# Pathophysiological mechanisms of hypertensive left ventricular hypertrophy: optimising regression

Submission date	Recruitment status	<ul><li>Prospectively registered</li></ul>
12/09/2003	No longer recruiting	Protocol
Registration date	Overall study status	Statistical analysis plan
12/09/2003	Completed	[X] Results
<b>Last Edited</b> 24/09/2012	Condition category Circulatory System	Individual participant data
<del>4</del> / <del>1</del>		

# Plain English summary of protocol

Not provided at time of registration

# Contact information

# Type(s)

Scientific

#### Contact name

Prof SG Ball

### Contact details

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# Additional identifiers

Protocol serial number N0436117967

Study information

# 110 150117507

### Scientific Title

## Study objectives

We aim to investigate the mechanisms responsible for the development of hypertensive left ventricular hypertrophy (LVH), and determine the optimal treatment strategy. We aim to investigate the mechanisms responsible for the development of hypertensive left ventricular hypertrophy (LVH), and determine the optimal treatment strategy. LVH is thought to be related to activation of the renin-angiotensin system and the sympathetic nervous system, in addition to the effect of the high blood pressure. We will accurately determine baseline LV mass using cardiac MRI as well as measuring the degree of humoral and neural activation. Patients will be randomised to different combinations of standard blood pressure treatments for 4 months and then reassessed. We hope to determine whether controlling blood pressure by specifically targeting the neurohumoral activation is more effective in regressing LVH than simple blood pressure control alone. It is hoped that this study will yield useful information regarding the best treatment for hypertensive LVH.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

Not provided at time of registration

## Study design

Randomised controlled trial

## Primary study design

Interventional

## Study type(s)

**Not Specified** 

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

Cardiovascular: Hypertensive left ventricular hypertrophy (LVH)

#### Interventions

Laboratory study; Randomised controlled trial, Random allocation to different combinations of standard blood pressure treatments.

### Random allocation to:

- A. Treatment one
- B. Treatment two
- C. Treatment three
- D. Treatment four

## Intervention Type

Other

## Phase

**Not Specified** 

## Primary outcome(s)

Magnetic resonance imaging (MRI) measurement of left ventricular mass regression.

## Key secondary outcome(s))

Not provided at time of registration

## Completion date

30/11/2009

# **Eligibility**

## Key inclusion criteria

All recruited patients will have hypertension and left ventricular hypertrophy.

## Participant type(s)

**Patient** 

## Healthy volunteers allowed

No

## Age group

**Not Specified** 

## Sex

**Not Specified** 

## Key exclusion criteria

Not provided at time of registration

## Date of first enrolment

01/08/2002

## Date of final enrolment

30/11/2009

# Locations

## Countries of recruitment

United Kingdom

England

# Study participating centre Yorkshire Heart Centre

Leeds United Kingdom LS1 3EX

# Sponsor information

# Organisation

Department of Health (UK)

# Funder(s)

## Funder type

Government

## Funder Name

Leeds Teaching Hospitals NHS Trust (UK)

# **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?
Results article	results	01/10/2012		Yes	No