

Assessment of efficacy, safety and population-pharmacokinetics of the fixed-dose combination of artesunate-mefloquine in the treatment of acute uncomplicated Plasmodium falciparum malaria in India

Submission date

21/11/2008

Recruitment status

No longer recruiting

☐ Prospectively registered

☐ Protocol

Registration date

27/11/2008

Overall study status

Completed

☐ Statistical analysis plan

☒ Results

Last Edited

28/03/2017

Condition category

Infections and Infestations

☐ Individual participant data

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

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Contact details

National Institute of Malaria Research

New Delhi

India

110029

Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

Study information

Scientific Title

Assessment of efficacy, safety and population-pharmacokinetics of the fixed-dose combination of artesunate-mefloquine in the treatment of acute uncomplicated Plasmodium falciparum malaria in India

Study objectives

1. To evaluate the clinical and parasitological efficacy of artesunate-mefloquine fixed-dose combination in adult patients with uncomplicated falciparum malaria, by determining the proportion of patients achieving a negative parasitaemia without recrudescence by 63 days (cure rate)
2. To measure the parasite reduction ratio at 48 hours of treatment, parasite clearance time, fever clearance time, gametocyte carriage
3. To evaluate cure rate at 28 days
4. To evaluate the population-pharmacokinetics of artesunate-mefloquine in adult patients in India
5. To evaluate the incidence of adverse events
6. To collect information to enable the Ministry of Health to make informed decisions about the possible need for updating of the current national anti-malarial treatment guidelines

Ethics approval required

Old ethics approval format

Ethics approval(s)

Institutional Ethics Committee of the National Institute of Malaria Research (ICMR), 23/10/2007

Study design

Multicentre single-arm open-label clinical trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Hospital

Study type(s)

Treatment

Participant information sheet

Not available in web format, please use the contact details to request a patient information sheet

Health condition(s) or problem(s) studied

Malaria

Interventions

All patients recruited into the study will be given full, supervised treatment with oral artesunate-mefloquine 100 mg and 220 mg tablets (two tablets daily for three days). Total duration of treatment and follow-up is 3 days of treatment and 60 days of follow-up.

Intervention Type

Drug

Phase

Phase III

Drug/device/biological/vaccine name(s)

Artesunate, mefloquine

Primary outcome measure

Cure rate as determined by polymerase chain reaction (PCR)-corrected adequate clinical and parasitological response (ACPR) on day 63. Treatment success or failures will be classified according to WHO Guidelines 2005.

Secondary outcome measures

1. Pharmacokinetic parameters: population pharmacokinetic parameters for artesunate (AS), dihydroartemisinin (DHA), and mefloquine (MQ)
2. Parasite reduction ratio (PRR) at 48 hours: baseline parasite count/parasite count at 48 hours
3. Parasite clearance time (PCT): time in hours from the initiation of therapy until the first of two successive (within an interval of 8 to 24 hours) parasite negative smears are obtained
4. Fever clearance time (FCT): time in hours from the initiation of therapy until disappearance of fever for at least 24 hours
5. Gametocyte carriage: percentage of patients without gametocytes at day 28
6. Proportion of patients with early treatment failure, late treatment failure, and late parasitological failure
7. Proportion of patients with mixed infections in the follow-up assessments
8. Proportion of patients with development of symptoms of severe malaria

Overall study start date

01/12/2007

Completion date

31/12/2008

Eligibility

Key inclusion criteria

1. Male or female patients greater than or equal to 18 years of age
2. Presence of acute uncomplicated *P. falciparum* mono-infection confirmed by:
 - 2.1. Fever, as defined by axillary temperature greater than or equal to 37.5°C or history of fever in the previous 24 hours, and
 - 2.2. Positive microscopy of *P. falciparum* with parasite density between 1,000 and 100,000 asexual parasite count/ μ l of blood
3. Written informed consent provided by patient; if the patient is unable to write, witnessed consent is permitted according to local ethical considerations

4. Screening laboratory values within the following limits:
- 4.1. Haemoglobin (Hb) greater than or equal to 7 g/dl
 - 4.2. Total bilirubin less than or equal to 2.5 times upper limit of normal (ULN)
 - 4.3. Aspartate aminotransferase (AST) and alanine aminotransferase (ALT) less than or equal to 2.5 times ULN
 - 4.4. Serum creatinine less than or equal to 1.5 times ULN
5. Negative urine pregnancy test before the first dose of fixed-dose combination (FDC) if the subject is a female of childbearing potential

Participant type(s)

Patient

Age group

Adult

Lower age limit

18 Years

Sex

Both

Target number of participants

84 patients

Key exclusion criteria

1. Patients with signs and symptoms of severe/complicated malaria requiring parenteral treatment according to the World Health Organization Criteria 2000 (Annex 1)
2. Mixed Plasmodium infection
3. Known history or evidence of clinically significant disorders such as cardiovascular (including arrhythmia), respiratory (including active tuberculosis), hepatic, renal, gastrointestinal, immunological (including active human immunodeficiency virus [HIV]/acquired immune deficiency syndrome [AIDS]), neurological (including auditory), endocrine, infectious, malignancy, psychiatric (active depression, recent history of depression, generalised anxiety, psychosis, schizophrenia or other major psychiatric disorders), history of convulsions or other abnormality (including recent head trauma)
4. Presence of febrile conditions caused by diseases other than malaria
5. Known history of hypersensitivity, allergic or serious adverse reactions to mefloquine, quinine, quinidine, artesunate or other artemisinin
6. History of use of any other anti-malarial agent within 2 weeks prior to start of the study
7. Except for women of non-childbearing potential sexually active individuals participating in the study must agree to use a medically acceptable form of contraception during the study and for at least 15 days after day 63
8. Received an investigational drug within the past 4 weeks
9. Inability to swallow oral medication

Date of first enrolment

01/12/2007

Date of final enrolment

31/12/2008

Locations

Countries of recruitment

India

Study participating centre

National Institute of Malaria Research

New Delhi

India

110029

Sponsor information

Organisation

Drugs for Neglected Diseases initiative (DNDi) (Switzerland)

Sponsor details

15 Chemin Louis Dunant

Geneva

Switzerland

CH-1202

Sponsor type

Research organisation

Website

<http://www.dndi.org/>

ROR

<https://ror.org/022mz6y25>

Funder(s)

Funder type

Government

Funder Name

Ministerie van Buitenlandse Zaken

Alternative Name(s)

Dutch Ministry of Foreign Affairs, Ministry of Foreign Affairs, Ministry of Foreign Affairs of the Kingdom of the Netherlands

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

Netherlands

Funder Name

Spanish Agency for International Cooperation (Agencia Espanola de Cooperacion Internacional) (Spain)

Results and Publications

Publication and dissemination plan

Not provided at time of registration

Intention to publish date**Individual participant data (IPD) sharing plan****IPD sharing plan summary**

Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	23/05/2014		Yes	No
Results article	results	28/12/2015		Yes	No