Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 2026

Population pharmacokinetics of propofol in patients undergoing surgical procedure

Protocol summary

Summary

This study intends to characterize propofol pharmacokinetics parameters that it may leads to specifying the ideal dose. Inclusion criteria: ASAclass-1; Age between 15-55 years. Exclusion criteria: ASAclass-2; Addiction; Liver, kidney, cardiac disease; Sensivity for egg; Hemodynamic instability. 30 patients presenting for general anesthesia were enrolled. They were equally divided into two groups: A (50µg/kg/min) and B (100ug/kg/min). All patients were administered same drugs in anesthesia induction with doses according to their weights and followed by a constant infusion rate of propofol. If possible, blood samples were collected at 0, 2, 5, 10, 15, 30, 45, 60 minutes during infusion and then 0, 2, 5, 10, 15, 30, 45, 60, 120, 180 minutes after the stop of infusion. Propofol concentration in plasma were measured using HPLC method..

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2013063012365N2**
Registration date: **2015-01-01, 1393/10/11**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2015-01-01, 1393/10/11

Registrant information

Name

Saeed Rezaee

Name of organization / entity

Jondishpour university of medical science, faculty of pharmacy

Country

Iran (Islamic Republic of)

Phone

+98 916 301 9067

Email address

s.rezaee@ajums.ac.ir

Recruitment status

Recruitment complete

Funding source

Ahvaz Jundishapur University of Medical Sciences

Expected recruitment start date

2012-10-22, 1391/08/01

Expected recruitment end date

2013-06-21, 1392/03/31

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Population pharmacokinetics of propofol in patients undergoing surgical procedure

Public title

Population pharmacokinetics of propofol infusion

Purpose

Other

Inclusion/Exclusion criteria

Inclusion criteria: ASAclass-1; Age between15-55 years. Exclusion criteria: ASAclass-2; Addiction; Liver, kidney, cardiac disease; Sensivity for egg; Hemodynamic instability.

Age

From **17 years** old to **50 years** old

Gender

Both

Phase

3

Groups that have been masked
No information
Sample size
Target sample size: **30**
Randomization (investigator's opinion)
Randomized
Randomization description
Blinding (investigator's opinion)
Single blinded
Blinding description
Placebo
Not used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ahvaz Jundishapur University of Medical Sciences
Street address
Ahvaz Jundishapur University of Medical Sciences, Golestan avenue, Ahvaz, Iran
City
Ahvaz
Postal code
Approval date
2012-07-21, 1391/04/31
Ethics committee reference number
ETH-542

Health conditions studied

1

Description of health condition studied
General anesthesia
ICD-10 code
Y 48.2
ICD-10 code description
Other and unspecified general anaesthetics

Primary outcomes

1

Description
Plasma concentration of propofol
Timepoint
If possible blood samples are collected at 0, 2, 5, 10, 15, 30, 45, 60 minutes during infusion and then 0, 2, 5, 10, 15, 30, 45, 60, 120, 180 minutes after the end of infusion.
Method of measurement
Blood sampling with the volume of 2ml and analyzing the concentration with HPLC

2

Description
Weight
Timepoint
Before transfering to operation room
Method of measurement
Scale

3

Description
Height
Timepoint
Before transfering to operation room
Method of measurement
Meter

4

Description
Age
Timepoint
Before transfering to operation room
Method of measurement
Match with birth certificate

5

Description
Sex
Timepoint
Before transfering to operation room
Method of measurement
Match with birth certificate

Secondary outcomes

empty

Intervention groups

1

Description
In A group, propofol is infused with infusion rate equals to 50µg/kg/min.
Category
Treatment - Drugs

2

Description
In B group, propofol is infused with infusion rate equals to 100µg/kg/min.
Category
Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center
Imam Khomeini hospital

Full name of responsible person
Dr Mohammad Reza Pipelzadeh

Street address
Imam Khomeini hospital, Azadegan street, Ahvaz, Iran

City
Ahvaz

2

Recruitment center

Name of recruitment center
Golestan hospital

Full name of responsible person
Dr Mohammad Reza Pipelzadeh

Street address
Golestan hospital, Golestan street, Ahvaz, Iran

City
Ahvaz

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Ahvaz Jundishapour University of Medical Sciences

Full name of responsible person
Dr Nader Saki

Street address
Ahvaz Jundishapur University of Medical Sciences, Golestan avenue, Ahvaz, Iran

City
Ahvaz

Grant name

Grant code / Reference number

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

Title of funding source
Ahvaz Jundishapour 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
School of pharmacy, Ahvaz Jundishapur University of Medical Sciences

Full name of responsible person
Dr Saeed Rezaee

Position
PhD of pharmaceutics, Assistant professor

Other areas of specialty/work

Street address
School of pharmacy, Ahvaz Jundishapur University of Medical Sciences, Golestan avenue, Ahvaz, Iran

City
Ahvaz

Postal code

Phone
+98 916 301 9067

Fax

Email
s.rezaee@ajums.ac.ir; s.rezaee@live.com

Web page address

Person responsible for scientific inquiries

Contact

Name of organization / entity
School of pharmacy, Ahvaz Jundishapur University of Medical Sciences

Full name of responsible person
Dr Saeed Rezaee

Position
PhD of pharmaceutics, Assistant professor

Other areas of specialty/work

Street address
School of pharmacy, Ahvaz Jundishapur of Medical Sciences, Golestan avenue, Ahvaz, Iran

City
Ahvaz

Postal code

Phone
+98 916 301 9067

Fax

Email
s.rezaee@ajums.ac.ir; s.rezaee@live.com

Web page address

Person responsible for updating data

Contact

Name of organization / entity
School of pharmacy, Ahvaz Jundishapur University of Medical Sciences

Full name of responsible person
Dr Saeed Rezaee

Position
PhD of pharmaceutics, Assistant professor

Other areas of specialty/work

Street address
School of pharmacy, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran

City
Ahvaz

Postal code

Phone
+98 916 301 9067

Fax

Email

s.rezaee@ajums.ac.ir; s.rezaee@live.com

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