# Multi-center cluster-randomised clinical trial to evaluate the efficacy of an intervention to improve anti-hypertensive medication adherence among patients with uncontrolled hypertension and high cardiovascular risk

| Submission date               | Recruitment status No longer recruiting         | <ul><li>Prospectively registered</li></ul> |  |  |
|-------------------------------|---|--|--|--|
| 24/08/2004                    |   | ☐ Protocol                                 |  |  |
| Registration date             | Overall study status                            | Statistical analysis plan                  |  |  |
| 11/10/2004                    | Completed                                       | [X] Results                                |  |  |
| <b>Last Edited</b> 02/12/2010 | <b>Condition category</b><br>Circulatory System | [] Individual participant data             |  |  |

# Plain English summary of protocol

Not provided at time of registration

# Contact information

# Type(s)

Scientific

#### Contact name

Dr Manel Pladevall

#### Contact details

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# Additional identifiers

**EudraCT/CTIS** number

**IRAS** number

ClinicalTrials.gov number

# Secondary identifying numbers

N/A

# Study information

#### Scientific Title

# Acronym

**COM 99** 

# **Study objectives**

Added as of 01/12/2008:

The proposed study intervention to improve adherence to antihypertensive medication will improve both adherence to antihypertensive medication and the degree of blood pressure control. The better blood pressure control in the intervention group will result in a reduction of cardiovascular events.

Please note that, as of 01/12/2008, the start and end dates of this trial have been updated from 10/04/2000 and 05/05/2002 to 01/01/2000 and 01/12/2005, respectively.

# Ethics approval required

Old ethics approval format

# Ethics approval(s)

Institutional Review Board of the Hospital General de Vic (Spain), approved on 02/06/1999.

# Study design

Randomised controlled trial

# Primary study design

Interventional

# Secondary study design

Randomised controlled trial

# Study setting(s)

Not specified

# Study type(s)

**Not Specified** 

# Participant information sheet

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

Arterial hypertension

#### Interventions

Usual clinical practice will be continued in patients assigned to the control group. The intervention to improve adherence to antihypertensive medications in the treatment group will

include multi-level components (behavioral, cognitive, and social support). The clinical guidelines published by the World Health Organization (WHO) and the International Society of Hypertension (ISH) will be used to classify patients by their cardiovascular risk. The trial will be actively monitored to perform quality data assurance as well as external auditing. Outcomes: Adherence to medications will be measured in both the control and intervention group using an electronically monitored pill container (EDEM®), which registers the date and time a pill is removed from the container. Blood pressure will be registered at each visit with a validated semiautomatic

sphygmomanometer (OMRON 705-CP). Primary outcomes will include blood pressure, adherence levels, and cardiovascular morbidity and mortality. Expected follow-up time is 5 years.

# Intervention Type

Other

#### **Phase**

**Not Specified** 

# Primary outcome measure

1. Mean SBP and DBP values obtained during office visit (measured at each visit with a semiautomatic sphygmomanometer (OMRON 705-CP). Main analysis will include blood pressure data until visit 3 (6 months).

# Secondary outcome measures

- 1. Medication adherence according to MEMS (medication event monitoring system) device results. Medication adherence data will include information on the first 6 months (visit 3). Apart from recording the date and time each time the container is opened, the information from the electronic device may be downloaded to a computer for further statistical analysis.
- 2. Time elapsed until the first cardiovascular morbidity or mortality event during follow-up (expected follow-up duration: 5 years).
- 2.1. Fatal events ascribable to cardiovascular pathology. the following will be included: sudden heart failure; fatal myocardial infarction; death during/post percutaneous transluminal coronary angioplasty (PTCA) or aortocoronary bypass; death due to congestive heart failure; fatal CVA. 2.2. Non-fatal events ascribable to cardiovascular pathology. the following will be included: debutant congestive heart failure requiring hospitalization or chronic congestive heart failure requiring hospitalization; non-fatal acute myocardial infarction, as verified by a ST-segment peak in the ECG and/or typical enzyme pattern; emergency thrombolytic treatment/fibrinolytic treatment and/or emergency PTCA/aortocoronary bypass to prevent extensive myocardial infarction, as verified by a ST-segment peak in the ECG and/or typical enzyme pattern; CVA verified by CAT or hospital recordings; angina diagnosed with positive treadmill test results; routine PTCA/aortocoronary bypass; unstable angina requiring hospitalization; silent myocardial infarction detected during the study and not present in the ECGs prior to the beginning of the study; terminal renal insufficiency, impaired renal function.

Overall study start date 01/01/2000

Completion date 01/12/2005

# **Eligibility**

## Key inclusion criteria

900 patients, aged 50 or older, presenting non-controlled systolic and/or diastolic hypertension, elevated cardiovascular risk (ten-year probability of a cardiovascular event ≥30%).
90 physicians from hospitals and primary care centers will be randomly allocated to the intervention or control group.

# Participant type(s)

Patient

# Age group

Adult

#### Sex

Both

# Target number of participants

900

# Key exclusion criteria

- 1. Participation in any investigational clinical trial within the past 3 months.
- 2. Incapacity or unwillingness to sign the informed consent.

#### Date of first enrolment

01/01/2000

#### Date of final enrolment

01/12/2005

# Locations

## Countries of recruitment

Spain

United States of America

# Study participating centre Center for Health Services Research - Henry Ford Health System

Detroit United States of America MI 48202

# Sponsor information

# Organisation

Osona Foundation for Research and Health Education (Fundació dOsona per a la Recerca i l Educació Sanitàries [FORES]) (Spain)

# Sponsor details

C/Francesc Pla Vic Spain 08500 +34 937027710 fores@hgv.es

# Sponsor type

Research organisation

#### Website

http://www.foresosona.org/

# Funder(s)

# Funder type

Government

#### **Funder Name**

Instituto de Salud Carlos III -Fondo de Investigación Sanitaria (Spanish Ministry of Health) (FIS00 /0045-01 and FIS00/0045-02)

#### **Funder Name**

Catalan Agency for Health Technology Assessment and Research (AATM 02/24/98)

## **Funder Name**

Novartis (COM99)

## Alternative Name(s)

Novartis AG, Novartis International AG

## **Funding Body Type**

Government organisation

## **Funding Body Subtype**

For-profit companies (industry)

## Location

Switzerland

## Funder Name

Almirall Prodesfarma (COM99)

## Funder Name

Aventis (COM99)

# **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 | 21/09/2010   |            | Yes            | No              |