

# Doxycycline treatment to eliminate Onchocerca volvulus worms that respond poorly to ivermectin

<b>Submission date</b> 19/01/2009	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
<b>Registration date</b> 13/02/2009	<b>Overall study status</b> Completed	<input type="checkbox"/> Protocol
<b>Last Edited</b> 30/07/2015	<b>Condition category</b> Infections and Infestations	<input type="checkbox"/> Statistical analysis plan
		<input checked="" type="checkbox"/> Results
		<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

Not provided at time of registration

## Contact information

### Type(s)

Scientific

### Contact name

Prof Achim Hoerauf

### Contact details

Institute of Medical Microbiology, Immunology and Parasitology  
Faculty of Medicine  
University of Bonn  
Sigmund Freud Str. 25  
Bonn  
Germany  
53105  
+49 (0)228 287 15675  
hoerauf@microbiology-bonn.de

### Type(s)

Scientific

### Contact name

Prof Ohene Adjei

### Contact details

Kwame Nkrumah University of Science and Technology (KNUST), and Kumasi Centre of Collaborative Research (KCCR)  
University Post Office  
Kumasi  
Ghana  
-  
+ 233 (0)51 60351  
oadjei@africaonline.com

## **Additional identifiers**

### **Protocol serial number**

INCO-CT-2006-032321

## **Study information**

### **Scientific Title**

Doxycycline treatment to eliminate Onchocerca volvulus worms that respond poorly to ivermectin: a double-blind randomised placebo-controlled trial

### **Acronym**

SCOOTT (Sustainable Control of Onchocerciasis Today and Tomorrow)

### **Study objectives**

Proof that doxycycline treatment is safe, tolerable and an effective alternative for patients in whom ivermectin has failed to clear microfilariae (potentially due to worm resistance to ivermectin).

### **Ethics approval required**

Old ethics approval format

### **Ethics approval(s)**

Committee on Human Research Publication and Ethics, Kwame Nkrumah University of Science and Technology, 15/03/2007

### **Study design**

Double-blind randomised placebo-controlled trial

### **Primary study design**

Interventional

### **Study type(s)**

Treatment

### **Health condition(s) or problem(s) studied**

Onchocerciasis (river blindness)

### **Interventions**

100 mg/day oral doxycycline or matching placebo for 6 weeks.

Volunteers for this study are recruited, based on the inclusion and exclusion criteria, and treated directly in their villages (along the Pru and Lower Black Volta river basins). The study drugs are to be distributed ad personam by the research-staff and drug intake is monitored on a daily basis for 6 weeks.

To assess the skin microfilarial load, skin biopsies are taken pre-treatment, 12 months and 20 months after treatment. Nodulectomies to assess the worm vitality and embryogenesis are performed 20 months after the start of drug administration. Onchocercomas will be removed under local anaesthesia in the hospital.

Patients are kept in hospital for one day after operation before discharge to be observed by the surgeon. Wound dressing will continue in the villages until all wounds are healed.

### **Intervention Type**

Drug

### **Phase**

Not Applicable

### **Drug/device/biological/vaccine name(s)**

Doxycycline

### **Primary outcome(s)**

Proportion of sterile or dead female *O. volvulus* worms in nodules from doxycycline-treated onchocerciasis patients, measured 20 months after the start of drug administration

### **Key secondary outcome(s)**

Reduction or absence of microfilariae in the skin, measured 20 months after the start of drug administration

### **Completion date**

31/12/2010

## **Eligibility**

### **Key inclusion criteria**

1. Males and females between 18 - 50 years
2. Good general health without any clinical condition requiring long-term medication
3. Clinical manifestation of onchocerciasis assessed by skin biopsies and palpation (at least one onchocercoma)
4. Minimum body weight 40 kg

### **Participant type(s)**

Patient

### **Healthy volunteers allowed**

No

### **Age group**

Adult

**Lower age limit**

18 years

**Sex**

All

**Key exclusion criteria**

1. Pregnancy (if not obvious all women are tested by dipstick chemistry: beta-human chorionic gonadotropin [BhCG])
2. Currently breast-feeding
3. Evidence of clinically significant neurological, cardiac, pulmonary, hepatic, rheumatological, or renal disease by history, physical examination, and/or laboratory tests
4. Behavioural, cognitive or psychiatric disease that, in the opinion of the investigator, affects the ability of the volunteer to understand and cooperate with the study protocol
5. Laboratory evidence of liver disease (aspartate aminotransferase [AST], alanine aminotransferase [ALT] and/or gamma-glutamyl transferase (GGT) greater than 1.25 times the upper limit of normal of the testing laboratory)
6. Laboratory evidence of renal disease (serum creatinine greater than 1.25 times the upper limit of normal of the testing laboratory)
7. Other condition that, in the opinion of the investigator, would jeopardise the safety or rights of a volunteer participating in the trial or would render the subject unable to comply with the protocol
8. Volunteer has abused alcohol or illicit drugs during the past 6 months by history
9. History of severe allergic reaction or anaphylaxis
10. Intolerance to doxycycline

**Date of first enrolment**

01/06/2007

**Date of final enrolment**

31/12/2010

**Locations****Countries of recruitment**

Germany

Ghana

**Study participating centre**

University of Bonn

Bonn

Germany

53105

**Sponsor information**

**Organisation**

European Commission (Belgium)

**ROR**

<https://ror.org/00k4n6c32>

## Funder(s)

**Funder type**

Government

**Funder Name**

European Commission (Belgium) (ref: INCO-CT-2006-032321)

**Alternative Name(s)**

European Union, Comisión Europea, Europäische Kommission, EU-Kommissionen, Euroopa Komisjoni, EC, EU

**Funding Body Type**

Government organisation

**Funding Body Subtype**

National government

**Location**

## Results and Publications

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

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>	results	15/08/2015		Yes	No
<a href="#">Participant information sheet</a>	Participant information sheet	11/11/2025	11/11/2025	No	Yes