

# Coronary artery bypass graft (CABG) off- or on-pump revascularisation study

<b>Submission date</b> 04/02/2008	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
<b>Registration date</b> 04/02/2008	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 03/04/2019	<b>Condition category</b> Circulatory System	<input type="checkbox"/> Individual participant data

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

**Study website**  
<http://www.ccc.mcmaster.ca/coronary.htm>

## Contact information

**Type(s)**  
Scientific

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## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**  
NCT00463294

## Secondary identifying numbers

MCT-85214; 5999

# Study information

## Scientific Title

Coronary artery bypass graft (CABG) off- or on-pump revascularisation study

## Acronym

CORONARY

## Study objectives

Primary hypothesis:

In patients undergoing coronary artery bypass graft (CABG) surgery, off-pump CABG surgery compared to on-pump CABG surgery reduces major clinical vascular events in the short term (30 days) and these benefits are maintained at long term (5 years).

Secondary hypothesis:

In patients undergoing CABG surgery, off-pump CABG surgery compared to on-pump CABG surgery reduces costs in the short term (30 days) and at long term (5 years).

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

Ethics approval received from:

1. Canada: Research Ethics Board of Hamilton Health Sciences/McMaster University, Hamilton, Ontario on the 30th March 2007 (final approval for pilot) and 19th June 2007 (re-consent for long term follow-up) (ref: 06-045)
2. Brazil: Comitê de Ética em Pesquisa, Instituto Dante Pazzanese on the 6th November 2007 (ref: CEP 3581)
3. Colombia: Comité de Ética en Investigación, Fundación Cardiovascular Del Oriente Colombiano, Floridablanca (SS) on the 23rd January 2008
4. France: Comité de Protection des Personnes, CHU-Hôpital Saint Jacques on the 26th June 2007 (ref: 07/446)
5. Turkey: Research Ethics Committee of Medical Faculty, Ankara University, Ankara on the 7th January 2008 (ref: 123-3353)
6. Chile: Gobierno De Chile, Servicio de Salud Metropolitano Oriente, Comité de Ética Científico, Santiago on the 20th January 2008
7. China: Ethics Committee FuWai Hospital, Beijing in May 2007
8. Czech Republic: Etická komise, Fakultní nemocnice Královské Vinohrady, Prague on the 9th January 2008
9. India: Ethics Committee All India Institute of Medical Sciences, Delhi on the 10th April 2008
10. Italy: Comitato Etico Intraziendale, Azienda Ospedaliera S. Croce e Carle, Cuneo on the 4th April 2008
11. Poland: Niezależna Komisja Bioetyczna, Akademia Medyczna, Gdańsk on the 15th May 2008
12. Ukraine: Komitet z medicnoi etiki, M.M. Amosov Government Facility, National Institute of Cardio-vascular Surgery on the 26th June 2008
13. United Kingdom: MREC approved (ref: 08/H0604/48)

Ethics approval pending as of 26/04/2010 from:

14. Slovak Republic

15. Argentina

16. Netherlands

### **Study design**

International unblinded multicentre two arm randomised parallel surgical trial

### **Primary study design**

Interventional

### **Secondary study design**

Randomised controlled trial

### **Study setting(s)**

Hospital

### **Study type(s)**

Treatment

### **Participant information sheet**

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

Coronary artery disease requiring isolated coronary artery bypass graft (CABG)

### **Interventions**

Coronary artery bypass graft (CABG) surgery with or without cardio-pulmonary bypass (CPB) machine:

1. Experimental group: CABG without use of CPB

2. Control group: CABG with the use of CPB

Contact for public queries (except for UK component):

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Sponsor details for UK component:

University of Oxford (UK)

University Offices

Wellington Square

Oxford

OX1 2JD

United Kingdom

<http://www.ox.ac.uk/>

**Intervention Type**

Other

**Phase**

Not Specified

**Primary outcome measure**

1. The occurrence of the composite of total mortality, stroke, nonfatal myocardial infarction [MI], or new renal failure at 30 days post CABG surgery
2. The occurrence of the composite of total mortality, stroke, nonfatal MI, new renal failure, or repeat coronary revascularisation (i.e. coronary artery bypass surgery or percutaneous coronary intervention) over 5 years after randomisation

**Secondary outcome measures**

1. The assessment of total costs and resources consumption at 30 days after CABG surgery
2. The assessment of total costs and resources consumption at 5 years after CABG surgery

**Overall study start date**

01/10/2007

**Completion date**

31/05/2014

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

1. Require isolated CABG with median sternotomy
2. Provide written informed consent
3. 21 years of age and older, either sex
4. Have one risk factor or more:
  - 4.1. Greater than or equal to 70 years age
  - 4.2. Peripheral vascular disease (previous peripheral bypass or amputation or ankle brachial index [ABI] less than 0.80)
  - 4.3. Cerebrovascular disease (history of stroke, transient ischaemic attack [TIA], carotid stenosis greater than 70%)
  - 4.4. Renal insufficiency (creatinine above upper limit of normal)
  - 4.5. Greater than 60 years of age with one of the following:
    - 4.5.1. Diabetes (oral hypoglycaemic agent and/or insulin)
    - 4.5.2. Urgent revascularisation (waiting in hospital)
    - 4.5.3. Left ventricular ejection fraction less than 35%
    - 4.5.4. Current or recent smokers (within 1 year of randomisation)

**Participant type(s)**

Patient

**Age group**

Adult

**Sex**

Both

## **Target number of participants**

Planned Sample Size: 4700; UK Sample Size: 250

## **Key exclusion criteria**

1. Concomitant cardiac procedure associated with CABG
2. Contra-indications to off-pump CABG or on-pump CABG (calcified aorta, intramuscular left anterior descending [LAD], calcified coronaries, small target vessels)
3. Concomitant life-threatening disease likely to limit life expectancy to less than 2 years
4. Prior enrolment in this trial
5. Emergency CABG surgery (immediate revascularisation for haemodynamic instability)
6. Redo CABG

## **Date of first enrolment**

01/10/2007

## **Date of final enrolment**

31/05/2014

## **Locations**

### **Countries of recruitment**

Argentina

Brazil

Canada

Chile

China

Colombia

Czech Republic

France

India

Italy

Netherlands

Poland

Slovakia

Türkiye

Ukraine

United Kingdom

**Study participating centre**  
**Hamilton General Hospital**  
Hamilton, Ontario  
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## Sponsor information

**Organisation**  
Population Health Research Institute (PHRI) (Canada)

**Sponsor details**  
McMaster University, General Site  
237 Barton Street East  
Hamilton, Ontario  
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**Sponsor type**  
Research organisation

**Website**  
<http://www.ccc.mcmaster.ca/>

**ROR**  
<https://ror.org/03kwaeq96>

## Funder(s)

**Funder type**  
Research organisation

**Funder Name**  
Canadian Institutes of Health Research (CIHR) (Canada) - <http://www.cihr-irsc.gc.ca> (ref: MCT-85214)

## 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	01/01/2012		Yes	No
<a href="#">Protocol article</a>	sub-study protocol	18/04/2012		Yes	No
<a href="#">Results article</a>	results	19/04/2012		Yes	No
<a href="#">Results article</a>	results	28/03/2013		Yes	No
<a href="#">Results article</a>	results	04/06/2014		Yes	No
<a href="#">Results article</a>	results	01/11/2014		Yes	No
<a href="#">Results article</a>	results	15/12/2016		Yes	No