

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

**A randomized, open label, two treatments, two periods, two sequence, single dose, crossover, bioequivalence study of Rosuvastatin 20mg of Sobhan Darou Pharm Co., IRAN and Crestor 20 mg in 24 healthy adult subjects under fasting condition**

### Protocol summary

#### Study aim

To characterize the rate and extent of bioavailability of test in comparison of reference product after single dose administration in healthy subjects under fasting condition. - To assess the bioequivalence of test formulation (Rosuvastatin 20mg tablet of Sobhan Darou Pharm Co.) with reference product (Crestor 20mg tablet ) by means of AUC<sub>0-t</sub> and C<sub>max</sub> (using pharmacokinetic & statistical software). - Safety and tolerability evaluation of test product in comparison with reference in subjects (Recording signs of side effects in each period of the study).

#### Design

A randomized, open label, two treatments, two periods, single dose, crossover, bioequivalence study of Rosuvastatin 20mg tablet of Sobhan Darou Pharm Co., IRAN in comparison of Crestor 20mg tablet of Astra-Zeneca in 24 healthy subjects under fasting condition

#### Settings and conduct

1- 24 healthy subjects enroll in this project. Volunteers provide written informed consent. 2- A single dose of 2\*20 mg rosuvastatin will administer, in each study period. 3-The Blood samples collect before and at 1.0, 2.0, 3.0, 4.0, 4.5, 5.0, 6.0, 8.0, 10.0, 24.0 & 48.0 hr. post-dose. 4- The treatment phases (test & reference products) separate by a washout period of at least 7 days.

#### Participants/Inclusion and exclusion criteria

Main Inclusion criteria: Healthy subjects aged between 18 -50 years old and weighted between 50 - 100 kg\\ Main exclusion criteria: Clinically relevant deviations from normal; Donation a unit of blood or participated in another clinical trial within the last three months; History of drug or alcohol abuse; Used any medication within 7-14 days before the first treatment; History of allergic to statins

#### Intervention groups

Intervention: Single dose of 2 tablets of Rosuvastatin 20mg of Sobhan Darou Pharm Co. Control: Single dose of 2 tablets of Crestor 20mg of Astra-Zeneca

#### Main outcome variables

Plasma concentration of rosuvastatin

### General information

#### Reason for update

#### Acronym

#### IRCT registration information

IRCT registration number: **IRCT20190706044111N15**

Registration date: **2020-02-23, 1398/12/04**

Registration timing: **retrospective**

Last update: **2020-02-23, 1398/12/04**

Update count: **0**

#### Registration date

2020-02-23, 1398/12/04

#### Registrant information

##### Name

Ladan Tayebi

##### Name of organization / entity

Pars Biopharmacy Research Co.

##### Country

Iran (Islamic Republic of)

##### Phone

+98 21 8895 6061

##### Email address

l.tayebi@parsbiopharmacy.com

#### Recruitment status

**Recruitment complete**

#### Funding source

**Expected recruitment start date**

2019-04-21, 1398/02/01

**Expected recruitment end date**

2020-02-20, 1398/12/01

**Actual recruitment start date**

2019-11-14, 1398/08/23

**Actual recruitment end date**

2019-11-29, 1398/09/08

**Trial completion date**

2019-11-29, 1398/09/08

**Scientific title**

A randomized, open label, two treatments, two periods, two sequence, single dose, crossover, bioequivalence study of Rosuvastatin 20mg of Sobhan Darou Pharm Co., IRAN and Crestor 20 mg in 24 healthy adult subjects under fasting condition

**Public title**

Bioequivalence study of Rosuvastatin 20mg of Sobhan Darou Pharm Co.

**Purpose**

Other

**Inclusion/Exclusion criteria****Inclusion criteria:**

- Aged between 18 - 50 years - Body weight between 50 - 100 kg - Having good health on the basis of medical history and physical & clinical examination - Understand the procedures and give written informed consent

**Exclusion criteria:**

Subject showed clinically relevant deviations from normal in physical examination (BMI less than 18 or more than 25, ... ) Subject had undergone surgery of the gastro-intestinal tract Subject had donated a unit of blood or participated in another clinical trial, within the last three months before the first treatment. Subject had a history of drug or alcohol abuse. Subject who smokes more than 10 cigarettes per day. Subject had used any prescription medication within 14 days, or any non-prescription medication within 7 days, before the first treatment. Subject had a history of allergic to statins

**Age**

From **18 years** old to **50 years** old

**Gender**

Both

**Phase**

Bioequivalence

**Groups that have been masked**

*No information*

**Sample size**

Target sample size: **24**

More than 1 sample in each individual

Number of samples in each individual: **2**

Each volunteer, 2 times take medicine in the study. One time test product and the other time reference product with at least one week wash-out period.

Actual sample size reached: **24**

More than 1 sample in each individual

Actual sample size in each individual: **2**

Each volunteer, 2 times took medicine in the study. One time test product and the other time reference product with at least one week wash-out period.

**Randomization (investigator's opinion)**

Randomized

**Randomization description**

Using Excel software, each subject will be randomly assigned to one of the two sequence AB or BA in a balanced manner.

**Blinding (investigator's opinion)**

Not blinded

**Blinding description****Placebo**

Not used

**Assignment**

Crossover

**Other design features****Secondary Ids**

empty

**Ethics committees****1****Ethics committee****Name of ethics committee**

Ethicc committee of Shahid Beheshti University of Medical Sciences

**Street address**

Velenjak. 7th Floor, Bldg No.2 SBUMS, Arabi Ave

**City**

Tehran

**Province**

Tehran

**Postal code**

1985717443

**Approval date**

2017-02-21, 1395/12/03

**Ethics committee reference number**

IR.SBMU.REC.1395.48

**Health conditions studied****1****Description of health condition studied**

Hyperlipidemia

**ICD-10 code**

E78.5

**ICD-10 code description**

Hyperlipidemia, unspecified

**Primary outcomes****1****Description**

Plasma concentration of Rosuvastatin

**Timepoint**

At 0 (before dosing), 1.0, 2.0, 3.0, 4.0, 4.5, 5.0, 6.0, 7.0, 8.0, 10.0, 24.0 & 48.0 hr. post-dose

**Method of measurement**

High Performance Liquid Chromatography (HPLC)

## Secondary outcomes

empty

## Intervention groups

### 1

#### Description

Intervention group: Single dose of 2 tablets of Rosuvastatin 20mg of Sobhan Darou Pharm Co., IRAN

#### Category

Other

### 2

#### Description

Control group: Single dose of 2 tablets of Crestor 20mg tablet of Astra-Zeneca

#### Category

Other

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Core Research Lab. of ZAUMS

##### Full name of responsible person

Gholamreza Komeili

##### Street address

Emam Ali Hospital, Salamat Blv., Khalij-e-Fars Highway

##### City

Zahedan

##### Province

Sistan-va-Balouchestan

##### Postal code

9816743111

##### Phone

+98 54 3329 5664

##### Fax

+98 54 3329 5665

##### Email

crl@zaums.ac.ir

##### Web page address

<http://crl.zaums.ac.ir/>

## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

Sobhan Darou Pharm. Co.

##### Full name of responsible person

Ali sharif Alam

##### Street address

No. 295, West Dr. Fatemi St.

##### City

Tehran

#### Province

Tehran

#### Postal code

۱۴۱۱۸۵۳۶۹۵

#### Phone

+98 21 6656 8181

#### Fax

+98 21 6694 8553

#### Email

[info@sobhandarou.com](mailto:info@sobhandarou.com)

#### Web page address

<http://www.sobhandarou.com/>

#### Grant name

#### Grant code / Reference number

#### Is the source of funding the same sponsor organization/entity?

Yes

#### Title of funding source

Sobhan Darou Pharm. Co.

#### Proportion provided by this source

100

#### Public or private sector

Private

#### Domestic or foreign origin

Domestic

#### Category of foreign source of funding

*empty*

#### Country of origin

#### Type of organization providing the funding

Industry

## Person responsible for general inquiries

#### Contact

##### Name of organization / entity

Pars Biopharmacy Research Co.

##### Full name of responsible person

Ladan Tayebi

##### Position

Managing Director

##### Latest degree

Medical doctor

##### Other areas of specialty/work

Medical Pharmacy

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1st floor, Saeidi Dd end, Felestin Ave.

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##### Email

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## Person responsible for scientific

## **inquiries**

### **Contact**

**Name of organization / entity**

Pars Biopharmacy Research Co.

**Full name of responsible person**

Ladan Tayebi

**Position**

Managing Director

**Latest degree**

Medical doctor

**Other areas of specialty/work**

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**Web page address**

## **Sharing plan**

**Deidentified Individual Participant Data Set (IPD)**

Undecided - It is not yet known if there will be a plan to make this available

**Study Protocol**

Undecided - It is not yet known if there will be a plan to make this available

**Statistical Analysis Plan**

Undecided - It is not yet known if there will be a plan to make this available

**Informed Consent Form**

Undecided - It is not yet known if there will be a plan to make this available

**Clinical Study Report**

Undecided - It is not yet known if there will be a plan to make this available

**Analytic Code**

Undecided - It is not yet known if there will be a plan to make this available

**Data Dictionary**

Undecided - It is not yet known if there will be a plan to make this available

## **Person responsible for updating data**

### **Contact**

**Name of organization / entity**

Pars Biopharmacy Research Co.

**Full name of responsible person**

Ladan Tayebi

**Position**

Managing Director

**Latest degree**

Medical doctor