Tribendimidine for the treatment of liver fluke infection in Southeast Asia in Laos

Submission date 07/09/2012	Recruitment status No longer recruiting	[X] Prospectively registered		
		☐ Protocol		
Registration date 18/09/2012	Overall study status Completed Condition category	Statistical analysis plan		
		[X] Results		
Last Edited		Individual participant data		
23/01/2019	Infections and Infestations			

Plain English summary of protocol

Background and study aims

Opisthorchiasis and clonorchiasis are parasitic liver fluke infections that are of considerable public health significance in Southeast Asia. There is currently no vaccine available for prevention of liver fluke infections, and hence drug treatment is the current mainstay for clearing infections and subsequently reducing illness. However, treatment of opisthorchiasis relies on a single drug, praziquantel. Efforts are underway to more widely administer praziquantel to prevent infections. There is some concern that this strategy might result in the development and spread of drug-resistant parasites. Against this background, there is a need for new drugs. The aim of this study is to assess the effectiveness and safety of oral tribendimidine, a Chinese anti-parasitic drug, in patients with opisthorchiasis.

Who can participate?

Patients aged over 8 with opisthorchiasis.

What does the study involve?

In the first part of the study, participants are assigned to six different groups depending on age. Children aged 8-14 are randomly allocated into three groups, with each group receiving a different dose of tribendimidine. Adults and adolescents aged 15 and above are also randomly allocated into three groups, with each group receiving a different dose of tribendimidine. Blood and stool samples are taken. In the second part of the study, participants are randomly allocated into one of two groups. One group receives the most effective dose of tribendimidine as identified in the first part of the study. The other group is treated with praziquantel in two divided doses. This part of the study is only carried out if the results of the first part of the study are satisfactory. All patients are closely monitored for illness during the period of drug administration. Patients who report adverse events are examined carefully by the study doctor and, when necessary, medical action is taken on the spot or patients are referred to a nearby hospital.

What are the possible benefits and risks of participating? Not provided at time of registration Where is the study run from? Swiss Tropical and Public Health Institute (Switzerland)

When is the study starting and how long is it expected to run for? October 2012 to September 2013

Who is funding the study?

Department for International Development (UK), Medical Research Council (UK), Wellcome Trust (UK)

Who is the main contact? Dr Peter Odermatt

Contact information

Type(s)

Scientific

Contact name

Dr Peter Odermatt

Contact details

Swiss Tropical and Public Health Institute Socinstrasse 57 Postfach 4002 Switzerland 4002

Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

N/A

Study information

Scientific Title

Tribendimidine for the treatment of liver fluke infection in Southeast Asia in Laos

Acronym

TribOvL

Study objectives

Current study hypothesis as of 06/02/2017:

- 1. Tribendimidine dosage for the treatment of Opisthorchis viverrini liver fluke is the same as the dosage for the other intestinal parasitic infections
- 2. Tribendimidine is non inferior than the current standard treatment with praziquantel (non-inferiority margin set at 3%-pts for difference in cure rates)

Previous study hypothesis:

- 1. Tribendimidine dosage for the treatment of Opisthorchis viverrini liver fluke is the same as the dosage for the other intestinal parasitic infections
- 2. Tribendimidine has a higher efficacy and fewer adverse events than the current standard treatment with praziquantel

Ethics approval required

Old ethics approval format

Ethics approval(s)

- 1. Ethics Committee of the Canton of Basel and Baselland, 09/02/2012, ref: EKBB 375/11
- 2. National Ethics Committee Laos, Ministry of Health
- 3. Liverpool School of Tropical Medicine, Research Ethics Committee, 03/05/2012, ref: 12.02RS

Study design

Randomized controlled trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Other

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

Liver fluke (Opisthorchis viverrini) infection

Interventions

1. Dose finding 2a trial: Children aged 0 to 14 years will be randomized into 3 groups:

Group 1 will receive 50 mg

Group 2 will receive 100 mg

Group 3 200mg tribendimidine.

Patients aged 15 years and above will also be randomized into three treatment roups: group 1 will be receive a treatment dose of 100 mg, group 2 200 mg and group 3 400 mg of tribendimidine. Study participants will be randomly assigned to one of these arms using a computerized block randomization procedure.

2. Randomised controlled trial 2b: Most efficacious tribendimidine dosage of trial compared with praziquantel 75mg/kg BW devided in two doses (50 mg/kg BW, 25 mg /kg BW) 4 hours apart

Intervention Type

Drug

Phase

Not Applicable

Drug/device/biological/vaccine name(s)

Tribendimidine, praziquantel

Primary outcome measure

O. viverrini infection: cure rates and egg reduction rates

Secondary outcome measures

- 1. Adverse events observed with tribendimidine and praziquantel
- 2. PK parameters of tribendimidine in patients infected with O. viverrini
- 3. Co-infection with soil-transmitted helminths (hookworm, A. lumbricoides, T. trichiura)

Overall study start date

01/10/2012

Completion date

30/09/2013

Eligibility

Key inclusion criteria

- 1. Patients (older than 8 years) infected with O. viverrini (respectively: C. sinensis in PR China), as assessed by the presence of eggs in the stool
- 2. Able and willing to be examined by a study physician at the beginning of the study and at the end-of study (3 weeks post-treatment)
- 3. Able and willing to provide 2 stool samples at the beginning and end of study
- 4. Absence of major systemic illnesses, as assessed by the medical doctor, upon initial clinical assessment
- 5. Absence of psychiatric and neurological disorders
- 6. No known or reported hypersensitivity to tribendimidine
- 7. No known or reported history of chronic illness as cancer, diabetes, chronic heart, liver or renal disease
- 8. Signed written informed consent sheet
- 9. For females aged 12 years and above, not pregnant, as assessed by a female nurse (interview and pregnancy test), upon initial clinical assessment

Participant type(s)

Patient

Age group

Mixed

Sex

Both

Target number of participants

900

Key exclusion criteria

- 1. Pregnancy
- 2. Presence of any abnormal medical condition, judged by the study physician.
- 3. Concurrent non-helminthic infectious disease as judged by the study clinician (for malaria, use rapid diagnostic test to diagnose).
- 4. History of acute or severe chronic disease
- 5. Known or reported psychiatric or neurological disorders
- 6. Use of praziquantel and other helminth treatment within the past three months
- 7. Attending other clinical trials during the study

Date of first enrolment

01/10/2012

Date of final enrolment

30/09/2013

Locations

Countries of recruitment

Lao People's Democratic Republic

Switzerland

Study participating centre Swiss Tropical and Public Health Institute 4002 Switzerland 4002

Sponsor information

Organisation

Swiss Tropical and Public Health Institute (Switzerland)

Sponsor details

c/o Dr eter Odermatt Socinstrasse 57 Postfach Basel Switzerland 4002

Sponsor type

Research organisation

Website

http://www.swisstph.ch/

ROR

https://ror.org/03adhka07

Funder(s)

Funder type

Government

Funder Name

Department for International Development

Alternative Name(s)

Department for International Development, UK, DFID

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

United Kingdom

Funder Name

Medical Research Council (ref: G1100699)

Alternative Name(s)

Medical Research Council (United Kingdom), UK Medical Research Council, MRC

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

United Kingdom

Funder Name

Wellcome Trust (ref: 096471)

Alternative Name(s)

Funding Body Type

Private sector organisation

Funding Body Subtype

International organizations

Location

United Kingdom

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	01/10/2016		Yes	No
Results article	results	01/02/2018		Yes	No