

Efficacy of a moxidectin versus ivermectin in subjects infected by *Strongyloides stercoralis*

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| Submission date 04/04/2016 | Recruitment status No longer recruiting | <input checked="" type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol |
| Registration date 04/04/2016 | Overall study status Completed | <input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results |
| Last Edited 07/02/2019 | Condition category Infections and Infestations | <input type="checkbox"/> Individual participant data |

Plain English summary of protocol

Background and study aims

Strongyloides stercoralis, commonly referred to as threadworms, is a type of parasitic worm that infects the large intestines. *S. stercoralis* can cause a range of gastrointestinal (gut) symptoms, including nausea, pain and diarrhoea, and long-term infections can lead to disabling complications such as anaemia, stunted growth and slow mental development. *S. stercoralis* infections are very common in south East Asia and affect mainly adults. At the moment the most effective drug against the infection is ivermectin (a medication used to treat a range of different parasitic infections). The aim of this study is to find out whether the medication moxidectin (a drug designed specifically to kill parasitic worms) is active against the worm in the human body.

Who can participate?

Adults with a *S. stercoralis* infection

What does the study involve?

Participants are randomly allocated to one of two groups. Participants in the first group receive a single dose of 8mg moxidectin. Participants in the second group receive a single dose of 200ug/kg ivermectin. At the start of the study and 21 days after treatment, participants provide stool samples so that the severity of the infection can be measured. Participants are also asked to report any unwanted side-effects from the medications 3, 24, 48 and 72 hours after treatment.

What are the possible benefits and risks of participating?

Participants will benefit from receiving a free medical examination and treatment. There are no risks of participating as the study medications have been used before and no major side effects have been reported.

Where is the study run from?

Local villages in Champasack province (Laos)

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

December 2015 to June 2016

Who is funding the study?
European Research Council (Belgium)

Who is the main contact?
Prof. Jennifer Keiser

Contact information

Type(s)
Scientific

Contact name
Prof Jennifer Keiser

Contact details
Swiss Tropical and Public Health Institute (Swiss TPH)
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Additional identifiers

Study information

Scientific Title
Efficacy of moxidectin vs ivermectin against Strongyloides stercoralis infections: a randomised parallel trial

Study objectives
The aim of this study is to assess the first time the efficacy of oral moxidectin against S. stercoralis infection.

Ethics approval required
Old ethics approval format

Ethics approval(s)
1. Ethical committee of Northern and Central Switzerland, 07/12/2015, ref: EKNZ UBE-15/103
2. Ministry of Health, National Institute of Public Health, Lao People's Democratic Republic, 11/01/2016, ref: NIOPH/NECHR 075

Study design
Single-blind phase 2 randomised parallel trial

Primary study design
Interventional

Study type(s)
Treatment

Health condition(s) or problem(s) studied

Strongyloides stercoralis infection

Interventions

Subjects will be randomly assigned to one of the two treatment arms:

Group 1: Participants receive a single dose of ivermectin 200 ug/kg.

Group 2: Participants receive a single dose of moxidectin 8 mg.

Follow up will be carried out 21 days after the treatment and involves the provision of two stool samples.

Intervention Type

Drug

Phase

Not Applicable

Drug/device/biological/vaccine name(s)

Moxidectin, ivermectin

Primary outcome(s)

Strongyloides stercoralis infection status is determined 21 days after treatment using the Baermann method in 2 stool samples.

Key secondary outcome(s)

1. Adverse events are measured through self-reporting 3, 24, 48 and 72 hours after treatment
2. *S. stercoralis* infection intensity is measured using a larval count in stool samples 21 days after treatment in relation to baseline infection intensity (LRR)
3. *O. viverrini* and other helminth infection status and intensity is measured using stool samples (Kato Katz method) 21 days after treatment

Completion date

30/06/2016

Eligibility

Key inclusion criteria

1. Aged 18 years or over
2. Infected with *S. stercoralis* infection
3. Absence of major systemic illnesses
4. Written informed consent signed

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

All

Key exclusion criteria

1. Abnormal medical conditions or chronic disease
2. Negative diagnostic result for soil-transmitted helminthes infection
3. No written informed consent
4. Recent anthelmintic treatment (past 2 months)
5. Pregnancy

Date of first enrolment

21/04/2016

Date of final enrolment

06/05/2016

Locations**Countries of recruitment**

Lao People's Democratic Republic

Study participating centre

National Institute of Public Health

Vientiane

Lao People's Democratic Republic

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Sponsor information**Organisation**

Swiss Tropical and Public Health Institute (Swiss TPH)

ROR

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

Funder(s)**Funder type**

Research council

Funder Name

European Research Council

Alternative Name(s)

The European Research Council, ERC

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

Results and Publications

Individual participant data (IPD) sharing plan**IPD sharing plan summary**

Available on request

Study outputs

| Output type | Details | Date created | Date added | Peer reviewed? | Patient-facing? |
|---------------------------------|-----------------------------|--------------|------------|----------------|-----------------|
| Results article | results | 15/07/2017 | | Yes | No |
| Results article | results from embedded study | 26/03/2018 | | Yes | No |