# A randomised placebo-controlled trial of fixed-dose combination medication in people at raised risk of cardiovascular disease

Published: 20-12-2007 Last updated: 10-08-2024

To measure the efficacy (change in systolic blood pressure and LDL cholesterol) and tolerability of a polypill in individuals with raised risk of a cardiovascular event.

Ethical reviewApproved WMOStatusRecruitment stoppedHealth condition typeCoronary artery disorders

Study type Interventional

# **Summary**

## ID

NL-OMON33869

#### Source

ToetsingOnline

## **Brief title**

PILL pilot

## **Condition**

- Coronary artery disorders
- Arteriosclerosis, stenosis, vascular insufficiency and necrosis

#### Synonym

cardiovascular, hypertension

## Research involving

Human

## **Sponsors and support**

**Primary sponsor:** Universitair Medisch Centrum Utrecht

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Source(s) of monetary or material Support: Ministerie van OC&W

## Intervention

**Keyword:** Cardiovascular, Framingham risk, Poly pill

## **Outcome measures**

## **Primary outcome**

To assess the efficacy (systolic blood pressure, LDL cholesterol) and tolerability (the proportion who withdraw from trial treatment).

## **Secondary outcome**

Treatment adherence (measured by pill count), diastolic blood pressure, total cholesterol, HDL cholesterol, total cholesterol:HDL cholesterol ratio, non HDL cholesterol, triglycerides, frequency of switching to open-label treatment, estimated CVD risk, serious adverse events and all adverse events.

# **Study description**

## **Background summary**

One of the most hotly debated issues in cardiovascular disease (CVD) research is whether a \*polypill\* (a new combination cardiovascular medication containing aspirin and agents to lower blood pressure and cholesterol) can really reduce CVD by three-quarters or more. To assess this reliably will require a long term clinical trial of many thousands of participants. This protocol is for a pilot trial that will assess the efficacy and tolerability of the polypill.

## Study objective

To measure the efficacy (change in systolic blood pressure and LDL cholesterol) and tolerability of a polypill in individuals with raised risk of a cardiovascular event.

## Study design

Randomised, placebo-controlled, parallel-group trial (n=400)

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## Intervention

Eligible individuals willing to participate in the trial will be randomised to 12 weeks treatment with the polypill or to an identical matching placebo:

- \* Polypill: aspirin 75mg, simvastatin 20mg, lisinopril 10mg, hydrochlorothiazide 12.5mg.
- \* Placebo: identical matching placebo.

Both groups will also receive information about smoking cessation (if applicable) and how to follow a healthy heart diet. They will be advised to increase physical activity and lose weight if needed.

## Study burden and risks

## Measurements:

None of the study measures are dangerous. Routine blood samples taken may be associated with some bruising, discomfort and local irritation. There is also a small risk of infection whenever the skin is broken by a needle.

## Medication:

The polypill combination cardiovascular medication will be an unapproved medication. However all the ingredients of the polypill combinations used in the trial are well known medicines with well established efficacy and safety profiles.

Although all the drugs in the polypill have been used for many years there are possible risks that the polypill or placebo may cause side effects. These are generally mild and infrequent and are usually resolved immediately by stopping the medication. Side effects of the components of the polypill can include low blood pressure, dizziness, headache, nausea, mild stomach pain, heartburn, ulceration, abdominal pain, constipation, flatulence, bleeding, gout, cough, fatigue, liver problems, and muscle pain, tenderness or weakness. As with any medication, an allergic reaction is possible such as skin rash, itching, difficulty breathing or swelling of the face, but this is guite rare.

# **Contacts**

#### **Public**

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#### Scientific

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## **Trial sites**

## **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

## Age

Adults (18-64 years) Elderly (65 years and older)

## Inclusion criteria

Adults (> 18 years) with a cardiovascular disease (CVD) risk over 5 years of at least 7.5%, determined by the Framingham risk function (Anderson, 1991) using data on age, gender, blood pressure, total cholesterol, HDL cholesterol, diabetes status and cigarette smoking status.

## **Exclusion criteria**

Clear indication for antiplatelet, blood pressure lowering or cholesterol lowering medications. This includes: current treatment with blood pressure or cholesterol lowering medicines, diabetes mellitus, existing CVD, or individuals with LDL cholesterol, systolic blood pressure or estimated CVD risk values above those recommended for treatment by local guidelines.

# Study design

## Design

Study phase: 2

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Double blinded (masking used)

Control: Placebo

Primary purpose: Treatment

## Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 27-10-2008

Enrollment: 105

Type: Actual

## Medical products/devices used

Product type: Medicine

Brand name: nvt

Generic name: aspirin 75 mg, simvastatin 20 mg, lisinopril 10 mg,

hydrochlorthiazide 12.5 mg

# **Ethics review**

Approved WMO

Date: 20-12-2007

Application type: First submission

Review commission: METC NedMec

Approved WMO

Date: 11-03-2008

Application type: First submission

Review commission: METC NedMec

Approved WMO

Date: 09-09-2008

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 25-11-2008

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 21-04-2009

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 12-05-2009

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 04-08-2009

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 22-09-2009

Application type: Amendment

Review commission: METC NedMec

# **Study registrations**

# Followed up by the following (possibly more current) registration

No registrations found.

## Other (possibly less up-to-date) registrations in this register

No registrations found.

## In other registers

Register ID

Other ACTRN012607000099426 EudraCT EUCTR2007-002466-35-NL

CCMO NL20733.041.07