

# The use of erythropoietin in cardiac surgery to protect against ischaemia-related injury in kidney and other organ systems

<b>Submission date</b> 08/05/2006	<b>Recruitment status</b> No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 02/06/2006	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 16/12/2013	<b>Condition category</b> Circulatory System	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

Not provided at time of registration

## Contact information

### Type(s)

Scientific

### Contact name

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### Contact details

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## Additional identifiers

### Protocol serial number

ajmepo1

## Study information

### Scientific Title

**Acronym**  
EPOCARD

**Study objectives**

To investigate whether pre-treatment with erythropoietin (EPO) reduces the incidence of renal injury associated with surgery under cardiopulmonary bypass.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Ethics approval details not yet received as of 02/06/06.

**Study design**

Prospective, randomised, double-blind, placebo controlled trial

**Primary study design**

Interventional

**Study type(s)**

Prevention

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

Ischaemic heart disease

**Interventions**

Erythropoietin versus placebo in coronary artery bypass graft surgery

**Intervention Type**

Drug

**Phase**

Not Specified

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

Erythropoietin

**Primary outcome(s)**

Change in creatine calculated clearance between preoperative baseline and postoperative day one

**Key secondary outcome(s)**

1. Oliguria
2. Acute renal failure requiring dialysis
3. Urinary analysis of N-acetyl-BD-glucosaminidase and alpha-1 microglobulin/creatinine ratio
4. Evidence of cardiac injury (troponin I)
5. Neurological injury S-100
6. Evidence of type I neurological outcome (stroke, transient ischaemic attack [TIA])
7. Type II neurological outcome (new deterioration in intellectual function, confusion, agitation, disorientation, memory deficit or seizure)

**Completion date**

01/10/2007

## Eligibility

**Key inclusion criteria**

1. First-time coronary artery bypass surgery
2. Age >70
3. Serum creatinine >120 µmol/l
4. Diabetes mellitus (diet or medication controlled)

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Senior

**Sex**

All

**Key exclusion criteria**

1. Hypersensitivity to mammalian cell-derived products to (human) albumin, to EPO or any of the ingredients of EPO
2. Hypercoagulability
3. Significant psychiatric or neurological disease that would prevent adherence to the requirements of the protocol
4. Immunosuppression immunocompromised (including, but not limited to acquired immune deficiency syndrome (AIDS) and immunosuppressive therapy)
5. Significant hepatic disturbance
6. Chronic renal impairment (requiring haemodialysis or peritoneal dialysis)
7. Pregnant or breast feeding
8. Current treatment with human recombinant erythropoietin
9. Previous cardiac surgery

**Date of first enrolment**

01/10/2006

**Date of final enrolment**

01/10/2007

## Locations

**Countries of recruitment**

United Kingdom

Scotland

**Study participating centre**  
**Scottish Cardiopulmonary Transplant Unit**  
Glasgow  
United Kingdom  
G31 2ER

## **Sponsor information**

**Organisation**  
NHS Greater Glasgow and Clyde (UK)

**ROR**  
<https://ror.org/05kdz4d87>

## **Funder(s)**

**Funder type**  
Industry

**Funder Name**  
Roche Products Limited (NEO 029)

## **Results and Publications**

**Individual participant data (IPD) sharing plan**

**IPD sharing plan summary**  
Not provided at time of registration