

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

09 Jul 2026

### Study of effects of vitamin D on IL2,IL4, IL-6 ,IL-17A,CYP27A1 and CYP27B1 genes expression in multiple sclerosis patients

#### Protocol summary

##### Summary

The aim of this research is to investigate vitamin D effects on the expression of IL2,IL4,IL6,IL17A,CYP27A1 and CYP27B1 in multiple sclerosis patients . Therefore,45 relapsing-remitting multiple sclerosis patients with serum level vitamin D (80NG/ML) are selected and after taking their blood samples ,are administrated to the patients 50000IU of vitamin D per week for 8 weeks .The patients' blood samples are taken after 8 weeks again .The expression of target genes will measure before and after treatment at mRNA level by Real Time PCR . Inclusion criteria: relapsing-remitting multiple sclerosis patients; MS patients with vitamin D deficiency (<80ng/ml). Exclusion criteria: patients treated with vitamin D supplements; progressive MS; relapsed patients, psychiatric patients and the patients who are taken steroid drugs.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT2014081818840N1**

Registration date: **2014-09-28, 1393/07/06**

Registration timing: **retrospective**

Last update:

Update count: **0**

##### Registration date

2014-09-28, 1393/07/06

##### Registrant information

###### Name

Bahar Naghavi Gargari

###### Name of organization / entity

Modares University

###### Country

Iran (Islamic Republic of)

##### Phone

+98 21 8288 4477

##### Email address

bahar.naghavigargari@modares.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

Tarbiat Modares university

##### Expected recruitment start date

2012-09-23, 1391/07/02

##### Expected recruitment end date

2013-09-24, 1392/07/02

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Study of effects of vitamin D on IL2,IL4, IL-6 ,IL-17A,CYP27A1 and CYP27B1 genes expression in multiple sclerosis patients

##### Public title

Study of effects of vitamin D on some genes expression in multiple sclerosis patients

##### Purpose

Treatment

##### Inclusion/Exclusion criteria

Inclusion criteria: relapsing-remitting multiple sclerosis patients; MS patients with vitamin D deficiency (<80ng/ml). Exclusion criteria: patients treated with vitamin D supplements; progressive MS; relapsed patients, psychiatric patients and the patients who are taken steroid drugs.

##### Age

From **22 years** old to **52 years** old

##### Gender

Both

**Phase**  
N/A

**Groups that have been masked**  
*No information*

**Sample size**  
Target sample size: **45**

**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 Tarbiat Modares University

**Street address**  
school of Medicine, Tarbiat Modares University,  
Nasrbrigs, Tehran, Islamic Republic of Iran

**City**  
Tehran

**Postal code**

**Approval date**  
2014-05-31, 1393/03/10

**Ethics committee reference number**  
52/1632/d

## Health conditions studied

### 1

#### Description of health condition studied

Multiple sclerosis

**ICD-10 code**  
G35

**ICD-10 code description**  
Multiple sclerosis

## Primary outcomes

### 1

**Description**  
expression of IL2 gene

**Timepoint**  
before vitamin D treatment and two month after  
treatment

**Method of measurement**  
taking of blood from patients and measurment of mRNA

level

## Secondary outcomes

### 1

**Description**  
expression of IL4 ,IL6,IL17A,CYP27A1 and CYP27B1

**Timepoint**  
before vitamin D treatment and two month after  
treatment

**Method of measurement**  
taking of blood from patients and measurement of mRNA  
level

## Intervention groups

### 1

**Description**  
vitamin D, 50000 IU /a week , 8 weeks

**Category**  
Treatment - Drugs

## Recruitment centers

### 1

#### Recruitment center

**Name of recruitment center**  
MS Research Center

**Full name of responsible person**  
Dr. Roozita Doosti

**Street address**

**City**  
Terhran

## Sponsors / Funding sources

### 1

#### Sponsor

**Name of organization / entity**  
Vice Chancellor forTarbiat Modares University of  
Tehran

**Full name of responsible person**  
Dr. Mehrdad Behmanesh

**Street address**  
Genetic Department, Faculty of biological Science,  
Tarbiat Modares University, Tehran, Iran

**City**  
Tehran

#### Grant name

#### Grant code / Reference number

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

#### Title of funding source

Vice Chancellor forTarbiat Modares University of Tehran

#### 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*

Tarbiat Modares University, Tehran, Iran

**City**

Tehran

**Postal code****Phone**

+98 21 8288 4451

**Fax****Email**

behmanesh@modares.ac.ir

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

Tarbiat Modares University

**Full name of responsible person**

Bahar Naghavi Gargari

**Position**

phd student

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

Genetic Department, Faculty of Biological Science,  
Tarbiat Modares university

**City**

Tehran

**Postal code****Phone**

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bahar.naghavigargari@modares.ac.ir

**Web page address****Person responsible for scientific inquiries****Contact****Name of organization / entity**

Tarbiat Modares University of Tehran

**Full name of responsible person**

Dr.Mehrdad Behmanesh

**Position**

Associate

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

Genetic Department, Faculty of Biological Science,

**Person responsible for updating data****Contact****Name of organization / entity**

Tehran University of Medical Sciences

**Full name of responsible person**

Dr.Mohamad Ali Sahraian

**Position**

Specialist

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

MS Research Center, Sina hospital

**City**

Tehran

**Postal code****Phone**

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**Fax****Email****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*