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TB Fast Track

Submission date
12/09/2012

Recruitment status
No longer recruiting

Registration date
12/09/2012

Overall study status
Completed

Last Edited
18/11/2019

Condition category
Infections and Infestations

[X] Prospectively registered

[X] Protocol

[_] Statistical analysis plan

[X] Results

[_] Individual participant data

Plain English summary of protocol

Background and study aims:
The increased use of antiretroviral therapy (ART) for HIV-positive people in low-income countries has saved many thousands of lives. However, the death rate among people starting ART remains much higher than in wealthy countries, and many of these deaths are due to tuberculosis (TB). TB is hard to diagnose, especially among people with HIV and in low-income countries. The traditional tests for TB are either not very good or are slow to give results, so TB is often identified late, or missed altogether. Newer tests for TB are becoming available. One of these, the LAM test, can be done in clinics using a urine sample. The LAM test works best to pick up TB in people with advanced HIV disease, but even in this group it will miss up to a quarter of TB cases. Other simple tests which predict both TB and risk of death in HIV-positive people include haemoglobin (the red blood cell count) and weight for height (body mass index, BMI). The aim of this study is to find out whether we can reduce early deaths among HIV-positive people by rapidly identifying and treating those at high risk of having TB, using tests that can be done on site, with immediate results, by nurses in primary health clinics.

Who can participate?
HIV-positive men and women, aged 18 or above, who are not already taking ART or TB treatment.

What does the study involve?
In the clinics, participants will be assessed by a study nurse. We will do a urine LAM test, take a fingerprick blood sample to measure haemoglobin and measure BMI. We will assess the risk of TB based on symptoms and these test results. People who are at high risk of TB will start TB treatment as soon as possible, and then ART two weeks later. People with a medium risk of TB will have further tests sent, according to South African guidelines, and will be reviewed one week later to decide if they should start TB treatment, or start ART. People who are at low risk of TB will start ART as soon as possible. We will follow up all participants for six months; the main outcome of interest is whether people are still alive at six months. We will compare survival at six months among people taking part in the study in the treatment clinics with similar HIV-positive people in ten 'control' clinics, who will be looked after in the standard way according to South African national guidelines. We will also measure the cost of the treatment, and if the treatment works, we will measure how much it costs per life saved.

What are the possible benefits and risks of participating?
We think that by treating people early for TB, followed by ART, we will reduce the number of people who die around the time of starting ART, and that this will benefit people in the clinics. However, it is likely that some people will start TB treatment even though they do not have active TB, and these people may get side effects of TB treatment that they would not have had if they were looked after in the standard way. We think it is likely that, overall, the treatment will do more good than harm, but we need to do this trial to find out for sure.

Where is the study run from?
The study will run in primary health clinics in South Africa led by the Aurum Institute and the Foundation for Professional Development, South Africa.

When is the study starting and how long is it expected to run for?
The study is due to start in October 2012, and we expect to recruit patients until December 2014. Participants will be followed up for 6 months. We hope to complete the study in June 2015.

Who is funding the study?
Global Health Trials, a collaboration between the Wellcome Trust, the UK Department for International Development and the UK Medical Research Council.

Who is the main contact?
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Contact information

Type(s)
Scientific

Contact name
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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers
G1100689

Study information

Scientific Title
TB Fast Track: a study to evaluate the effect of a point-of-care TB test-and-treat algorithm on early mortality in people with HIV accessing ART, a trial with randomisation at clinic level

Study objectives
We hypothesise that a care pathway for adults with HIV presenting for antiretroviral therapy (ART) with CD4 <150, using point-of-care technology to rapidly identify individuals at high risk of TB and ensure they start TB treatment, then ART, will markedly reduce early mortality. This will be via two mechanisms: first, reducing TB-specific mortality; secondly, reducing all-cause mortality by reducing time to ART initiation among individuals both with and without TB. We hypothesise that the increase in survival due to this strategy will greatly outweigh the risks of treatment toxicities overall among individuals at high risk of early mortality presenting for ART.

On 13/10/2014 the following changes were made to the trial record:
1. The anticipated end date was changed from 31/07/2014 to 30/06/2015.
2. The target number of participants was changed from 3500 to 2616.

Ethics approval required
Old ethics approval format

Ethics approval(s)
1. University of the Witwatersrand, 20/04/2012, ref: R14/49
2. London School of Hygiene & Tropical Medicine, 13/04/2012, ref: 6099

Study design
Open cluster-randomised trial

Primary study design
Interventional

Secondary study design
Cluster randomised trial

Study setting(s)
Other

Study type(s)
Treatment

Participant information sheet
Not available in web format, please use the contact details below to request a patient information sheet

Health condition(s) or problem(s) studied
HIV-associated tuberculosis

Interventions
A management strategy based on a point of care technology-based algorithm to rapidly identify individuals at high risk of TB, based on urine LAM, haemoglobin and body mass index, and ensure that those at high risk start TB treatment rapidly, followed by antiretroviral therapy

Intervention Type
Other

Phase
Not Applicable

Primary outcome measure
All-cause mortality at 6 months after enrolment

Secondary outcome measures
1. Duration of hospital admission in first 6 months after enrolment
2. Time from enrolment to ART start
3. Proportion of patients retained in care, i.e. documented to have attended clinic for HIV care at 6 months (window: 150-240 days) after enrolment
4. Study-defined serious adverse events (particularly hepatotoxicity, hypersensitivity, peripheral neuropathy, and nephrotoxicity) in the intervention arm
5. Economic outcomes

Overall study start date
15/10/2012

Completion date
30/06/2015

Eligibility

Key inclusion criteria
1. HIV positive
2. Eligible and willing to start ART
3. CD4 150 cells/ul or less

Participant type(s)
Patient

Age group
Adult

Sex
Both

Target number of participants
2616

Total final enrolment
3053

Key exclusion criteria
1. Age <18 years
2. Currently on TB treatment, or completed TB treatment in the last 3 months
3. First trimester of pregnancy, or desiring pregnancy in the next 6 months
4. Contraindication to efavirenze, based on current South African ART guidelines
5. Too sick to be managed in ambulatory care

Date of first enrolment
20/12/2012

Date of final enrolment
31/12/2014

Locations

Countries of recruitment
England

South Africa

United Kingdom

Study participating centre
London School of Hygiene & Tropical Medicine
London
United Kingdom
WC1E 7HT

Sponsor information

Organisation
London School of Hygiene & Tropical Medicine (UK)

Sponsor details
Keppel Street
London
England
United Kingdom
WC1E 7HT

Sponsor type
University/education

Website
http://www.lshtm.ac.uk

ROR
https://ror.org/00a0jsq62

Funder(s)

Funder type
Research organisation

Funder Name
Global Health Trials (Wellcome Trust, the UK Department for International Development and the UK Medical Research Council), ref: G1100689 (UK)

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?
Protocol article	protocol	28/03/2015		Yes	No
Results article	results	03/07/2018		Yes	No
Results article	results	09/11/2016	25/01/2019	Yes	No
Results article	results	23/03/2017	25/01/2019	Yes	No
Results article	results of measuring income for catastrophic cost estimates.	01/10/2018	25/01/2019	Yes	No
Results article	results of the performance of verbal autopsy methods in estimating HIV-associated mortality among adults in South Africa.	03/07/2018	25/01/2019	Yes	No
Results article	results	01/01/2020	18/11/2019	Yes	No