

# Pilot study for CHAOS-Two (Cambridge Heart Anti-Oxidant study: trial with other vitamins)

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|----------------------------------------|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| <b>Submission date</b><br>23/01/2004   | <b>Recruitment status</b><br>No longer recruiting | <input type="checkbox"/> Prospectively registered<br><input type="checkbox"/> Protocol                       |
| <b>Registration date</b><br>23/01/2004 | <b>Overall study status</b><br>Completed          | <input type="checkbox"/> Statistical analysis plan<br><input type="checkbox"/> Results                       |
| <b>Last Edited</b><br>30/04/2018       | <b>Condition category</b><br>Circulatory System   | <input type="checkbox"/> Individual participant data<br><input type="checkbox"/> Record updated in last year |

**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**  
Brown HSR/06/97

## Study information

**Scientific Title**

Pilot study for CHAOS-Two (Cambridge Heart Anti-Oxidant study: trial with other vitamins)

**Acronym**

CHAOS-Two

**Study objectives**

The overall aim of CHAOS-Two is to determine whether folic acid reduces the incidence of myocardial infarction. The principle current hypothesis on which to base expectation of benefit is a well documented effect of folic acid to reduce plasma levels of the amino acid, homocysteine, which has been found in several prospective and case-control studies to be a major risk factor for atherosclerotic diseases. CHAOS-Two should thus provide a test of the homocysteine hypothesis. However, an additional pathway through which folic acid may be beneficial is the so-called salvage pathway to synthesis of the co-factor, tetrahydrobiopterin, required for Nitric Oxide (NO) synthesis. The principle requirement of the pilot study is to permit calculation of numbers required for the main study, using the relative risk of homocysteine in the epidemiological studies, and the average difference after 1 year between homocysteine levels in the folate and placebo groups. The pilot will also establish whether folic acid had the additional action via NO.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Not provided at time of registration

**Primary study design**

Interventional

**Study design**

Randomised placebo controlled trial

**Study type(s)**

Prevention

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

Heart disease

**Interventions**

1. Folate 5 mg
2. Placebo

**Intervention Type**

Other

**Phase**

Not Specified

**Primary outcome(s)**

1. Main Study
  - 1.1. Fatal or non-fatal myocardial infarction.

## 2. Pilot Study

2.1. Percentage of patients with B12 deficiency on entry despite normal Hb and MCV, and patients becoming B12 deficient at follow-ups.

2.2. Percentage change in plasma homocysteine and plasma tetrahydrobiopterin in response to folic acid, and variation in these over one year.

2.3. Compliance with treatment addeddes from rise in rbc folate in active group.

2.4. Estimate of number of eligible patients likely to be recruited annually.

### Key secondary outcome(s)

Not provided at time of registration

### Completion date

01/07/1999

## Eligibility

### Key inclusion criteria

1. Patients admitted for coronary angiograph

2. Stable angina

3. Positive coronary angiogram

### Participant type(s)

Patient

### Healthy volunteers allowed

No

### Age group

Not Specified

### Sex

Not Specified

### Key exclusion criteria

Patients with a macrocytic anaemia (Hb <10, mean cell volume [MCV] >100) will be excluded from the pilot unless their serum B12 is normal. To be revised if indicated by follow-up results of Hb and B12 pilot.

### Date of first enrolment

01/07/1997

### Date of final enrolment

01/07/1999

## Locations

### Countries of recruitment

United Kingdom

England

**Study participating centre**  
**University of Cambridge**  
Cambridge  
United Kingdom  
CB2 2QQ

## **Sponsor information**

**Organisation**  
NHS R&D Regional Programme Register - Department of Health (UK)

## **Funder(s)**

**Funder type**  
Government

**Funder Name**  
NHS Executive Eastern (UK)

## **Results and Publications**

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

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