



# Phase 1 MSP3 trial in Korogwe, Tanzania

## **Name of authors**

John Lusingu, Samweli Gesase, Samweli Sembuche, Judith Msovela, Mathias Kamugisha, Bruno Mmbando, Simon Cousens, Acleus Rutta, Deus Ishengoma, Seth Misago, Martha Lemnge

## **Acknowledgements and affiliations**

National Institute for Medical Research (NIMR)

London School of Hygiene and Tropical Medicine (LSHTM)

European Malaria Vaccine Initiative (EMVI)

African Malaria Network Trust (AMANET)



# Objectives



- **Primary**
  - To assess safety and reactogenicity of MSP3
- **Secondary**
  - To assess humoral and cellular immune responses
- **Exploratory**
  - To evaluate functionality of IgG responses



# Methods (1)



- Strengthening of team to conduct malaria vaccine trial
- Identification of a site with high and moderate/low malaria transmission
- Establishment of DSS in the site
- Establishment of malaria surveillance (XXS, longitudinal malaria detection)
- Development of proposal for MSP3 vaccine trial



# Methods (2)



- Laboratory analysis using:
  - Microscopy
  - Haematology analysis
  - Biochemistry analysis
  - ELISA
  - Western blot
  - Functional assays
- Statistical analysis
  - Descriptive



# Results (1)



- 14 communities/villages within DSS, with about 30,000 inhabitants
- Earmarked village for MSP3 trial
  - Total inhabitants: 3718
  - Children 1-<2 years (5.6%)
  - Malaria transmission: moderate/low
  - 1 dispensary, accessible throughout the year
  - Fieldworkers available in one of the village



# Discussion & Conclusions



- Exciting venture to search for complimentary tool for the existing malaria preventive measures



# Future perspectives



- Conduct the MSP3 Phase 1b trial, and if it becomes safe and immunogenic, we are planning to proceed to Phase II, to determine efficacy against malaria