

# A randomised trial of conventional and off-pump coronary artery bypass grafting (CABG) on myocardial injury as assessed by multi-parametric magnetic resonance imaging (MRI) and specific biochemical markers.

<b>Submission date</b> 30/09/2005	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 30/09/2005	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 30/08/2013	<b>Condition category</b> Surgery	<input type="checkbox"/> Individual participant data

**Plain English summary of protocol**  
Not provided at time of registration

## Contact information

**Type(s)**  
Scientific

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## Additional identifiers

**Protocol serial number**  
N0176113611

# Study information

## Scientific Title

### Study objectives

1. To quantify both functional and irreversible myocardial injury after CABG, with and without cardiopulmonary bypass (CPB) using multiparametric cardiac MRI at the highest spatial resolution.
2. To quantify the pathophysiological significance of bio chemically defined myocardial injury with MRI determined grams of myocardial tissue loss after CABG, with and without CPB.
3. To define the power of these new MRI indices to predict functional recovery at 6 months post-surgical revascularisation.

### 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)

Treatment

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

Surgery: Coronary artery bypass grafting (CABG)

### Interventions

Patients will be randomised to receive conventional CABG or off-pump CABG (OPCABG).

### Intervention Type

Procedure/Surgery

### Phase

Not Applicable

### Primary outcome(s)

1. Number and percentage of new left ventricular (LV) wall segments that are assessed as non viable by late Gd-DTPA MR imaging in both the conventional CABG and OPCABG groups
2. The distribution (regional versus global) of new non viable LV segments in both the conventional CABG and OPCABG groups
3. The extent of post operative rise in biochemical cardiac markers will be compared in the two surgical groups and will be correlated with the functional cardiac MR assessment.

### Key secondary outcome(s)

Not provided at time of registration

**Completion date**

30/09/2003

**Eligibility**

**Key inclusion criteria**

90 patients undergoing CABG

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Not Specified

**Sex**

Not Specified

**Key exclusion criteria**

Does not match inclusion criteria

**Date of first enrolment**

01/06/2002

**Date of final enrolment**

30/09/2003

**Locations**

**Countries of recruitment**

United Kingdom

England

**Study participating centre**

**Department of Cardiovascular Medicine**

Oxford

United Kingdom

OX3 9DU

**Sponsor information**

## Organisation

Department of Health

## Funder(s)

### Funder type

Government

### Funder Name

Oxford Radcliffe Hospitals NHS Trust (UK) - Departmental resources

## 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	27/01/2004		Yes	No