

# How screening for and treating malaria before surgery affect the overall outcome of surgical patients

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<b>Registration date</b> 17/10/2022	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 17/10/2022	<b>Condition category</b> Surgery	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

Malaria screening and treatment before and after surgery is not done routinely in the practice of surgery in Ghana. However, there have been reports from a few cross-sectional studies revealing a link between peri-operative malaria infection and poor surgical outcomes in Ghana and other parts of the world. Meanwhile, adverse surgical outcomes continue to pose a significant socio-economic burden on patients, families, communities and health systems globally, particularly in low-middle-income countries like Ghana. We seek to determine the impact of peri-operative malaria screening and treatment on the outcomes of patients who undergoes elective surgeries at the Eastern Regional Hospital, Koforidua.

### Who can participate?

Patients at least 6 months old who are to undergo surgery

### What does the study involve?

Patients will be divided into two groups. One group will be tested for malaria using microscopy or antigen test. Those who test positive will be given malaria treatment before surgery. Those will test negative will undergo their surgery as planned.

### What are the possible benefits and risks of participating?

Benefits: screening and treatment for malaria

Risks: no additional risks

### Where is the study run from?

Eastern regional Hospital (Ghana)

### When is the study starting and how long is it expected to run for?

July 2022 to November 2022

### Who is funding the study?

President's Malaria Initiative, USAID and National Malaria Control Programme (Ghana)

Who is the main contact?

Dr Foster Amponsah-Manu, foster\_amponsah@yahoo.com

## Contact information

### Type(s)

Principal investigator

### Contact name

Dr Forster Amponsah-Manu

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## Additional identifiers

### Protocol serial number

GHS-ERC 021/05/22

## Study information

### Scientific Title

Impact of peri-operative malaria screening and treatment on surgical outcomes at the Eastern Regional Hospital, Koforidua: a single-blind randomized controlled trial

### Acronym

IPMSTSOERHK

### Study objectives

There will be no difference between surgical outcomes of patients who are screened and/or treated for malaria peri-operatively and those who are not screened or treated for malaria

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

Approved 18/07/2022, Ghana Health Service Ethics Review Committee (Research and Development Division, P.O. Box MB 190, Accra, Ghana; no telephone number provided; ethics. research@ghsmai.org), ref: GHS/RDD/ERC/Admin/App/22/269

## **Study design**

Single center randomized controlled trial

## **Primary study design**

Interventional

## **Study type(s)**

Screening

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

The effect of perioperative malaria screening on surgical outcomes

## **Interventions**

After consent, an eligible participant will be randomly assigned to either screening or comparison group by a computer generated randomisation scheme. Numbers will be generated randomly and put in an opaque envelope.

Participants in the screening group will be screened perioperatively for malaria parasites using microscopy and those found to have malaria parasitemia will receive standard malaria treatment with artemisinin combination therapy (ACT).

Participants in the control group will not be screened and receive treatment as usual.

These two groups of participants would be followed-up to 30 days post-operation while outcomes including surgical site infection, haemorrhage, prolonged hospitalisation, readmission and death will be assessed and recorded.

## **Intervention Type**

Other

## **Primary outcome(s)**

Surgical outcomes measured weekly using patient records for a period of 30 days post-op:

1. Length of hospital stay
2. Development of surgical site infections
3. Hemorrhage
4. Readmission
5. Death

## **Key secondary outcome(s)**

There are no secondary outcome measures

## **Completion date**

30/11/2022

## **Eligibility**

### **Key inclusion criteria**

1. Patient must be at least 6 months old, since under 6 months and congenital malaria are rare
2. Patient must undergo an elective surgical operation involving greater than or equal to 5cm skin incision
3. Patients who consent to participate in the trial

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Mixed

**Sex**

All

**Key exclusion criteria**

1. Surgical patient with uncompensated comorbidities
2. Patient is undergoing surgery but had previous surgery in the last 30 days and before time of recruitment
3. Patient is undergoing surgery but has an active surgical site infection or any other surgical outcome from procedure that took place before time of recruitment

**Date of first enrolment**

10/08/2022

**Date of final enrolment**

30/10/2022

**Locations****Countries of recruitment**

Ghana

**Study participating centre**

Eastern regional Hospital

P.O. Box 201

Koforidua

Ghana

N/A

**Sponsor information**

## Organisation

President's Malaria Initiative, USAID and National Malaria Control Programme

## Funder(s)

### Funder type

Government

### Funder Name

President's Malaria Initiative

### Alternative Name(s)

U.S. President's Malaria Initiative, US President's Malaria Initiative, The President's Malaria Initiative, PMI

### Funding Body Type

Government organisation

### Funding Body Subtype

National government

### Location

United States of America

## Results and Publications

### Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request  
foster\_amponsah@yahoo.com

### IPD sharing plan summary

Available on request

### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Participant information sheet</a>			14/10/2022	No	Yes
<a href="#">Protocol file</a>		01/05/2022	14/10/2022	No	No