

# Gametocytocidal and Transmission-blocking Efficacy of PQ in Combination With AL and TQ in Combination With SPAQ in Mali

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Compare the gametocytocidal and transmission reducing activity of artemether-lumefantrine (AL) with and without a single dose of 0.25mg/kg primaquine (PQ) and sulfadoxine-pyrimethamine with amodiaquine (SPAQ) with and without single dose of 1.66mg/...

<b>Ethische beoordeling</b>	Positief advies
<b>Status</b>	Werving gestopt
<b>Type aandoening</b>	-
<b>Onderzoekstype</b>	Interventie onderzoek

## Samenvatting

### ID

NL-OMON23822

### Bron

NTR

### Verkorte titel

NECTAR3

### Aandoening

Malaria

### Ondersteuning

**Primaire sponsor:** London School of Hygiene and Tropical Medicine

**Overige ondersteuning:** Bill & Melinda Gates Foundation

### Onderzoeksproduct en/of interventie

## **Uitkomstmaten**

### **Primaire uitkomstmaten**

1. Change in mosquito infection rate assessed through membrane feeding assays (day 2 and day 7)

Within person percent change (presented as percent reduction) in mosquito infection rate in infectious individuals from baseline (day 0, pre-treatment) to day 2 post treatment in the AL and AL-PQ arms, and day 7 post-treatment in the SPAQ and SPAQ-TQ.

[Time Frame: 3 days (days 0, 2 and 7): 7 day span]

## **Toelichting onderzoek**

### **Achtergrond van het onderzoek**

The purpose of this study is to compare the gametocytocidal and transmission reducing activity of artemether-lumefantrine (AL) with and without a single dose of 0.25mg/kg primaquine (PQ) and sulfadoxine-pyrimethamine with amodiaquine (SPAQ) with and without single dose of 1.66mg/kg tafenoquine (TQ). Outcome measures will include infectivity to mosquitoes at 2, 5 and 7 days after treatment, gamete density throughout follow-up, and safety measures including haemoglobin density and the frequency of adverse events.

### **Doel van het onderzoek**

Compare the gametocytocidal and transmission reducing activity of artemether-lumefantrine (AL) with and without a single dose of 0.25mg/kg primaquine (PQ) and sulfadoxine-pyrimethamine with amodiaquine (SPAQ) with and without single dose of 1.66mg/kg tafenoquine (TQ).

### **Onderzoeksopzet**

day 0, day 1, day 2, day 5, day 7, day 14, day 21, day 28

### **Onderzoeksproduct en/of interventie**

Artemether-lumefantrine (20/80 mg artemether and 120/480 mg lumefantrine), Primaquine Phosphate (0.25mg/kg), Sulphadoxine-pyrimethamine with amodiaquine (500mg sulfadoxine and 25mg pyrimethamine and 150mg amodiaquine), Tafenoquine (1.66mg/kg)

# Contactpersonen

## Publiek

Radboud university medical center  
Merel Smit

024-3619515

## Wetenschappelijk

Radboud university medical center  
Merel Smit

024-3619515

## Deelname eisen

### Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- Age  $\geq$  10 years and  $\leq$  50 years
- G6PD-normal defined by Carestart rapid diagnostic test or the OSMMR2000 G6PD qualitative test
- Absence of symptomatic falciparum malaria, defined by fever on enrolment
- Presence of P. falciparum gametocytes on thick blood film at a density  $>16$  gametocytes/ $\mu$ L (i.e.  $\geq$  gametocytes recorded in the thick film against 500 white blood cells)
- Absence of other non-P. falciparum species on blood film
- Hemoglobin  $\geq$  10 g/dL
- Individuals weighing  $<=$  80 kg
- No evidence of acute severe or chronic disease
- Written, informed consent

### Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

- Women who are pregnant or lactating (tested at baseline). Urine and/or serum pregnancy testing ( $\beta$ -hCG) will be used.
- Detection of a non-P. falciparum species by microscopy
- Previous reaction to study drugs / known allergy to study drugs
- Signs of severe malaria, including hyperparasitemia (defined as asexual parasitemia >

- 100,000 parasites /  $\mu$ L)
- Signs of acute or chronic illness, including hepatitis
  - The use of other medication (except for paracetamol and/or aspirin)
  - Use of antimalarial drugs over the past 7 days (as reported by the participant)
  - Clinically significant illness (intercurrent illness e.g., pneumonia, pre-existing condition e.g., renal disease, malignancy or conditions that may affect absorption of study medication e.g., severe diarrhea or any signs of malnutrition as defined clinically)
  - Signs of hepatic injury (such as nausea and/or abdominal pain associated with jaundice) or known severe liver disease (i.e., decompensated cirrhosis, Child Pugh stage B or C)
  - Signs, symptoms or known renal impairment
  - Clinically significant abnormal laboratory values as determined by history, physical examination or routine blood chemistries and hematology values (laboratory guideline values for exclusion are hemoglobin < 10 g/dL, platelets < 50,000/ $\mu$ l, White Blood - Cell count (WBC) < 2000/ $\mu$ l, serum creatinine >2.0mg/dL, or ALT or AST more than 3 times the upper limit of normal for age).
  - Blood transfusion in the last 90 days.
  - Consistent with the long half-life of tafenoquine, effective contraception should be continued for 5 half-lives (3 months) after the end of treatment.
  - History of psychiatric disorders

## Onderzoeksopzet

### Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	Gerandomiseerd
Blindering:	Enkelblind
Controle:	N.v.t. / onbekend

### Deelname

Nederland	
Status:	Werving gestopt
(Verwachte) startdatum:	08-10-2021
Aantal proefpersonen:	80
Type:	Werkelijke startdatum

### Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

**Wordt de data na het onderzoek gedeeld:** Nee

## Ethische beoordeling

Positief advies

Datum: 08-10-2021

Soort: Eerste indiening

## Registraties

### Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

### Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

### In overige registers

Register	ID
NTR-new	NL9777
Ander register	LSHTM Research Ethics Committee : 26257

## Resultaten