

Safety and efficacy of single-dose and triple-dose albendazole and mebendazole against soil-transmitted helminth infections in humans

Submission date
10/11/2008

Recruitment status
No longer recruiting

☐ Prospectively registered

☐ Protocol

Registration date
28/11/2008

Overall study status
Completed

☐ Statistical analysis plan

☒ Results

Last Edited
10/04/2012

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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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

N/A

Study information

Scientific Title

Safety and efficacy of single-dose and triple-dose albendazole and mebendazole against soil-transmitted helminth infections in humans: open-label randomised-controlled trial in China

Study objectives

1. Both albendazole and mebendazole are safe for treating common soil-transmitted helminth infections in humans
2. Single-dose oral albendazole and single-dose oral mebendazole are both highly active against *Ascaris lumbricoides*, and result in high faecal egg count reduction rates for hookworm and *Trichuris trichiura*
3. Single-dose oral albendazole is more efficacious than single-dose oral mebendazole against hookworm infections
4. Triple-dose oral albendazole and triple-dose oral mebendazole are significantly more efficacious against *T. trichiura* than single-dose oral regimens

Ethics approval required

Old ethics approval format

Ethics approval(s)

1. Ethics Committee of Basel (Ethikkommission beider Basel [EKBB]), approved on the 23rd September 2008 (ref: 294/08)
2. Academic Board of the National Institute of Parasitic Diseases (IPD), Chinese Centre for Disease Control and Prevention (China CDC), approved on the 17th September 2008 (ref: 2008091701)

Study design

Community-based, phase IV, open-label/single-blind, randomised controlled 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 below to request a patient information sheet

Health condition(s) or problem(s) studied

Soil-transmitted helminth infections (*Ascaris lumbricoides*, *Trichuris trichiura*, hookworms)

Interventions

Stool collection will be carried out for baseline parasitological assessment (two stools /participant, each stool tested for the presence of helminth eggs by the Kato-Katz [2 slides /stool] and FLOTAC method).

The participants will be randomly allocated to the following four trial arms:

1. Albendazole (oral) single dose: 400 mg
2. Mebendazole (oral) single dose: 500 mg
3. Triple-dose albendazole (oral): 400 mg daily for 3 days
4. Triple-dose mebendazole (oral): 500 mg daily for 3 days

The participants are blinded regarding which drug they receive but not regarding which treatment schedule they belong to (1 or 3 day treatment) since no placebos are used. The investigators are aware of drug type and schedule at each stage of the trial.

Adverse drug-related events will be monitored for 24 hours post-application. Stool collection will be repeated for parasitological treatment efficacy assessment (two stools/participant, each stool tested for the presence of helminth eggs by the Kato-Katz [2 slides/stool] and FLOTAC method).

Details of Joint Sponsor:

National Institute of Parasitic Diseases
Chinese Centre for Disease Control and Prevention
207 Rui Jin Er Road
Shanghai 200025
China
Tel: +86 (0)136 7161 6056

Intervention Type

Other

Phase

Phase IV

Primary outcome measure

Cure rates of single-dose and triple-dose oral albendazole and mebendazole for treating common soil-transmitted helminth (STH) infections, especially hookworms, assessed at 2 - 3 weeks post-treatment.

Secondary outcome measures

1. Safety of single-dose and triple-dose oral albendazole and mebendazole against common STH infections
2. Egg-reduction rates of single-dose and triple-dose oral albendazole and mebendazole against common STH infections

Assessed at 2 - 3 weeks post-treatment.

Overall study start date

01/11/2008

Completion date

31/01/2009

Eligibility

Key inclusion criteria

1. Age: greater than or equal to 5 years old
2. Sex: males and females
3. Residency: resident of Nongyang village in Menghai county, Yunnan province, Peoples Republic of China
4. Registration, participation: signing of written informed consent sheet (5 - 17 year olds: additional written approval by parents or legal guardians), willingness to comply with study procedures (stool submission, drug treatment, alcohol abstinence at day of treatment)
5. Absence of systemic or chronic diagnosed or perceivable illness as assessed by medical personnel upon enrolment and again at each day of treatment
6. Females: not pregnant (as verbally assessed by female medical personnel upon enrolment and again at each day of treatment)

Participant type(s)

Patient

Age group

Other

Sex

Both

Target number of participants

370 (max. 400)

Key exclusion criteria

1. Age: less than 5 years
2. Residency: not a permanent resident of Nongyang village in Menghai county, Yunnan province, Peoples Republic of China
3. Registration, participation: no written informed consent sheet signed or parental approval not obtained, unwillingness to comply with all study procedures
4. Presence or suspicion of any abnormal medical condition which is known or suspected to interfere with anthelmintic treatment
5. Known hypersensitivity to any anthelmintic drugs
6. Recent history of anthelmintic treatment
7. Current or past (within 1 month) participation in any other medical trial
8. For females: suspected or verified pregnancy

Date of first enrolment

01/11/2008

Date of final enrolment

31/01/2009

Locations

Countries of recruitment

China

Switzerland

Study participating centre

Swiss Tropical Institute

Basel

Switzerland

CH-4051

Sponsor information

Organisation

Swiss Tropical Institute (STI) (Switzerland)

Sponsor details

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+41 (0)61 284 8111

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Sponsor type

Research organisation

Website

<http://www.sti.ch>

ROR

<https://ror.org/03adhka07>

Funder(s)

Funder type

Government

Funder Name

Stanley Thomas Johnson Foundation (Switzerland)

Funder Name

Swiss National Science Foundation (SNSF) (Switzerland) (ref: PBBSP3-123193)

Alternative Name(s)

Schweizerischer Nationalfonds, Swiss National Science Foundation, Fonds National Suisse de la Recherche Scientifique, Fondo Nazionale Svizzero per la Ricerca Scientifica, Fonds National Suisse, Fondo Nazionale Svizzero, Schweizerische Nationalfonds, SNF, SNSF, FNS

Funding Body Type

Private sector organisation

Funding Body Subtype

Trusts, charities, foundations (both public and private)

Location

Switzerland

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	1. results	01/06/2011		Yes	No