# Examining whether any interactions occur between the antibiotic Ciprofloxacin and the antimalarial treatment Chloroquine/Proguanil

Submission date	Recruitment status	<ul><li>Prospectively registered</li></ul>
17/01/2019	No longer recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
05/04/2019	Completed	Results
Last Edited	Condition category	Individual participant data
12/04/2019	Other	[] Record updated in last year

# Plain English summary of protocol

Background and study aims

The aim of the study was to check whether two medicines commonly used together by military personnel affect how the medicines are absorbed and eliminated by the body and whether both medicines taken at once are well tolerated.

Who can participate?

Healthy male subjects aged between 18 and 50 years.

What does the study involve?

The study involves taking tablets (antibiotics and/or antimalarial tablets) over a three week period. People entering the study were assigned to either group 1 or group 2. People in group 1 took antibiotic tablets plus antimalarial tablets, whereas people in group 2 took antimalarial tablets.

What are the possible benefits and risks of participating?

There were no direct individual benefits for the subjects participating. All medicinal products can on occasions cause unwanted effects, but no participant experienced any significant adverse effects attributable to the medicines studied.

Where is the study run from?

The study was run from- Dstl, Porton Down, Salisbury.

When is the study starting and how long is it expected to run for? November 2005 to June 2010.

Who is funding the study?

This study was funded by the UK Ministry of Defence.

# Study website

N/A

# Contact information

## Type(s)

Scientific

#### Contact name

Dr Medical Officer

#### Contact details

Defence Science and Technology Laboratory, Porton Down Salisbury United Kingdom SP4 0JQ

# Additional identifiers

#### **EudraCT/CTIS** number

2005-004905-27

#### IRAS number

#### ClinicalTrials.gov number

Nil known

## Secondary identifying numbers

CBD VP 132/05

# Study information

#### Scientific Title

Pharmacokinetic Interactions between Ciprofloxacin and Chloroquine/Proguanil Prophylaxis in healthy young males: a randomised, parallel-group, open label study

# **Study objectives**

Trial rationale was to to determine whether any pharmacokinetic interactions occur during the concomitant oral administration of Chloroquine/Proguanil with Ciprofloxacin in healthy subjects.

# Ethics approval required

Old ethics approval format

# Ethics approval(s)

Oxfordshire Research Ethics Committee A, 01/02/2008, ref. 07/H0604/155.

# Study design

Randomised, parallel-group, open label study.

# Primary study design

Interventional

#### Secondary study design

Randomised parallel trial

#### Study setting(s)

Other

## Study type(s)

Other

#### Participant information sheet

No participant information sheet available

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

Pharmacokinetics

#### Interventions

Ciprofloxacin and Chloroquine/Proguanil Route of administration - oral Doses- 500 mg ciprofloxacin, 200 mg proguanil, 500 mg chloroquine phosphate

#### Brief methodology:

Ciprofloxacin

Generic drug name: ciprofloxacin

Dosage given: 500mg

Method and frequency of administration: oral route. Ciprofloxacin was administered as  $2 \times 250$ 

mg tablets orally on Day 1 and again on Day 22 to subjects in Group 1 only.

Total duration of treatment: 2 single doses separated by 21 days

#### Chloroquine

Generic drug name: chloroquine

Dosage given: 500mg

Chloroquine was administered as 2 x 250 mg tablets orally once a week, starting on Day 8, for 15 days (i.e. on 3 occasions) to subjects in both Groups 1 and 2. On the third occasion (Day 22) it was combined with a ciprofloxacin dose (500 mg) for

subjects in Group 1 only.

Total duration of treatment: 2 weeks

#### Proguanil

Generic drug name: proguanil

Dosage given: 200mg

Method and frequency of administration: Proguanil was administered as  $2 \times 100$  mg tablets orally once daily for 15 days, starting from Day 8, to subjects in both Groups 1 and 2. It was combined with a

chloroquine dose on Day 8, Day 15 and Day 22 and combined with a ciprofloxacin dose (500 mg) on Day 22 for subjects in Group 1 only.

Total duration of treatment: 2 weeks

#### Intervention Type

Drug

#### Phase

Phase IV

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

Ciprofloxacin and Chloroquine/Proguanil

#### Primary outcome measure

- 1. Any interaction occurring with concomitant oral administration of chloroquine/proguanil with ciprofloxacin was measured using pharmacokinetic (PK) parameters at day 1, day 2, day 22, and days 23to 25. These parameters were assessed during administration of:
- 1.1. Chloroquine and Proguanil together
- 1.2. Chloroquine and Proguanil together in combination with Ciprofloxacin
- 1.3. Ciprofloxacin alone

#### Secondary outcome measures

- 1. Safety of concomitant oral administration of Chloroquine/Proguanil with Ciprofloxacin was measured using the following measures pre and post-study:
- 1.1. Medical History and Physical Examinations
- 1.2. Vital Signs (supine blood pressure and pulse rate)
- 1.3. Laboratory Safety Screening: haematology, biochemistry and urinalysis were carried out pre and post study.
- 2. Tolerability of concomitant oral administration of Chloroquine/Proguanil with Ciprofloxacin was measured using Adverse Event Recording: performed throughout the study.

#### Overall study start date

25/11/2005

## Completion date

14/06/2010

# Eligibility

## Key inclusion criteria

- 1. Ability and willingness to give written informed consent prior to study participation
- 2. Healthy male subjects aged between 18 and 50 years (inclusive)
- 3. Body Mass Index (BMI) within the range of 21 and 30 kg/m2
- 4. Vital signs within the following ranges:
- 4.1. Pulse rate 40-90 bpm
- 4.2. Systolic blood pressure 90-140 mmHg
- 4.3. Diastolic blood pressure 50-90 mmHg
- 5. Ability to communicate well with the Investigator and to comply with the requirements of the study.

#### Participant type(s)

Healthy volunteer

#### Age group

Adult

#### Lower age limit

#### Sex

Male

#### Target number of participants

Planned recruitment of 16 healthy male subjects

#### Total final enrolment

16

#### Key exclusion criteria

- 1. Presence of any clinically significant medical condition as determined by the Investigator or Medical Advisor
- 2. Any clinically significant haematological or biochemical abnormality as determined by the Investigator or Medical Advisor
- 3. Any surgical or medical condition which might significantly alter the absorption, distribution, metabolism or excretion of any drug (e.g. renal or liver disease, respiratory, immunological, endocrine or neurological disorders)
- 4. Any ECG abnormality other than sinus bradycardia or respiratory sinus arrhythmia
- 5. Known or suspected hypersensitivity or idiosyncratic reaction related to any of the investigational medicinal products
- 6. Positive test for hepatitis B surface antigen or Hepatitis C antibody
- 7. History or evidence of alcohol abuse defined as an intake of more than 28 units per week (4 units per day), where 1 unit corresponds to 250 mL beer, 20 mL spirits/liqueur or one glass (100 mL) of wine
- 8. Participation in another clinical study within the three months prior to screening
- 9. Use of any prescription medication within the 14 days prior to screening
- 10. Use of any non-prescription medication within the last 7 days (apart from paracetamol), which may, in the opinion of the Investigator or Medical Advisor, impact the safety aspects and /or objectives of the study
- 11. Donation of blood or blood products within the 3 months prior to screening, or the intention to donate blood or blood products within 3 months after completion of the study.

#### Date of first enrolment

01/02/2008

#### Date of final enrolment

10/10/2008

# Locations

# Countries of recruitment

England

United Kingdom

#### Study participating centre

# **Dstl, Porton Down**

Salisbury United Kingdom SP40JQ

# Sponsor information

# Organisation

Defence Science and Technology Laboratory (Dstl)

#### Sponsor details

Porton Down Salisbury United Kingdom SP4 0JQ

#### Sponsor type

Government

#### **ROR**

https://ror.org/04jswqb94

# Funder(s)

#### Funder type

Government

#### Funder Name

Ministry of Defence

# Alternative Name(s)

MOD

# **Funding Body Type**

Government organisation

# **Funding Body Subtype**

National government

#### Location

United Kingdom

# **Results and Publications**

## Publication and dissemination plan

Our intention is to submit the results of this study for publication in an academic journal as soon as we have sufficient staff resources to prepare the manuscript.

# Intention to publish date

31/12/2019

## Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are not expected to be made available due to lack of subject consent being obtained at the time of the study.

# IPD sharing plan summary

Not expected to be made available