

Clinical Trial Protocol

Iranian Registry of Clinical Trials

02 Aug 2026

Assessment of autologous Platelet-Rich Plasma Injections in the Treatment of male pattern Androgenetic Alopecia

Protocol summary

Summary

This study is for assessment of PRP local injection in hair loss treatment among males suffering from androgenetic alopecia between grade 3v to 5 according Hamilton-Norwood scaling system. Written informed consent was obtained. Volunteers were selected from patients in Mashhad Quaem hospital's skin clinic in 2015. In every session, 50cc of blood volume was taken from brachial vein and then in sterile condition for separating autologous platelets sent to stem cell lab in Mashhad college of medicine that has specific clean room. After preparation, approximately 5cc of PRP was obtained. This concentrate has fourfold to eightfold more platelet and growth factors. Immediately after preparation, this platelet concentrate is injected by dermatology resident with local anaesthesia and intradermally. This procedure is performed for 3 sessions with 4 weeks interval. Digital photography (with 20 cm distance) and dermatoscopy images in constant locations (determining with an equal distance from a point exactly upside eyebrows in midpupill line to vertex area in midline) is performed in weeks 0, 4, 8 and 12 as well as 3 months after last injection.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2016021526563N1**

Registration date: **2016-05-29, 1395/03/09**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2016-05-29, 1395/03/09

Registrant information

Name

Mohammad Javad Yazdanpanah

Name of organization / entity

Mashhad University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 51 3801 2851

Email address

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Recruitment status

Recruitment complete

Funding source

Vice chancellor for research of Mashhad University of Medical Sciences

Expected recruitment start date

2015-07-23, 1394/05/01

Expected recruitment end date

2016-02-20, 1394/12/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Assessment of autologous Platelet-Rich Plasma Injections in the Treatment of male pattern Androgenetic Alopecia

Public title

Effect of PRP on male pattern hair loss

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: patients include males with male pattern androgenetic alopecia who had acquiescence for participation in this study and their baldness is grade 3v to 5 according to Hamilton-Norwood scaling system. Exclusion criteria: using minoxidil or finasteride in the

last 6 months; using any other systemic or topical supplementary drugs for hair growth stimulation in the last 6 months; using drugs that can induce hair loss (eg. Retinoids, heavy metals, antithyroids, anticonvulsants, betablockers and ...); specific diseases like thyroid disease, collagen vascular disease ...; positive history for any kind of cancer or skin cancer and chemotherapy; any other kind of alopecia (scaring alopecia, alopecia areata, ...); steroid therapy; coagulation disorders, acquisition of aspirin, ticlopidine or other anticoagulative drugs; dialysis patients and platelet disorders (thrombocytopenia); smoker and alcoholic persons and malnutrition; and anytime patient wants to leave the study.

Age

From **28 years** old to **60 years** old

Gender

Male

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **20**

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**

Ethics committee of Mashhad University of Medical Sciences

Street address

Central building of Mashhad University of Medical Sciences(Ghorshi), Daneshgah 16, Daneshgah Street

City

Mashhad

Postal code**Approval date**

2015-01-21, 1393/11/01

Ethics committee reference number

930092

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

Male androgenetic alopecia

ICD-10 code

L64

ICD-10 code description

Androgenic alopecia

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

Hair loss improvement and stimulation of hair growth

Timepoint

Measurement on weeks 0, 4, 8, 12 and 3 months after last injection

Method of measurement

Average hair diameter and hair count in unit surface

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

Side effects

Timepoint

At the end of treatment (3 months after last injection)

Method of measurement

Effectiveness and side effects include local and systemic reactions according to patients and investigator observations

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

injection of Platelet-Rich Plasma (PRP) 3 times in 4 weeks.

Category

Treatment - Other

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

Dermatology clinic, Quaem Hospital

Full name of responsible person

Dr Mohammad Javad Yazdanpanah

Street address

Department of dermatology, Quaem hospital, Ahmad Abad Street

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice chancellor for research of Mashhad University of Medical Sciences

Full name of responsible person

Dr Mohsen Tafaghodi

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Central Building of Mashhad University of Medical Sciences (Ghorshi), Daneshgah 16, Daneshgah street

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Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

Vice chancellor for research of Mashhad 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**

Mashhad University of Medical Sciences

Full name of responsible person

Dr Mohammad Javad Yazdanpanah

Position

Professor of dermatology

Other areas of specialty/work**Street address**

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Bachelor of Biology

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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