# Heart Outcomes Prevention Evaluation-2 (HOPE-2) study

Submission date	Recruitment status No longer recruiting	<ul><li>Prospectively registered</li></ul>		
05/09/2005		Protocol		
Registration date	Overall study status	Statistical analysis plan		
05/09/2005	Completed	[X] Results		
Last Edited	Condition category	[] Individual participant data		
03/08/2009	Circulatory System			

#### Plain English summary of protocol

Not provided at time of registration

#### Study website

http://www.phri.ca

# Contact information

## Type(s)

Scientific

#### Contact name

Dr Eva Lonn

#### Contact details

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# Additional identifiers

**EudraCT/CTIS** number

**IRAS** number

ClinicalTrials.gov number

NCT00106886

#### Secondary identifying numbers

MCT-15428

# Study information

#### Scientific Title

#### Acronym

HOPE-2

#### **Study objectives**

- 1. To evaluate whether prolonged therapy with folic acid and vitamins B6 and B12 compared to placebo reduces the risk of cardiovascular death, myocardial infarction (MI) and stroke (major fatal and non-fatal cardiovascular [CV] events)
- 2. To evaluate the effects of the study intervention on major fatal and non-fatal CV and revascularisation procedures and on total important ischaemic events

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Hamilton Health Sciences Corporation and McMaster University approved on the 17th November 1999.

#### Study design

Randomised controlled 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

Cardiovascular disease, myocardial infarction (MI), stroke, cancer

#### **Interventions**

Combination pill containing: Folic acid 2.5 mg, vitamin B6 50 mg, vitamin B12 1 mg, or placebo

#### **Intervention Type**

#### Supplement

#### Phase

Not Applicable

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

Folic acid, vitamins B6 and B12

#### Primary outcome measure

The composite of cardiovascular death, myocardial infarction (MI) and stroke.

#### Secondary outcome measures

- 1. Total major ischaemic events, including CV death, MI, stroke, hospitalisations for unstable angina and revascularisations
- 2. Total mortality
- 3. Hospitalisation for unstable angina (UA)
- 4. Hospitalisation for congestive heart failure (CHF)
- 5. Revascularisation procedures
- 6. Incident cancer
- 7. Cancer death

#### Overall study start date

01/04/1999

#### Completion date

31/03/2006

# **Eligibility**

#### Key inclusion criteria

- 1. Women and men 55 years of age or over with established CVD and at high risk for future fatal and nonfatal CV events defined as:
- 1.1. Documented coronary artery disease (CAD)
- 1.2. Documented peripheral vascular disease (PVD)
- 1.3. Documented cerebrovascular disease
- 1.4. Diabetes with one of the following additional cardiovascular risk factors:
- 1.4.1. Hypertension (blood pressure [BP] greater than 160 mmHg systolic or greater than 90 mmHg diastolic or on treatment)
- 1.4.2. Total cholesterol greater than 5.2 mmol/l (greater than 200 mg/dl)
- 1.4.3. High density lipoprotein (HDL) cholesterol less than 0.9 mmol/l (3.5 mg/dl)
- 1.4.4. Current cigarette smoker
- 1.4.5. Any evidence of previous vascular disease
- 2. Provision of informed consent

## Participant type(s)

Patient

#### Age group

Senior

#### Sex

Both

#### Target number of participants

5552

#### Key exclusion criteria

- 1. Current use of any vitamin supplements containing folic acid greater than 200  $\mu$ g/day. Patients taking such vitamin supplements can be asked if they agree to discontinue these supplements. If they agree they can be randomised to the study.
- 2. Known previous adverse reactions to folic acid, vitamin B6 or B12
- 3. Planned cardiac, peripheral or cerebrovascular revascularization, defined as a decision taken by the patient and his or her physician(s) to perform surgical or percutaneous transluminal revascularisation within the next 6 months
- 4. Haemodynamically significant primary valvular outflow tract obstruction (e.g. mitral stenosis, asymmetric septal hypertrophy, malfunctioning prosthetic valve)
- 5. Constrictive pericarditis
- 6. Complex congenital heart disease
- 7. Syncopal episodes presumed to be due to uncontrolled life-threatening arrhythmias (asymptomatic arrhythmias including ventricular tachycardia are not exclusion criteria)
- 8. Uncontrolled hypertension
- 9. Cor pulmonale
- 10. Heart transplant recipient
- 11. Other important non-cardiovascular disease(s) expected to limit compliance and/or impact on patients ability to complete the study, such as: history of alcohol or drug abuse, psychiatric disorders, senility, severe physical disability, illnesses including terminal stage cancer and other major systemic illnesses expected to limit the patients ability to comply with the study protocol and to complete the study

#### Date of first enrolment

01/04/1999

#### Date of final enrolment

31/03/2006

# Locations

#### Countries of recruitment

Canada

#### Study participating centre HGH-McMaster Clinic Hamilton

Canada

L8L 2X2

# Sponsor information

#### Organisation

McMaster University (Canada)

#### Sponsor details

Office of the Associate Dean Research McMaster University Faculty of Health Sciences 1200 Main Street West Room HSC-3N8 Hamilton Canada L8N 3Z5

#### Sponsor type

University/education

#### Website

http://www.mcmaster.ca/

#### **ROR**

https://ror.org/02fa3aq29

# Funder(s)

## Funder type

Research organisation

#### **Funder Name**

Canadian Institutes of Health Research (CIHR) (Canada) - http://www.cihr-irsc.gc.ca (ref: MCT-15428)

# **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?
Results article	results	13/04/2006		Yes	No
Results article	results	05/06/2007		Yes	No
Results article	results	01/04/2009		Yes	No