Assessing the efficacy and safety of albendazole, nitazoxanide and albendazole-nitazoxanide in the treatment of Trichuris trichiura and other Soil Transmitted Helminth infections in Pemba, Tanzania

Submission date	Recruitment status	[X] Prospectively registered
10/05/2011	No longer recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
01/06/2011	Completed	Results
Last Edited	Condition category	Individual participant data
23/09/2016	Infections and Infestations	Record updated in last year

Plain English summary of protocol

Background and study aims

Soil-transmitted helminths are intestinal worms that infect humans and are transmitted through contaminated soil. Between 600 and 800 million people are infected with one or several of the common soil-transmitted helminths. There is a pressing need for new drugs against soil-transmitted helminth infection. At present, there are four drugs on the World Health Organization (WHO) model list of essential medicines and they have been widely and effectively used against STH infections for three decades or more. The aim of this study is to assess the effectiveness and safety of oral albendazole, nitazoxanide and a nitazoxanide-albendazole combination against STH infection.

Who can participate? Children aged 6 - 12 in Pemba, Tanzania

What does the study involve?

Participants are randomly allocated to be treated with either oral albendazole, nitazoxanide, or a nitazoxanide-albendazole combination. At the start and the end of the study participants' stool samples are examined and the number of helminth eggs per gram of stool is measured. All participants are closely monitored for illness during the period of drug treatment. Participants who report side effects are examined carefully by the study doctor and, when necessary, action is taken. At the end of the study all participants are treated with albendazole and any other infections are diagnosed according to the national treatment guidelines for district hospitals.

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? June 2011 to July 2011

Who is funding the study?

- 1. University of Basel (Switzerland)
- 2. Vontobel Foundation (Switzerland)

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 University of Basel Socinstrasse 57 Basel Switzerland 4002

Additional identifiers

Protocol serial number

N/A

Study information

Scientific Title

Nitazoxanide, albendazole and nitazoxanide plus albendazole, in the treatment against T. trichiura and other Soil Transmitted Helminth infections in a placebo controlled trial in Pemba, Tanzania a randomized double blind trial

Acronym

NTZALB-STH

Study objectives

An albendazole - nitazoxanide combination achieves a higher efficacy against T. trichiura than single albendazole

Ethics approval required

Old ethics approval format

Ethics approval(s)

- 1. Ethics Committee of Basel, 15/09/2010, ref: 225/10
- 2. Ministry of Health and Social Welfare (MoHSW) of Zanzibar, 31/08/2010, Ref: ZAMEC/0001/010

Study design

Randomised controlled trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Infection with soil-transmitted helminths (i.e. T. trichiura, A. lumbricoides, hookworms)

Interventions

- 1. Combination of albendazole (400mg) plus placebo
- 2. Combination of nitazoxanide (1000mg) plus placebo
- 3. Combination of albendazole (400mg) plus nitazoxanide (1000mg)
- 4. Two tablets of placebo
- 5. Because the drug interaction between nitazoxanide and albendazole is not known, the two drugs will be distributed on subsequent days
- 6. Since albendazole and nitazoxanide have a half life time of 7 hours and 8-12 hours, respectively, no interaction between the drugs should occur when consumed on two subsequent days

At the end of the study, all children positive for soil-transmitted helminths will receive one tablet of albendazole.

Intervention Type

Drug

Phase

Not Applicable

Drug/device/biological/vaccine name(s)

Albendazole, nitazoxanide

Primary outcome(s)

Cure rates and egg reduction rates three weeks after treatment:

- 1. For diagnosis 2 stool samples will be collected before and after treatment
- 2. From each stool sample 2 Kato-Katz thick smears will be examined
- 3. Additionally 2g of stool will be preserved for later diagnosis with the FLOTAC technique and ether concentration method

Key secondary outcome(s))

Adverse events due to specific treatment:

- 1. Participants will be monitored 1 hour after treatment
- 2. 24 hours after each day of treatment they will be asked with a standard questionnaire for adverse events

Completion date

31/07/2011

Eligibility

Key inclusion criteria

- 1. Written informed consent signed by parents and/or legal guardian
- 2. Male or female, aged 6 12 years
- 3. Able and willing to be examined by a study physician at the beginning and at the end of the study (3 weeks post-treatment)
- 4. Able and willing to provide 2 stool samples at the beginning and at the end of the study
- 5. Absence of major systemic illnesses (e.g. cancer, diabetes, clinical malaria or hepato-splenic schistosomiasis) as assessed by the medical doctor, upon initial clinical assessment
- 6. No known or reported history of chronic illness as cancer, diabetes, chronic heart, liver or renal disease
- 7. No recent anthelminthic treatment (within past 4 weeks)
- 8. No pregnancy

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Child

Lower age limit

6 years

Upper age limit

12 years

Sex

All

Kev exclusion criteria

- 1. No written informed consent by parents/legal guardian and child
- 2. Presence of any abnormal medical condition, judged by the study physician
- 3. History of acute or severe chronic disease. (cancer, diabetes, chronic heart, liver or renal disease)
- 4. Recent use of anthelminthic drug (within past 4 weeks)
- 5. Attending other clinical trials during the study
- 6. Pregnancy

Date of first enrolment

06/06/2011

Date of final enrolment

Locations

Countries of recruitment

Switzerland

Tanzania

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

Sponsor information

Organisation

University of Basel (Switzerland)

ROR

https://ror.org/02s6k3f65

Funder(s)

Funder type

University/education

Funder Name

Universität Basel

Alternative Name(s)

University of Basel, UniBas, Die Universität Basel, Universitas Basiliensis, UB

Funding Body Type

Government organisation

Funding Body Subtype

Universities (academic only)

Location

Switzerland

Funder Name

Vontobel-Stiftung

Alternative Name(s)

Vontobel Foundation

Funding Body Type

Private sector organisation

Funding Body Subtype

Trusts, charities, foundations (both public and private)

Location

Switzerland

Results and Publications

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?

Participant information sheet Participant information sheet 11/11/2025 No Yes