

Clinical Trial Protocol

Iranian Registry of Clinical Trials

16 Sep 2026

comparisson of the effectiveness of intrauterine infusion of platelet-rich plasma versus no intervention on pregnancy rates in infertile women with repeated implantation failure

Protocol summary

Study aim

Determination the effect of platelet-rich plasma on pregnancy rates in infertile women with repeated implantation failure.

Design

Randomized, not blind, double center, phase 2.

Settings and conduct

Ninety infertile women with repeated implantation failure who attending in infertility department in Imam khomaii Hospital, Mazandaran University of Medical Sciences, Sari, Iran, divided in two groups based on random numbers table. Patients and physician became aware and informed from intervention.

Participants/Inclusion and exclusion criteria

Inclusion criteria: Women aged 20 to 40 years, uterine tubal patency, prior three or more failed in vitro fertilization cycles. Exclusion criteria: Body mass index over the 30 kilogram per meter square, hematologic, immunologic, hormonal, genetic and renal disorders.

Intervention groups

Intervention 1: Intrauterine infusion of platelet-rich plasma 48 hours before embryo transfer. Intervention 2: Freeze embryo transfer.

Main outcome variables

Clinical pregnancy rate

General information

Reason for update

Acronym

PRP

IRCT registration information

IRCT registration number: **IRCT20160815029374N2**

Registration date: **2018-01-16, 1396/10/26**

Registration timing: **registered_while_recruiting**

Last update: **2018-01-16, 1396/10/26**

Update count: **0**

Registration date

2018-01-16, 1396/10/26

Registrant information

Name

Marzieh Zamaniyan

Name of organization / entity

Mazandaran University of Medical Sciences, Sari, Iran.

Country

Iran (Islamic Republic of)

Phone

+98 11 3336 5724

Email address

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2017-09-23, 1396/07/01

Expected recruitment end date

2018-05-21, 1397/02/31

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

comparisson of the effectiveness of intrauterine infusion of platelet-rich plasma versus no intervention on pregnancy rates in infertile women with repeated implantation failure

Public title

Effect of PRP on pregnancy

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:
 Women aged 20-40 year Body mass index lower than 30
 Kilogram per square meter Normal
 husterosalpingography At least prior three failed in vitro
 fertilization failure

Exclusion criteria:
 Hematologic disorders (blood cancer, thrombocytopenia)
 Immunologic disorders (anti-phospholipid syndrome,
 thrombophilia) Hormonal disorders (diabetes, thyroid,
 hyperprolactinemia) Chromosomal anomalies and
 genetics (hereditary or congenital) Renal failure

Age
 From **20 years** old to **40 years** old

Gender
 Female

Phase
 2

Groups that have been masked
No information

Sample size
 Target sample size: **90**

Randomization (investigator's opinion)
 Randomized

Randomization description
 Randomization is done based on the random number
 table on the day of progesterone initiation in freeze
 embryo transfer cycle by one nurse. In fact, only the
 nurse knows which patient is under the PRP infusion, or
 not. Physicians do not know which patient is undergoing
 PRP, but patients know about the intervention due to
 informed consent, therefore, it is not possible to
 concealed the patients in this group.

Blinding (investigator's opinion)
 Not blinded

Blinding description

Placebo
 Not used

Assignment
 Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Mazandaran University of Medical
 Sciences

Street address

No. 5, third floor, Cancer ward, Imam Khomeini
 Hospital, Amir Mazandarani Ave, Diabetes Research
 Center.

City

Sari

Province

Mazandaran

Postal code

3313148166

Approval date

2017-05-27, 1396/03/06

Ethics committee reference number

IR.MAZUMS.IMAMHOSPITAL.REC.96.2911

Health conditions studied

1

Description of health condition studied

Diseases of the genitourinary system

ICD-10 code

N97; N98

ICD-10 code description

Female infertility; Complications associated with artificial
 fertilization

Primary outcomes

1

Description

Clinical pregnancy rate

Timepoint

Forth weeks after embryo transfer

Method of measurement

Questionnaire

Secondary outcomes

1

Description

Miscarriage rates

Timepoint

Till twenty weeks after embryo transfer

Method of measurement

Questionnaire

2

Description

Implantation rate

Timepoint

Forth weeks after embryo transfer

Method of measurement

Questionnaire

Intervention groups

1

Description

Intervention group: Intrauterine infusion of 0.5 CC of
 autologus platelet-rich plasma (has 4-6 times platelet
 concentration rather than peripheral blood by IUI
 catheter(Takvin company, Iran) 48 hours before freeze
 embryo transfer.

Category

Treatment - Other

2**Description**

Control group: Transfer of three Freeze embryos by chateter (Cook, USA) under ultrasonographic guidance.

Category

Treatment - Other

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

Imam Khomaini Hospital

Full name of responsible person

Marzieh Zamaniyan

Street address

No. 1, Ground floor, Infertility ward, Imam Khomeini Hospital, Amir Mazandarani Ave,

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Province

Mazandaran

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3313148166

Phone

+98 13 3366 1700

Email

marziehzamaniyan@gmail.com

Web page address**2****Recruitment center****Name of recruitment center**

Mother Clinic

Full name of responsible person

Sepideh Peyvandi

Street address

NO. 4. Second floor, White tower, Infront of the 15 Khordad, Farhang Ave

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Sari

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Mazandaran

Postal code

1763644456

Phone

+98 11 4443 0507

Email

dr_peyvandi@yahoo.com

Sponsors / Funding sources**1****Sponsor****Name of organization / entity**

Vice chancellor of Mazandaran University of Medical Science.

Full name of responsible person

Bahar Farshidfar

Street address

NO.2, Third floor, Department of Research and Technology, Teachers' Square

City

Sari

Province

Mazandaran

Postal code

4815733971

Phone

+98 11 3304 4001

Fax**Email**

Blackart_Blackart@yahoo.com

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

Yes

Title of funding source

Vice chancellor of Mazandaran University of Medical Science.

Proportion provided by this source

100

Public or private sector

Public

Domestic or foreign origin

Domestic

Category of foreign source of funding*empty***Country of origin****Type of organization providing the funding**

Academic

Person responsible for general inquiries**Contact****Name of organization / entity**

Mazandaran University of Medical Sciences

Full name of responsible person

Marzieh Zamaniyan

Position

Assistant professor

Latest degree

Medical doctor

Other areas of specialty/work

Reproductive Health

Street address

No. 1, First floor, Infertility ward, Imam Khomeini Hospital, Amir Mazandarani Ave,

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marziehzamaniyan@gmail.com

Web page address

Person responsible for scientific inquiries

Contact

Name of organization / entity

Mazandaran University of Medical Sciences

Full name of responsible person

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Position

Assistant professor

Latest degree

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Other areas of specialty/work

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Person responsible for updating data

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Name of organization / entity

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Full name of responsible person

Marzieh Zamaniyan

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Assistant professor

Latest degree

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Email

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Web page address

Sharing plan

Deidentified Individual Participant Data Set (IPD)

Undecided - It is not yet known if there will be a plan to make this available

Study Protocol

Undecided - It is not yet known if there will be a plan to make this available

Statistical Analysis Plan

Not applicable

Informed Consent Form

Undecided - It is not yet known if there will be a plan to make this available

Clinical Study Report

Not applicable

Analytic Code

Not applicable

Data Dictionary

Not applicable