# Cost-effectiveness of an active withdrawal of medication policy versus usual care in patients currently treated for hypertension and/or hypercholesterolemia: a cluster-randomised controlled non-inferiority trial in general practice

Published: 11-06-2012 Last updated: 26-04-2024

The general aim of this project is to evaluate the effectiveness, safety and costs of a medication withdrawal policy compared to usual care in general practice in patients who are currently treated for hypertension and/or hypercholesterolemia, but...

**Ethical review** Approved WMO **Status** Recruitment stopped

**Health condition type** Cardiac disorders, signs and symptoms NEC

**Study type** Interventional

## **Summary**

#### ID

NL-OMON39214

Source

ToetsingOnline

**Brief title** ECSTATIC

## Condition

- Cardiac disorders, signs and symptoms NEC
- Central nervous system vascular disorders
- Vascular hypertensive disorders

Synonym

high blood pressure, high cholesterol, hypercholesterolemia, Hypertension

Research involving

Human

Sponsors and support

**Primary sponsor:** Zorgonderzoek Nederland (ZON)

Source(s) of monetary or material Support: ZonMw

Intervention

**Keyword:** Cardiovascular disease, Guidelines, Medication withdrawal, Prevention

**Outcome measures** 

**Primary outcome** 

The primary outcome measure is the change in 10-year CVD risk according to the

risk table from the guideline CVRM 2011.

**Secondary outcome** 

Secondary outcome measures are quality of life (EQ-5D + VAS), (CVD related)

mortality, cardiovascular events and side effects related to withdrawal of

medication or use of medication. Other outcome measures are related to

modifiable risk factors, such as smoking behaviour (smoking behaviour

questionnaire), physical activity (SQUASH), alcohol consumption, eating habits

(Standard nutrition questionnaire of Dutch common health services), systolic

blood pressure (SBP), ratio of total cholesterol/HDL-cholesterol (TC/HDL ratio)

in blood, Body Mass Index (body weight and height), and waist circumference.

**Study description** 

**Background summary** 

2 - Cost-effectiveness of an active withdrawal of medication policy versus usual car ... 8-05-2025

In the Netherlands, cardiovascular disease (CVD) is the leading cause of mortality in women, the second leading cause in man, and is associated with loss of quality of life and high costs for the society (www.nationaalkompas.nl). Primary health care plays an important role in the primary prevention of CVD.

In 2006, the former guidelines Hypertension and Cholesterol of the Dutch College for General Practitioners (Nederlands Huisarts Genootschap (NHG)) were replaced by a combined guideline Cardiovascular Risk Management (CVRM), which is recently revised (2011). At the time, the transition of management of patients treated for hypertension and/or hypercholesterolemia according to the former guidelines Hypertension and Cholesterol into the guideline Cardiovascular Risk Management, was not part of this new guideline. The former guidelines recommended lower thresholds for the start of preventive medication in patients. Therefore, there are probably many patients unnecessarily treated with antihypertensive medication and/or lipid-lowering drugs according to the guideline CVRM 2011. This study will evaluate a medication withdrawal policy in these patients and will be carried out in collaboration with the Dutch College of General Practitioners (NHG). The NHG facilitates implementation of the study findings into routine clinical practice.

## Study objective

The general aim of this project is to evaluate the effectiveness, safety and costs of a medication withdrawal policy compared to usual care in general practice in patients who are currently treated for hypertension and/or hypercholesterolemia, but do not need pharmacological therapy according to the guideline CVRM 2011

## Study design

This study employs a cluster randomised controlled non-inferiority trial in general practice, using a complete-double-consent design. The primary endpoint for effectiveness has been chosen at 12 months and for safety and costs at 24 months.

#### Intervention

The general practitioners (GPs) of the practices in the intervention group will actively withdraw medication in patients who do not need pharmacological treatment according to the guideline CVRM 2011.

GPs will receive a half-day training program, consisting of a general introduction about the guideline CVRM 2011, with special attention to primary prevention of CVD, and withdrawal of medication in patients without an indication for medication according to this guideline.

#### Study burden and risks

Patients will be re-evaluated by a blinded research nurse after randomisation has taken place. Baseline measurements are performed simultaneously. After re-evaluation and baseline measurements patients are asked to fill in a 45-minute questionnaire package. The same package is completed at 3 and 12 months. In addition, after 6 and 24 months they are asked to complete a cost-questionnaire and EQ-5D + VAS.

After re-evaluation and baseline measurements, the research nurse will examine the patients at 3, and 12 months, which will take about 30 minutes. Every examination a venous blood sample will be taken.

In general practices allocated to the usual care group, patients will be given the usual care.

The GPs in the intervention group will actively withdraw medication in the participating patients. Based on a previous report of a relapse of high blood pressure in the case of withdrawal(2;7-10), an individual follow-up will take place of 1-3 visits, which involves registration of side effects of withdrawal and measuring blood pressure, and serum lipid levels.

## **Contacts**

#### **Public**

Zorgonderzoek Nederland (ZON)

Laan van Nieuw Oost-Indië 334 Den Haag 2593CE NL

### **Scientific**

Zorgonderzoek Nederland (ZON)

Laan van Nieuw Oost-Indië 334 Den Haag 2593CE NL

## **Trial sites**

## **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

## Age

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

### Inclusion criteria

- Age 40 to 70 years;
- Prescription of antihypertensive medication and/or lipid-lowering drugs for hypertension and/or hypercholesterolemia during the last 12 months (using ATC codes: C02, C03, C07, C08, C09, C10).

## **Exclusion criteria**

- Cardiovascular disease (ICPC codes: K74, K75, K76, K89, K90.03, K91, K92.01 and K99.01);
- Use of platelet aggregation inhibitors (heparin excluded) (ATC code: B01AC);
- Use of antihypertensive medication for another reason than prevention of CVD;
- Familial hypercholesterolemia/lipidemia (ICPC code: T93.04);
- Patients with a current SBP >180 mmHg, or a SBP >180 mmHg before the start of medication;
- Patients with a current TC/HDL ratio >8, or a TC/HDL ratio >8 before the start of medication;
- Patients with a 10-year CVD risk >16%
- 10-year CVD risk of 10-16%, based on the 2011 risk table, in combination with at least one additional major risk-increasing factor;
- 10-year CVD risk of 10-16%, based on the 2011 risk table, in combination with two or more additional minor risk-increasing factors;
- 10-year CVD risk of 10-16%, based on the 2011 risk table, in combination with one additional minor risk-increasing factor and an SBP >140 mmHg and/or LDL >2.5 mmol/L.

# Study design

## Design

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Open (masking not used)

**Primary purpose:** Prevention

## Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 07-11-2012

Enrollment: 464

Type: Actual

## **Ethics review**

Approved WMO

Date: 11-06-2012

Application type: First submission

Review commission: METC Leids Universitair Medisch Centrum (Leiden)

Approved WMO

Date: 16-10-2012

Application type: Amendment

Review commission: METC Leids Universitair Medisch Centrum (Leiden)

Approved WMO

Date: 08-11-2012

Application type: Amendment

Review commission: METC Leids Universitair Medisch Centrum (Leiden)

Approved WMO

Date: 12-12-2012

Application type: Amendment

Review commission: METC Leids Universitair Medisch Centrum (Leiden)

Approved WMO

Date: 08-01-2013

Application type: Amendment

Review commission: METC Leids Universitair Medisch Centrum (Leiden)

Approved WMO

Date: 31-01-2013

Application type: Amendment

Review commission: METC Leids Universitair Medisch Centrum (Leiden)

Approved WMO

Date: 03-04-2013

Application type: Amendment

Review commission: METC Leids Universitair Medisch Centrum (Leiden)

Approved WMO

Date: 01-05-2013

Application type: Amendment

Review commission: METC Leids Universitair Medisch Centrum (Leiden)

Approved WMO

Date: 21-05-2013

Application type: Amendment

Review commission: METC Leids Universitair Medisch Centrum (Leiden)

Approved WMO

Date: 01-07-2013

Application type: Amendment

Review commission: METC Leids Universitair Medisch Centrum (Leiden)

Approved WMO

Date: 02-09-2013

Application type: Amendment

Review commission: METC Leids Universitair Medisch Centrum (Leiden)

Approved WMO

Date: 13-11-2013

Application type: Amendment

Review commission: METC Leids Universitair Medisch Centrum (Leiden)

Approved WMO

Date: 09-12-2015

Application type: Amendment

Review commission: METC Leids Universitair Medisch Centrum (Leiden)

# **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

CCMO NL40551.058.12