

Clinical Trial Protocol

Iranian Registry of Clinical Trials

16 Sep 2026

Efficacy and safety of platelet-rich plasma (PRP) in the treatment of male pattern hair loss (androgenetic alopecia): a pilot, phase 2 clinical trial

Protocol summary

Summary

The aim of our study is to evaluate the efficacy and safety of PRP (Platelet Rich Plasma) in patients with androgenic alopecia. 15 male patients with androgenic alopecia with the age of 18-60 years old will enrolled in our study after evaluated by dermatologist. The volunteers with the Hamilton-Norwood grade of III-VI with the history of alopecia for more than 6 months without any anti hair loss treatment during the past six months will be selected. The participants should have no systemic diseases which interfering with the hair growth, hematologic or autoimmune disorders. The platelet counts and serum albumin level should be >100000 and >2.5 g/dl respectively. All participants were informed of the risks, benefits, and possible complications of the treatment, and each participant provided investigators with a written informed consent. The lab tests for CBC and serum albumin will be evaluated. By digital cameras (Nikon D300s®,Tokoyo, Japan) investigators will take standard photographs. A trichogram will be performed in 5 areas including right frontal, left frontal, right temporo-parietal, left temporo-parietal and vertex. Then investigators will take photos of an area with the lowest hair density marked with tattoo on the scalp and using a digital photographic hair analyzer (KC Triple Scope®, KC Technology co, Korea) by a 150x lens to measure hair density and hair diameter. The treatment courses are 5 sessions every two weeks. In each session 8cc of venous blood will draw and after processing by the routine kit protocol, the PRP will immediately injected in scalp with the intervals of 1-2cm. patients will evaluated 3 months after the last session.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2014110919870N1**

Registration date: **2014-12-15, 1393/09/24**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2014-12-15, 1393/09/24

Registrant information

Name

Mansour Nassiri Kashani

Name of organization / entity

Center for Research and Training in Skin diseases and Leprosy

Country

Iran (Islamic Republic of)

Phone

+98 21 8897 2220

Email address

nasirika@sina.tums.ac.ir

Recruitment status

Recruitment complete

Funding source

1.Mehrashkar company2.Vice Chancellor for research of Tehran University of Medical Sciences

Expected recruitment start date

2014-11-20, 1393/08/29

Expected recruitment end date

2015-03-20, 1393/12/29

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Efficacy and safety of platelet-rich plasma (PRP) in the treatment of male pattern hair loss (androgenetic alopecia): a pilot, phase 2 clinical trial

Public title

Efficacy and safety of platelet-rich plasma (PRP) in the treatment of male pattern hair loss

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: Androgenetic alopecia based on a clinical diagnosis made by a dermatologist; male subjects; 18-50 years old; hair loss longer than 6 months; Hamilton-Norwood grade III-VI; Willingness to participate in the study and giving written informed consent.
Exclusion criteria: Any topical or systemic treatment for hair loss in the past 6 months; Scalp infection Malignant disease; Receiving chemotherapy or any immunosuppressive medication Auto-immune disease (Hashimoto, rheumatoid arthritis, lupus,); Use of any growth factor containing medication; Hemoglobin level below 10, thrombocytopenia (or platelet count below 100,000); Serum albumin below 2.5 g/dl; History of vascular surgery in the past three months; Addiction to oral or intravenous narcotics; Any systemic disease interacting with hair growth; History of hematologic disorders; Patient currently enrolled or previously enrolled (within last 3 months) in another clinical trial

Age

From **18 years** old to **60 years** old

Gender

Male

Phase

2

Groups that have been masked

No information

Sample size

Target sample size:

Randomization (investigator's opinion)

N/A

Randomization description**Blinding (investigator's opinion)**

Not blinded

Blinding description**Placebo**

Not used

Assignment

Single

Other design features**Secondary Ids**

empty

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

Research Ethics Committee of Tehran University of Medical Sciences

Street address

Qouds st, keshavarz blv

City

Tehran

Postal code**Approval date**

2014-11-09, 1393/08/18

Ethics committee reference number

81633613

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

androgenic alopecia

ICD-10 code

L64

ICD-10 code description

Androgenic alopecia Incl.: male-pattern baldness

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

increase hair density

Timepoint

after 10 weeks

Method of measurement

trichography

Secondary outcomes**1****Description**

increase hair thickness

Timepoint

after 10 weeks

Method of measurement

trichography

Intervention groups**1****Description**

use platelet rich plasma in treatment of androgenetic alopecia in male patients

Category

Treatment - Other

Recruitment centers**1****Recruitment center****Name of recruitment center**

Center for Research and Training in Skin diseases and Leprosy

Full name of responsible person**Street address**

415, Taleghani street, Tehran, Iran

City

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Mehrashkar company

Full name of responsible person

Mehdi Dehghani

Street address

11 khazan st, West Fatemi

City

Tehran

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Mehrashkar 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

Center for Research and Training in Skin diseases and Leprosy

Full name of responsible person

Saman Ahmad Nasrollahi

Position

Pharmacologist/Assistant prof

Other areas of specialty/work

Street address

415, Taleghani street, Tehran, Iran

City

Tehran

Postal code

Phone

+98 21 8897 2220

Fax

Email

samannasrol@gmail.com

Web page address

Person responsible for scientific inquiries

Contact

Name of organization / entity

Center for Research and Training in Skin diseases and Leprosy

Full name of responsible person

Azin Ayatollahi

Position

Dermatologist

Other areas of specialty/work

Street address

415, Taleghani street, Tehran, Iran

City

Tehran

Postal code

Phone

+98 21 8897 2220

Fax

Email

azinay@gmail.com

Web page address

Person responsible for updating data

Contact

Name of organization / entity

Center for Research and Training in Skin diseases and Leprosy

Full name of responsible person

Azin Ayatollahi

Position

Dermatologist

Other areas of specialty/work

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415, Taleghani street, Tehran, Iran

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Email

azinay@gmail.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