

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### Bioequivalence study of Tramadole 100 mg Tablets manufactured by Shahr Daru pharmaceutical company on 24 healthy volunteers and comparing pharmacokinetics results with Reference Tablets

#### Protocol summary

##### Study aim

Comparing pharmacokinetics parameters of Tramadol 100 mg Tablets manufactured by Shahr daru pharmaceutical company on 24 healthy volunteers and comparing pharmacokinetics results with Reference Tablets

##### Design

Bioequivalence study insists of one 24 healthy volunteers group. This group itself randomly divided to two 12 volunteers sub-groups. The first sub-groups administrated reference drug and the second sub-groups administrated generic or test drugs. The bioequivalence study is performed as cross over double blind within 1-2 weeks.

##### Settings and conduct

Bioequivalence Tramadol 100 mg study will be performed under physician since 7 Am until 7 Pm. This study is carried out as a cross over double blind investigation. The blind person include volunteers, administrator and analyst.

##### Participants/Inclusion and exclusion criteria

Acceptance criteria: 1- Healthy liver 2- Healthy kidney 3- Volunteers should not be too fat or too thin and their weight index should be in the appropriate range  
Rejection criteria: 1- Smokers and pregnancy.

##### Intervention groups

Intervention consists of administration of one Tramadol 100 mg tablet of Shahr daru company as TEST PRODUCT to the first twelve group in this cross-study and simultaneously administration of tablets as REFERENCE PRODUCT to the second twelve group as control group.

##### Main outcome variables

Plasma concentration of Tramadol 100 mg is the main consequence, its concentration at Tmax reaches about 350 ng/mL and its measurement range is from 10ng / mL to 1000ng / mL.

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20200513047423N7**

Registration date: **2022-04-06, 1401/01/17**

Registration timing: **prospective**

Last update: **2022-04-06, 1401/01/17**

Update count: **0**

##### Registration date

2022-04-06, 1401/01/17

##### Registrant information

##### Name

Amir Mehdizadeh

##### Name of organization / entity

Ofogh pajo

##### Country

Iran (Islamic Republic of)

##### Phone

+98 21 6673 8727

##### Email address

ofoghfarmed.lab@gmail.com

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2022-05-27, 1401/03/06

##### Expected recruitment end date

2022-06-03, 1401/03/13

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

### Scientific title

Bioequivalence study of Tramadol 100 mg Tablets manufactured by Shahr Daru pharmaceutical company on 24 healthy volunteers and comparing pharmacokinetics results with Reference Tablets

### Public title

Bioequivalence study of Tramadol 100 mg Tablets

### Purpose

Other

### Inclusion/Exclusion criteria

#### Inclusion criteria:

Healthy liver Healthy kidney Volunteers should not be too fat or too thin and their weight index should be in the appropriate range

#### Exclusion criteria:

Out of age ranges smoking pregnancy

### Age

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

### Gender

Both

### Phase

Bioequivalence

### Groups that have been masked

- Participant
- Data analyser

### Sample size

Target sample size: **24**

More than 1 sample in each individual

Number of samples in each individual: **1**

Each volunteers has been administrated one reference drug and next time test drugs

### Randomization (investigator's opinion)

Randomized

### Randomization description

We designate to 24 healthy volunteers one number between 1 and 24. Extraction of 12 numbers is carried out using <https://kitset.ir/numbers/random#random-number-form>. These first 12 random numbers create the first group.

### Blinding (investigator's opinion)

Double blinded

### Blinding description

The main investigator creates a table using randomization and divides 24 healthy volunteer in 2 groups which only he knows the details of group. Test and reference drugs are packaged in special envelopes that administrator and volunteers are blinded regarding to the kind of drugs. Volunteers, administrator (health care professional) and analyst are blinded regarding to reference and test drugs.

### Placebo

Not used

### Assignment

Crossover

### Other design features

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Ethics committee of school and Nursing & midwifery-shahid beheshti university of medical

##### Street address

No.65, Razi Ave, Enghelab Ave

##### City

Tehran

##### Province

Tehran

##### Postal code

1133713144

#### Approval date

2022-02-22, 1400/12/03

#### Ethics committee reference number

IR.SBMU.PHARMACY.REC.1400.312

## Health conditions studied

### 1

#### Description of health condition studied

Bioequivalence Tramadol 100 mg

#### ICD-10 code

#### ICD-10 code description

## Primary outcomes

### 1

#### Description

plasma concentration changing after administration of Tramadol 100 mg tablet. Plasma concentration of Tramadol at Tmax reaches about 350 ng/mL and its measurement range is from 10ng / mL to 1000ng / mL

#### Timepoint

Initial blood sampling is performed before drug administration to obtain blank plasma chromatogram of each volunteers. Hence the Tmax of Tramadol is between 1 and 2 hours, so it is needed to have 5 blood sampling before Tmax. This period of time is called absorption phase. In the elimination phase (after Tmax) blood sampling carry out each hours.

#### Method of measurement

In this study, the variable is plasma concentration of Tramadol. High performance liquid chromatography is used to determine the concentration of Tramadol in plasma.

## Secondary outcomes

empty

## Intervention groups

1

### Description

Intervention group: One Tramadole 100 mg tablet manufactured by Shahr daru company (Test drug) is administrated to each of 12 healthy volunteer of group 1

### Category

Behavior

## Recruitment centers

1

### Recruitment center

#### Name of recruitment center

Ofoqh pharmed

#### Full name of responsible person

Dr Amir mehdizadeh

#### Street address

No. 65, Razi Ave, Enqhelab Ave

#### City

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#### Province

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#### Postal code

1133713144

#### Phone

+98 21 6673 8727

#### Email

a\_mehdizadeh@gmail.com

## Sponsors / Funding sources

1

### Sponsor

#### Name of organization / entity

Shahrdaru Pharmaceutical Co.

#### Full name of responsible person

Mr. Mohammad Sepasi Ashtiani

#### Street address

No. 1, Corner of Shateri Alley, Jomhuri Koi Saleh St.,  
Hafez St., Tehran

#### City

Tehran

#### Province

Tehran

#### Postal code

1135653133

#### Phone

+98 21 6670 4814

#### Email

info@shahredaru.com

### Grant name

### Grant code / Reference number

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

Yes

### Title of funding source

Shahrdaru Pharmaceutical 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

Other

## Person responsible for general inquiries

### Contact

#### Name of organization / entity

Ofoqh pharmed labratory

#### Full name of responsible person

Dr Amir mehdizadeh

#### Position

Responsible pharmacist

#### Latest degree

Ph.D.

#### Other areas of specialty/work

Medical Pharmacy

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#### Email

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## Person responsible for scientific inquiries

### Contact

#### Name of organization / entity

Shahid Beheshti University of Medical Sciences

#### Full name of responsible person

Dr Farzad kobarfard

#### Position

Professor

#### Latest degree

Ph.D.

#### Other areas of specialty/work

Medical Pharmacy

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**Email**

farzadkf@yahoo.com

**Person responsible for updating data****Contact****Name of organization / entity**

Ofogh pharmed

**Full name of responsible person**

Dr Amir mehdizadeh

**Position**

Responsible pharmacist

**Latest degree**

Ph.D.

**Other areas of specialty/work**

Medical Pharmacy

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**Province**

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**Postal code**

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**Email**

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

Yes - There is a plan to make this available

**Study Protocol**

Yes - There is a plan to make this available

**Statistical Analysis Plan**

Yes - There is a plan to make this available

**Informed Consent Form**

Yes - There is a plan to make this available

**Clinical Study Report**

Yes - There is 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

**Title and more details about the data/document**

Demography tables of volunteers including group 1 and 2 have been shared in bioequivalence report.

**When the data will become available and for how long**

The results of bioequivalence study of Tramadol tablets will be shared after accepting by Iranian food and drug organization.

**To whom data/document is available**

The results of bioequivalence study of Tramadol tablets will be accessed by expert by Iranian food and drug organization and financial supporter

**Under which criteria data/document could be used**

To promotion of result of investigation, the results will be shared with eager

**From where data/document is obtainable**

1-Iranian food and drug organization 2- Ofogh pharmed research laboratory

**What processes are involved for a request to access data/document**

To complied of educational filed of eager to result of investigation.

**Comments**