

# Double-blind clinical trial of taurolidine-citrate for the prevention of infection in patients using tunnelled lines for haemodialysis

**Submission date**  
09/08/2009

**Recruitment status**  
No longer recruiting

Prospectively registered

Protocol

**Registration date**  
18/09/2009

**Overall study status**  
Completed

Statistical analysis plan

Results

**Last Edited**  
28/07/2010

**Condition category**  
Infections and Infestations

Individual participant data

## Plain English summary of protocol

Not provided at time of registration

## Contact information

### Type(s)

Scientific

### Contact name

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## Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

N/A

## Study information

### Scientific Title

Taurolidine-citrate catheter locks for the prevention of bacteraemia in patients using tunnelled intravascular catheters for haemodialysis: a randomised double-blind controlled trial

### Study objectives

The primary aim of this study is to evaluate the feasibility, efficacy and cost-effectiveness of taurolidine line locks in the prevention of bacteraemia in haemodialysis patients using tunnelled lines starting at the time of line insertion and whether use of taurolidine from the time of line insertion is associated with an increased need for thrombolytic therapy.

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

Cumbria and Lancashire B Research Ethics committee approved on the 4th July 2006 (ref: 06/Q1309/30)

### Study design

Randomised double-blind controlled trial

### Primary study design

Interventional

### Secondary study design

Randomised controlled trial

### Study setting(s)

Hospital

### 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

Catheter-related bacteraemia

### Interventions

Patients will randomised to receive either taurolidine-citrate or standard heparin (5000 IU/ml) line locks at the time of catheter insertion and after every dialysis until an end-point of the trial. Taurolidine will be supplied as 1.35% taurolidine and 4% citrate (TauroLock™, Tauropharm AG). Heparin will supplied as heparin sodium, Ph Eur (porcine) at 5000 IU/L with 1% benzylic acid as preservative (Braun AG). This trial will be completed six months after the recruitment of the last participant.

**Intervention Type**

Drug

**Phase**

Not Applicable

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

Taurolidine-citrate, heparin

**Primary outcome measure**

1. 'Intention to treat' analysis of symptomatic and asymptomatic bacteraemic episodes. A bacteraemic episode will be defined by a single positive blood culture. Symptoms will be judged clinically on the basis of fever or rigors associated with dialysis. Measured by a positive blood culture at the time when the patient has relevant symptoms
2. A comparison of the unassisted line patency rate between the two treatment groups. This will be based on the need for thrombolytic therapy or radiological intervention. Detected by a requirement to use of thrombolytic therapy and the date when this happened.

**Secondary outcome measures**

1. The type of bacterium, outcome of treatment with antibiotics and relapse rate in those patients with proven infection
2. C-reactive protein concentrations
3. Haemoglobin concentrations, measured monthly
4. Erythropoietin requirement, recorded every two weeks
5. Blood flows, recorded every two weeks
6. Electron microscopy of removed lines to look for Biofilm

**Overall study start date**

01/11/2006

**Completion date**

30/09/2008

**Eligibility****Key inclusion criteria**

1. Adult patients (aged greater than 18 years), either sex
2. Requirement for dialysis using a tunnelled dialysis line
3. Able to give informed consent

**Participant type(s)**

Patient

**Age group**

Adult

**Lower age limit**

18 Years

**Sex**

Both

**Target number of participants**

50 patients per group (total: 100 patients)

**Key exclusion criteria**

1. Children aged less than 18 years
2. Unable to give informed consent
3. Positive blood culture in previous seven days
4. Unstable bleeding diathesis or hypercoagulable state

**Date of first enrolment**

01/11/2006

**Date of final enrolment**

30/09/2008

**Locations**

**Countries of recruitment**

England

United Kingdom

**Study participating centre**

**Renal Unit**

Preston

United Kingdom

PR2 9HT

**Sponsor information**

**Organisation**

Lancashire Teaching Hospitals NHS Foundation Trust (UK)

**Sponsor details**

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+44 (0)1772 716565

[laurie.solomon@lthtr.nhs.uk](mailto:laurie.solomon@lthtr.nhs.uk)

**Sponsor type**

Hospital/treatment centre

**Website**

<http://www.lancsteachinghospitals.nhs.uk/>

**ROR**

<https://ror.org/02j7n9748>

## **Funder(s)**

**Funder type**

Government

**Funder Name**

Lancashire Teaching Hospitals NHS Foundation Trust (UK) - internal funding

**Funder Name**

Central Manchester University Hospitals NHS Foundation Trust (UK) - internal funding

**Funder Name**

Royal Liverpool Hospital NHS Trust (UK) - internal funding

**Funder Name**

North West Kidney Research Association (UK) - small grant from the Preston Branch

**Funder Name**

Liverpool Regional Dialysis Unit Fund (UK) - small grant

## **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?
<a href="#">Results article</a>	results	01/06/2010		Yes	No