Session: **Helminths: Epidemiology & Fieldwork**

*Alternative strategies for onchocerciasis elimination in loiasis co-endemic areas: test-and-treat with doxycycline in combination with targeted vector control in South West Cameroon*

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**Discussion**

Community Directed Treatment with ivermectin (CDTi) is the current mainstay for onchocerciasis control. In addition, sustained annual or biannual use of CDTi has delivered onchocerciasis elimination in specific focal settings, and reduced prevalence of disease in others. However, in areas where Onchocerca volvulus infection overlaps with the related filarial parasite, Loa loa, ivermectin cannot be safely implemented at scale, since individuals with high L. loa parasitaemias can suffer from severe adverse events (SAEs), including coma and death. Readily implementable alternative strategies to CDTi are therefore needed in loiasis co-endemic areas of Central Africa if 2025 elimination targets are to be achieved. The COUNTDOWN consortium is trialling co-implementation of 5-week 100mg/day doxycycline (a macrofilaricidal antibiotic that targets O. volvulus obligate symbiotic bacteria Wolbachia), alongside focal vector control to reduce Simulium blackfly biting rate in the Meme river basin, South-West Cameroon. Further, societal and health economic data are being captured to analyse acceptability and feasibility of the approach. Here we present the study design and results from baseline parasitological surveys, including self-reported adherence to ivermectin, community microfilarial load, prevalence of O. volvulus skin microfilariae, prevalence of L. loa, blackfly cytospecies and susceptibility testing.