

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### study of the effects of Atenolol, Enalapril and Hydrochlorothiazid on the Hypertension stage II in patients with hypertension

#### Protocol summary

##### Summary

Hypertension is one of the most important and common health problems in societies. Hypertension is often asymptomatic and can be simply treated if HTN is not treated, it can result in serious morbidity and mortality. Varieties of drugs are available for treatment of HTN Including: Diuretics, beta bulkers, blockers of calcium channel, angiotensin-converting enzyme inhibitors, angiotensin receptor antagonists, alpha bulkers and arterial dilators. This research was performed to evaluate the efficacy of some of these drugs on the hypertension. This may help to choose an appropriate medication for the treatment of hypertension stage II. 150 patients with hypertension who were not under antihypertensive treatment and did not Contraindications for use Hydrochlorothiazide, Enalapril and Atenolol were randomly allocated into three groups. The first group received Atenolol 50 mg daily, The second group hydrochlorothiazide 50 mg daily and The third group Enalapril 5 mg two daily. After three weeks blood pressure of patients was measured.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT2012110511371N1**

Registration date: **2013-01-31, 1391/11/12**

Registration timing: **retrospective**

Last update:

Update count: **0**

##### Registration date

2013-01-31, 1391/11/12

##### Registrant information

##### Name

Bita Shahbazzadegan

##### Name of organization / entity

Ardabil University of Medical Sciences

##### Country

Iran (Islamic Republic of)

##### Phone

+98 45 1551 2007

##### Email address

b.shahbaz@arums.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

Ardabil University of Medical Sciences

##### Expected recruitment start date

2006-03-21, 1385/01/01

##### Expected recruitment end date

2007-03-21, 1386/01/01

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

study of the effects of Atenolol, Enalapril and Hydrochlorothiazid on the Hypertension stage II in patients with hypertension

##### Public title

comparative of the effects of Atenolol, Enalapril and Hydrochlorothiazid

##### Purpose

Other

##### Inclusion/Exclusion criteria

Inclusion criteria: All patients with hypertension stage II referred to Buali Hospital in Ardabil; without medications of hypertension; without renal disease (Cr> 1.5); without electrolyte imbalances; no contraindications for use atenolol (asthma, heart block, bradycardia, hypotension); no contraindications for use hydrochlorothiazide

(hyperuricemia, initial Hypraldstrvnyism; no contraindications for use enalapril (allergy, renal failure); wishing to participate in the study

#### Age

No age limit

#### Gender

Both

#### Phase

N/A

#### Groups that have been masked

No information

#### Sample size

Target sample size: **150**

#### Randomization (investigator's opinion)

Randomized

#### Randomization description

#### Blinding (investigator's opinion)

Not blinded

#### Blinding description

#### Placebo

Not used

#### Assignment

Parallel

#### Other design features

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Ardabil University of Medical Sciences

##### Street address

Ardabil. University street

##### City

Ardabil

##### Postal code

#### Approval date

2006-09-23, 1385/07/01

#### Ethics committee reference number

0264

## Health conditions studied

### 1

#### Description of health condition studied

Hypertension

#### ICD-10 code

I11.9

#### ICD-10 code description

Hypertensive heart disease without (congestive) heart failure

## Primary outcomes

### 1

#### Description

hypertension

#### Timepoint

Before the experiment, three weeks after intervention

#### Method of measurement

Mm Hg, using a mercury manometer

## Secondary outcomes

empty

## Intervention groups

### 1

#### Description

The first group were given atenolol 50mg once daily (three weeks).

#### Category

Treatment - Drugs

### 2

#### Description

The second group enalapril 5mg every 12 hours (three weeks).

#### Category

Treatment - Drugs

### 3

#### Description

The third group Hydrochlorothiazide 50mg once daily (three weeks).

#### Category

Treatment - Drugs

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Heart Clinic of Bootali Hospital

##### Full name of responsible person

Behzad Babapour

##### Street address

Ardabil University of Medical Sciences

##### City

Ardabil

## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

Ardabil University of Medical Sciences

##### Full name of responsible person

Behzad Babapour

**Street address**

Ardabil-University street

**City**

Ardabil

**Grant name****Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

**Title of funding source**

Ardabil University of Medical Sciences

**Proportion provided by this source**

100

**Public or private sector***empty***Domestic or foreign origin***empty***Category of foreign source of funding***empty***Country of origin****Type of organization providing the funding***empty***Person responsible for general inquiries****Contact****Name of organization / entity**

Ardabil University of Medical Sciences

**Full name of responsible person**

Behzad Babapour

**Position**

Assistant professor of cardiology

**Other areas of specialty/work****Street address**

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**Web page address****Sharing plan****Deidentified Individual Participant Data Set (IPD)***empty***Study Protocol***empty***Statistical Analysis Plan***empty***Informed Consent Form***empty***Clinical Study Report***empty***Analytic Code***empty***Data Dictionary***empty*