

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

13 Jul 2026

**A randomised, double-blind, single-dose, active-controlled, crossover study in healthy subjects to demonstrate pharmacokinetic equivalence of Altebrel™ (produced by AryoGen Pharmed) and Enbrel:registered:(produced by Amgen Company)**

### Protocol summary

#### Summary

This is a single-dose trial with one administration of each product (Altebrel™ and Enbrel®). Each subject will participate in two treatment periods, and will be randomised to receive Altebrel™ or Enbrel® in a crossover fashion. The subjects will be hospitalized in the trial site for 24 hours after dosing for serial pharmacokinetic sampling. The subjects will be requested to visit the trial site 36, 48, 60, 72, 96, 120, 144, 168, 216, 312 and 480 h after dose administration for blood sampling and evaluation of safety variable and tolerability.

### General information

#### Acronym

#### IRCT registration information

IRCT registration number: **IRCT2016033021315N4**

Registration date: **2017-06-06, 1396/03/16**

Registration timing: **retrospective**

Last update:

Update count: **0**

#### Registration date

2017-06-06, 1396/03/16

#### Registrant information

##### Name

Nassim Anjidan

##### Name of organization / entity

Orchid Pharmed

##### Country

Iran (Islamic Republic of)

##### Phone

+98 21 4347 3000

#### Email address

amini@orchidpharmed.com

#### Recruitment status

**Recruitment complete**

#### Funding source

AryoGen Pharmed company

#### Expected recruitment start date

2016-12-04, 1395/09/14

#### Expected recruitment end date

2017-03-15, 1395/12/25

#### Actual recruitment start date

empty

#### Actual recruitment end date

empty

#### Trial completion date

empty

#### Scientific title

A randomised, double-blind, single-dose, active-controlled, crossover study in healthy subjects to demonstrate pharmacokinetic equivalence of Altebrel™ (produced by AryoGen Pharmed) and Enbrel:registered:(produced by Amgen Company)

#### Public title

Comparison between Altebrel™ and Enbrel®

#### Purpose

Treatment

#### Inclusion/Exclusion criteria

Inclusion: 1)Provide written IC to participate in the trial and to comply with the trial procedures. 2)Take written informed consent to participate in the trial and to abide by the trial restrictions. 3)Be healthy male between the ages of 18 and 55 years. Healthy is defined as no clinically relevant abnormalities identified by a detailed medical history, complete physical examination including blood pressure and heart rate measurement, 12 lead

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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>ECG and clinical laboratory tests. 4)Have a body mass index between 20.0 and 30 kg/m<sup>2</sup>, inclusive 5)Have Chest X-ray with no evidence of current, active TB or previous (inactive) TB, general infections, heart failure, malignancy, or other clinically significant abnormalities taken at Screening or within 24 weeks prior to Day 1 and read by a qualified radiologist. Exclusion: 1.Being doubtful about their availability to complete the trial. 2.history and/or current presence of clinical significant atopic allergy, hypersensitivity or allergic reactions, also including known or suspected clinically relevant drug hypersensitivity to any components of the test and reference IMP formulation or comparable drugs. 3.Active or latent Tuberculosis or who have a history of Tuberculosis. 4.history of invasive systemic fungal infections or other opportunistic infections 5.systemic or local infection, a known risk for developing sepsis and/or known active inflammatory process 6.serious infection associated with hospitalisation and/or which required intravenous antibiotics 7.history of and/or current cardiac disease 8.Have received live vaccine(s) within 30 days prior to Screening or who will require live vaccine(s) between Screening and the final study visit. 9.Intake medication with a half-life &gt; 24 h within 1 month or 5 half-lives of the medication prior to the first administration of IMP. 10.Positive pre-study Hepatitis B surface antigen or positive Hepatitis C antibody. A positive test for HIV antibody. 11.History of CNS demyelinating disorders in family (MS) 12.Have a history of smoking &gt;10 cigarettes per day</p> | <p>Tehran University of medical science<br/> <b>Street address</b><br/> District 6, Poursina St.<br/> <b>City</b><br/> Tehran<br/> <b>Postal code</b><br/> <b>Approval date</b><br/> 2017-04-18, 1396/01/29<br/> <b>Ethics committee reference number</b><br/> IR.TUMS.VCR.REC.1396.2089</p>                                                                                                                                                                                                                                                                                  |
| <p><b>Age</b><br/> From <b>18 years</b> old to <b>55 years</b> old<br/> <b>Gender</b><br/> Male<br/> <b>Phase</b><br/> 1<br/> <b>Groups that have been masked</b><br/> <i>No information</i><br/> <b>Sample size</b><br/> Target sample size: <b>34</b><br/> <b>Randomization (investigator's opinion)</b><br/> Randomized<br/> <b>Randomization description</b><br/> <b>Blinding (investigator's opinion)</b><br/> Double blinded<br/> <b>Blinding description</b><br/> <b>Placebo</b><br/> Not used<br/> <b>Assignment</b><br/> Crossover<br/> <b>Other design features</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <p><b>Health conditions studied</b></p> <p><b>1</b><br/> <b>Description of health condition studied</b><br/> rheumatoid arthritis<br/> <b>ICD-10 code</b><br/> M05, M06.9<br/> <b>ICD-10 code description</b><br/> Seropositive rheumatoid arthritis, Rheumatoid arthritis, unspecified</p>                                                                                                                                                                                                                                                                                   |
| <p><b>Secondary Ids</b><br/> empty</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <p><b>Primary outcomes</b></p> <p><b>1</b><br/> <b>Description</b><br/> Cmax of etanercept<br/> <b>Timepoint</b><br/> 0, 6, 12, 24, 36, 48, 60, 72, 96, 120, 144, 168, 216, 312 and 480 hours<br/> <b>Method of measurement</b><br/> ELISA</p>                                                                                                                                                                                                                                                                                                                                |
| <p><b>Ethics committees</b></p> <p><b>1</b><br/> <b>Ethics committee</b><br/> Name of ethics committee</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <p><b>2</b><br/> <b>Description</b><br/> AUC infinite of etanercept<br/> <b>Timepoint</b><br/> 0, 6, 12, 24, 36, 48, 60, 72, 96, 120, 144, 168, 216, 312 and 480 hours<br/> <b>Method of measurement</b><br/> Calculation</p> <p><b>Secondary outcomes</b></p> <p><b>1</b><br/> <b>Description</b><br/> AUClast of etanercept<br/> <b>Timepoint</b><br/> 0, 6, 12, 24, 36, 48, 60, 72, 96, 120, 144, 168, 216, 312 and 480 hours<br/> <b>Method of measurement</b><br/> calculation</p> <p><b>2</b><br/> <b>Description</b><br/> tmax of etanercept<br/> <b>Timepoint</b></p> |

0, 6, 12, 24, 36, 48, 60, 72, 96, 120, 144, 168, 216, 312  
and 480 hours

**Method of measurement**

calculation

**3**

**Description**

t½ of etanercept

**Timepoint**

0, 6, 12, 24, 36, 48, 60, 72, 96, 120, 144, 168, 216, 312  
and 480 hours

**Method of measurement**

calculation

**4**

**Description**

Volume of distribution (VD) of etanercept

**Timepoint**

0, 6, 12, 24, 36, 48, 60, 72, 96, 120, 144, 168, 216, 312  
and 480 hours

**Method of measurement**

calculation

**5**

**Description**

Clearance (CL) of etanercept

**Timepoint**

0, 6, 12, 24, 36, 48, 60, 72, 96, 120, 144, 168, 216, 312  
and 480 hours

**Method of measurement**

calculation

**6**

**Description**

Adverse events (AE)

**Timepoint**

0, 6, 12, 24, 36, 48, 60, 72, 96, 120, 144, 168, 216, 312  
and 480 hours

**Method of measurement**

physical Examination

**Intervention groups**

**1**

**Description**

a prefilled syringe dose of AltebreITM (25 mg/0.5mL) to  
be administered as a single subcutaneous injection

**Category**

Treatment - Drugs

**2**

**Description**

a prefilled syringe dose of Enbrel® (25 mg/0.51mL) to be  
administered as a single subcutaneous injection

**Category**

Treatment - Drugs

**Recruitment centers**

**1**

**Recruitment center**

**Name of recruitment center**

Orchid Pharmed Company

**Full name of responsible person**

Somayeh Amini

**Street address**

4th floor, No. 74, Across Faculty of Food Technology  
Shahid Beheshti University, Shahid Hafezi Street,  
Farahzadi Blvd., Shahrake Gharb

**City**

Tehran

**Sponsors / Funding sources**

**1**

**Sponsor**

**Name of organization / entity**

AryoGen Pharmed Company

**Full name of responsible person**

Somayeh Amini

**Street address**

no 2, Emad Khorassani D.D, Derakhti St, Dadman  
Blvd, Shahrake Gharb

**City**

Tehran

**Grant name**

**Grant code / Reference number**

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

Yes

**Title of funding source**

AryoGen Pharmed Company

**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**

Orchid Pharmed Company

**Full name of responsible person**

Somayeh Amini

**Position**

MedicalDepartment Manager/Pharm.D

**Other areas of specialty/work**

**Street address**

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**Web page address**

## Person responsible for scientific inquiries

**Contact**  
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Rheumatology Research Center, Doctor Shariati Hospital  
**Full name of responsible person**  
Ahmadreza Jamshidi  
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Head of Rheumatology center Department/MD, PhD of Rheumatology  
**Other areas of specialty/work**  
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## Person responsible for updating data

**Contact**  
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Somayeh Amini  
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**Other areas of specialty/work**  
**Street address**  
no 2, Emad khorassani D.D, Derakhti St, Dadman Blvd, shahrake Gharb  
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**Fax**  
**Email**  
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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*