

# Controlled comparison of two moxifloxacin containing treatment shortening regimens in pulmonary tuberculosis

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<b>Registration date</b> 20/03/2007	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 10/04/2019	<b>Condition category</b> Infections and Infestations	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

[http://www.ctu.mrc.ac.uk/research\\_areas/study\\_details.aspx?s=29](http://www.ctu.mrc.ac.uk/research_areas/study_details.aspx?s=29)

## Contact information

### Type(s)

Scientific

### Contact name

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## Additional identifiers

### ClinicalTrials.gov (NCT)

NCT00864383

### Protocol serial number

N/A

## Study information

## **Scientific Title**

Controlled comparison of two moxifloxacin containing treatment shortening regimens in pulmonary tuberculosis

## **Acronym**

REMoxTB

## **Study objectives**

1. In treatment-naïve adults with active pulmonary Tuberculosis (TB) treated with eight weeks of moxifloxacin, isoniazid, rifampicin and pyrazinamide (i.e. a standard regimen where moxifloxacin is substituted for ethambutol), followed by nine weeks of moxifloxacin, isoniazid and rifampicin, followed by nine weeks of placebo, the proportion of patients who experience treatment failure or disease relapse in the twelve months following treatment completion will not be inferior to that observed in patients who are treated with a standard regimen (eight weeks of ethambutol, isoniazid, rifampicin and pyrazinamide followed by eighteen weeks of isoniazid plus rifampicin).

2. In treatment-naïve adults with active pulmonary TB treated with eight weeks of ethambutol, moxifloxacin, rifampicin and pyrazinamide (i.e. a standard regimen where moxifloxacin is substituted for isoniazid), followed by nine weeks of moxifloxacin and rifampicin followed by nine weeks of placebo, the proportion of patients who experience treatment failure or disease relapse in the twelve months following treatment completion will not be inferior to that observed in patients who are treated with a standard regimen (eight weeks of ethambutol, isoniazid, rifampicin and pyrazinamide followed by eighteen weeks of isoniazid plus rifampicin).

## **Ethics approval required**

Old ethics approval format

## **Ethics approval(s)**

University College London (UCL) Research Ethics Committee, 05/04/2006, ref:0670/001.  
Each trial site will apply to the appropriate institutional research ethics committee, approval must be granted before recruitment commences at that site.

## **Study design**

Multicentre randomised controlled trial

## **Primary study design**

Interventional

## **Study type(s)**

Treatment

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

Tuberculosis

## **Interventions**

Regimen one - control regimen:

Eight weeks of chemotherapy with ethambutol, isoniazid, rifampicin and pyrazinamide plus the moxifloxacin placebo, followed by nine weeks of isoniazid and rifampicin plus the moxifloxacin placebo, followed by nine weeks of isoniazid and rifampicin only.

Regimen two:

Eight weeks of chemotherapy with moxifloxacin, isoniazid, rifampicin and pyrazinamide plus the

ethambutol placebo, followed by nine weeks of moxifloxacin, isoniazid and rifampicin, followed by nine weeks of the isoniazid placebo and the rifampicin placebo.

#### Regimen three:

Eight weeks of chemotherapy with ethambutol, moxifloxacin, rifampicin and pyrazinamide plus the isoniazid placebo, followed by nine weeks of moxifloxacin and rifampicin plus the isoniazid placebo, followed by nine weeks of the isoniazid placebo and the rifampicin placebo.

Dosages are dependent on the weight category of the patient, and will be provided as follows (all drugs are taken orally):

1. Moxifloxacin: 400 mg
2. Rifampicin:
  - a. Less than or equal to 45 kg = 450 mg
  - b. Greater than 45 kg = 600 mg
3. Isoniazid: 300 mg
4. Pyrazinamide:
  - a. Less than 40 kg = 25 mg/kg rounded to nearest 500 mg
  - b. 40 to 55 kg = 1000 mg
  - c. Greater than 55 kg to 75 kg = 1500 mg
  - d. Greater than 75 kg = 2000 mg
5. Ethambutol:
  - a. Less than 40 kg = 15 mg/kg rounded to nearest 100 mg
  - b. 40 to 55 kg = 800 mg
  - c. Greater than 55 kg to 75 kg = 1200 mg
  - d. Greater than 75 kg = 1600 mg

#### Intervention Type

Drug

#### Phase

Not Applicable

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

Moxifloxacin, isoniazid, rifampicin and pyrazinamide, ethambutol

#### Primary outcome(s)

1. Efficacy : Combined failure of bacteriological cure and relapse within one year of completion of therapy
2. Safety : Proportion of patients with grade three or four Adverse Events (AEs) according to the World Health Organisation (WHO) grade

#### Key secondary outcome(s)

Efficacy:

1. Proportion of patients who are culture negative at eight weeks
2. Time to first culture negative sputum sample
3. Speed of decline of sputum viable count

#### Completion date

01/01/2011

## Eligibility

**Key inclusion criteria**

1. Signed written consent or witnessed oral consent in the case of illiteracy, before undertaking any trial related activity
2. Two sputum specimens positive for tubercle bacilli on direct smear microscopy at the local laboratory
3. No previous anti-tuberculosis chemotherapy
4. Aged 18 years and over
5. A firm home address that is readily accessible for visiting and willingness to inform the study team of any change of address during the treatment and follow-up period
6. Agreement to participate in the study and to give a sample of blood for Human Immunodeficiency Virus (HIV) testing
7. Laboratory parameters performed up to 14 days before enrolment
8. Serum aspartate aminotransferase (AST) activity less than three times the Upper Limit of Normal (ULN)
9. Serum total bilirubin level less than 2.5 times ULN
10. Creatinine Clearance (CrCl) level greater than 30 mls/min
11. Haemoglobin level of at least 7.0 g/dL
12. Platelet count of at least  $50 \times 10^9$  cells/L
13. Serum potassium greater than 3.5 mmol/L
14. Negative pregnancy test (women of childbearing potential)
15. Pre-menopausal women must be using a barrier form of contraception or be surgically sterilised or have an Intra-Uterine Contraceptive Device (IUCD) in place

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Lower age limit**

18 years

**Sex**

All

**Key exclusion criteria**

1. Unable to take oral medication
2. Previously enrolled in this study
3. Received any investigational drug in the past three months
4. Received an antibiotic active against M. tuberculosis in the last 14 days (fluoroquinolones, macrolides, standard anti-tuberculosis drugs)
5. Any condition that may prove fatal during the first two months of the study period
6. TB meningitis or other forms of severe tuberculosis with high risk of a poor outcome
7. Pre-existing non-tuberculosis disease likely to prejudice the response to, or assessment of, treatment e.g. insulin-dependent diabetes, liver or kidney disease, blood disorders, peripheral neuritis, chronic diarrhoeal disease
8. Pregnant or breast feeding

9. Suffering from a condition likely to lead to uncooperative behaviour e.g. psychiatric illness or alcoholism
10. Contraindications to any medications in the study regimens
11. Known to have congenital or sporadic syndromes of QTc prolongation or receiving concomitant medication reported to increase the QTc interval (e.g. amiodarone, sotalol, disopyramide, quinidine, procainamide, terfenadine)
12. End stage liver failure (class Child-Pugh C)
13. Uncorrected hypokalaemia
14. Weight less than 35 kg
15. Known allergy to any fluoroquinolone antibiotic or history of tendinopathy associated with quinolones
16. HIV infection with CD4 count less than  $250 \times 10^9/\text{lit}$
17. Patients already receiving anti-retroviral therapy
18. Patients whose initial isolate is shown to be multiple drug resistant

**Date of first enrolment**

01/06/2007

**Date of final enrolment**

01/01/2011

## **Locations**

**Countries of recruitment**

United Kingdom

England

Kenya

South Africa

Tanzania

Zambia

**Study participating centre**

**Royal Free and University College Medical School**

London

United Kingdom

NW3 2PF

## **Sponsor information**

**Organisation**

University College London (UK)

**ROR**

<https://ror.org/02jx3x895>

## **Funder(s)**

### **Funder type**

Industry

### **Funder Name**

European and Developing Countries Clinical Trials Partnership (EDCTP) (The Netherlands)

### **Alternative Name(s)**

Le partenariat Europe-Pays en développement pour les essais cliniques, A Parceria entre a Europa e os Países em Desenvolvimento para a Realização de Ensaaios Clínicos, The European & Developing Countries Clinical Trials Partnership, European and Developing Countries Clinical Trials, EDCTP

### **Funding Body Type**

Private sector organisation

### **Funding Body Subtype**

International organizations

### **Location**

Netherlands

### **Funder Name**

TB Alliance (USA)

### **Funder Name**

Bayer HealthCare Pharmaceuticals (USA)

### **Funder Name**

Sanofi-Aventis (France)

## **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?
<a href="#">Results article</a>	results	23/10/2014	10/04/2019	Yes	No
<a href="#">Results article</a>	results	04/02/2016	10/04/2019	Yes	No
<a href="#">Results article</a>	results	01/05/2018	10/04/2019	Yes	No
<a href="#">Basic results</a>				No	No
<a href="#">Study website</a>	Study website	11/11/2025	11/11/2025	No	Yes