding symptom onset. The proportion of mpox cases was markedly reduced consistently from 47.8% in 2017 to 6.6% in 2018 and 4.1% in 2020, with an upsurge of 50.0% in 2022. Out of the 242 cases, 43.4% were classified as discarded case, 35.1% confirmed cases, 21.5% suspected cases with 1 death and CFR =1.2%. Most of the cases (84.6%) had primary or no education, and 46.5% were pupil/student engaged in low-income occupations. The disease is symptomatic in majority (86.8%) of the cases, 10.8% of affected patient presented with Cutaneous eruption.

Conclusion The findings suggest local transmission dynamics propel Mpox mostly among those with low income and limited education. Strengthening laboratory diagnostics and outbreak response capacity is therefore recommended.

PA-334 POTENTIAL HINDRANCE OF SOIL-TRANSMITTED HELMINTHIASIS ELIMINATION IN CENTRAL AFRICA AS A CONSEQUENCE OF CO-INFECTION WITH LOIASIS: A CASE STUDY IN THE CENTRE REGION IN CAMEROON

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Background Soil transmitted helminthiasis (STH) remains a major public health problem worldwide. WHO has recommended a number of strategies for the control of STH, but due to logistical and financial constraints, only school-based deworming using Albendazole/Mebendazole is frequently used. However, this does not take into consideration other age groups who share similar risk and rate of infection, and the drugs used showed reduced efficacy on certain species of soil-transmitted helminths. Some trials have demonstrated that the combination of Albendazole/Mebendazole and Ivermectin a better potential for the interruption of transmission of STH. However, the introduction of ivermectin in the treatment regimen presents a high risk of occurrence of potentially fatal serious adverse events (SAEs) occurring after administration of ivermectin among individuals heavily infected with loiasis. This study aimed to investigate the proportion of individuals coinfecting with STH and loiasis, in order to determine which proportion of the population would be at-risk of SAEs if the regimen including ivermectin was used.

Methods A cross-sectional survey was conducted in 2022 in three health districts (Awae, Akonolinga and Okola) in the Centre Region of Cameroon. Capillary blood and stool samples were collected for the diagnosis of loiasis and STH, respectively. Calibrated thick blood smears were prepared for the enumeration of *Loa loa* microfilariae in the blood, and stool samples were analyzed by the Mini-FLOTAC and Kato-Katz methods.

Results Overall, 660 individuals were tested for both loiasis and STH in the three health districts, of which 23 (3.5%; 95%CI: 2.3–5.2) were coinfecting. The overall coinfection rate was 5.3% (95% CI: 2.3–11.7) in Okola, 3.9% (95%CI: 2.3–6.5) in Akonolinga and 2.2% (95%CI:0.9–5) in Awae. Of the coinfecting individuals, 69.5% (95%CI: 49.1–84.4) had light *L. loa* infection while 26.1% (95%CI: 12.5–46.5) had moderate infection and 0.04% (95%CI: 0.007–21) had heavy infection.

Conclusion The risk of developing SAEs remains in the population.