# The GAMetocyticidal activity of sulphadoxinepyremthamine plus artesunate followed by a single dose of PrimaQuine

Submission date	Recruitment status	Prospectively registered
31/10/2006	No longer recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
04/12/2006	Completed	[X] Results
Last Edited	Condition category	Individual participant data
16/04/2010	Infections and Infestations	

# Plain English summary of protocol

Not provided at time of registration

# Contact information

## Type(s)

Scientific

#### Contact name

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#### Contact details

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# Additional identifiers

Protocol serial number N/A

# Study information

#### Scientific Title

The activity of sulphadoxine-pyrimethamine plus artesunate (SP+AS) and SP+AS followed by a single dose of primaquine (0.75 mg/kg) against gametocytes in Tanzanian children with uncomplicated falciparum malaria

#### **Acronym**

GAM-PQ

### **Study objectives**

Gametocytocidal drugs can play an important role in malaria control. The current study proposal is a pilot study to determine the efficacy of a gametocytocidal drug combination that consists of the extensively tested combination of Sulphadoxine-Pyrimethamine (SP) plus Artesunate (AS), followed by a single dose of Primaquine (PQ). This combination has previously been used and has been shown to be safe and efficient in clearing microscopic gametocytes. In this study we propose to confirm the safety in a Tanzanian population and to determine the added value of a single dose of PQ on the clearance of (sub-microscopic) gametocytes compared to SP and AS alone.

Hypothesis: Primaquine adds to the gametocyticidal effect of artesunate and clears sub-microscopic gametocytes.

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

- 1. London School of Hygiene & Tropical Medicine 24th July 2006 (ref: 4097)
- 2. National Insititue of Medical Research, Tanzania 21st June 2006 (ref: NIMR/HQ/R.8A Vol.XIII /446)

#### Study design

Randomised single blind drug study

## Primary study design

Interventional

## Study type(s)

Treatment

# Health condition(s) or problem(s) studied

Uncomplicated febrile malaria

#### Interventions

Participants will be randomised to treatment with:

- 1. Sulfadoxine-pyrimethamine (SP) (500 mg S; 25 mg P/20 kg body weight, day zero) and artesunate (4 mg/kg, day zero, one, two) followed by a placebo (day two)
- 2. SP (500 mg S; 25 mg P/20 kg body weight, day zero) and AS (4 mg/kg, day zero, one, two) followed by primaquine (PQ) (0.75mg/kg, day two)

#### **Intervention Type**

Drug

#### **Phase**

Not Applicable

# Drug/device/biological/vaccine name(s)

Sulphadoxine-pyrimethamine, artesunate and primaquine

### Primary outcome(s)

The following are assesed on days one, two, three, seven, 14, 28 and 42 after treatment:

- 1. Resolution of clinical symptoms
- 2. Haematological recovery
- 3. Presense of malaria parasites by microscopy and molecular technicques
- 4. Presence of sexual stage parasites by microscopy and molecular technicques

### Key secondary outcome(s))

- 1. Haematological recovery in G6PD deficient and non deficient individuals
- 2. Selection of drug-resistant parasite strains after treatment

### Completion date

13/10/2006

# Eligibility

#### Key inclusion criteria

- 1. Age more than three years
- 2. Residents of research area (5 km around the clinic)
- 3. Willingness to come for complete scheduled follow-up
- 4. Uncomplicated malaria with Plasmodium falciparum mono-infection
- 5. Parasitaemia of 500,000 to 900,000 parasites/ul
- 6. Temperature more than 37.5 and less than 39.5°C, or history of fever in the previous 24 hours
- 7. No history of adverse reactions to SP or PQ treatment
- 8. Understanding of the procedures of the study by parent or guardian and willing to participate by signing informed consent forms

### Participant type(s)

Patient

## Healthy volunteers allowed

No

### Age group

Other

#### Sex

All

### Key exclusion criteria

- 1. General signs of severe malaria or haemoglobin count less than 8 g/dl
- 2. Presence of disease other than malaria causing febrile conditions
- 3. Unwilling to participate and sign informed consent forms
- 4. Eligibility for (or participation in) other malaria projects in the Korogwe area, notably the Intermittent Preventive Treatment of malaria in infants (IPTi) study

#### Date of first enrolment

01/08/2006

#### Date of final enrolment

13/10/2006

# Locations

#### Countries of recruitment

Tanzania

Study participating centre Joint Malaria Programme

Moshi Tanzania Box 2228

# Sponsor information

#### Organisation

The Netherlands Foundation for the Advancement of Tropical Research (NWO-WOTRO) (Netherlands)

#### **ROR**

https://ror.org/04jsz6e67

# Funder(s)

## Funder type

Research organisation

#### Funder Name

The Netherlands Foundation for the Advancement of Tropical Research (NWO-WOTRO) (Netherlands) - Poverty Related Infection Oriented Research (PRIOR) (ref: WIZ93-465)

# **Results and Publications**

Individual participant data (IPD) sharing plan

# IPD sharing plan summary

Not provided at time of registration

Study outputs

Output typeDetailsDate createdDate addedPeer reviewed?Patient-facing?Results articleresults10/10/2007YesNo