

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

31 May 2026

### The effects of oligopin supplementation on inflammatory and metabolic parameters in women with polycystic ovary syndrome.

#### Protocol summary

##### Study aim

Evaluation of the effects of Oligopin supplementation on inflammatory and metabolic profile in patients with polycystic ovary syndrome.

##### Design

Double blind randomized controlled trial

##### Settings and conduct

Eighty patients with PCOS (according to Androgen Excess Society criteria) without thyroid disease and androgenic hormone secretory tumors, at the age range of 18-40 years old will be randomly assigned to the groups receiving either oligopin or placebo (once a day) for 12 weeks. This randomized, double-blind trial will be conducted at Shariati hospital affiliated to Tehran University of Medical Sciences in the Iran. FSH, LH, SHBG, fasting blood sugar, insulin, HDL, LDL-C, total cholesterol, triglycerides, blood pressure, body composition, weight, height and waist circumferences will be measured before and 12 weeks after the intervention.

##### Participants/Inclusion and exclusion criteria

Inclusion criteria: PCOS diagnosis (according to Androgen Excess Society criteria); hyperandrogenism / hyperandrogenemia (testosterone >70ng/dl) and/or oligomenorrhea (<8 spontaneous menses per year) and/or polycystic ovarian morphology. Women aged from 18 to 40; Normal prolactin; thyroid function; 17-OH progesterone; No evidence of Androgenic hormone secretory tumors; No Cushing's syndrome or acromegaly  
Exclusion criteria: Use of either oral contraceptives, steroids hormones or other medications that could modify the metabolism 1 months before the trial.

##### Intervention groups

Intervention group: oral intake of oligopine capsule (50 mg once daily) for 12 weeks. Control group: oral intake of placebo (once daily) for 12 weeks.

##### Main outcome variables

Follicle stimulating hormone (FSH); SHBG; C-peptide; hs-CRP; HDL-Cholesterol; LDL-Cholesterol; HbA1C; DHEA-S;

cholesterol; r Trigelisrid; BUN; luteinizing hormone (LH); Insulin; Testosterone ; TSH; Prolactin; blood sugar; Cratinine; alanine aminotransferase (ALT); aspartate aminotransferase (AST); alkaline phosphatase (ALP)

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20140406017139N3**

Registration date: **2018-12-22, 1397/10/01**

Registration timing: **registered\_while\_recruiting**

Last update: **2018-12-22, 1397/10/01**

Update count: **0**

##### Registration date

2018-12-22, 1397/10/01

##### Registrant information

##### Name

Mohammad Reza Mohajeri-tehrani

##### Name of organization / entity

Endocrinology and Metabolism Research Institute

##### Country

Iran (Islamic Republic of)

##### Phone

+98 21 8822 0071

##### Email address

mrmohajeri@tums.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2018-10-23, 1397/08/01

##### Expected recruitment end date

2019-05-22, 1398/03/01

##### Actual recruitment start date

empty

**Actual recruitment end date**  
empty

**Trial completion date**  
empty

**Scientific title**  
The effects of oligopin supplementation on inflammatory and metabolic parameters in women with polycystic ovary syndrome.

**Public title**  
The effect of oligopin on PCOS

**Purpose**  
Treatment

**Inclusion/Exclusion criteria**  
**Inclusion criteria:**  
PCOS diagnosis according to Androgen Excess Society criteria: hyperandrogenism (hirsutism) / hyperandrogenemia (testosterone >70ng/dl) and/or oligomenorrhea (<8 spontaneous menses per year) and/or polycystic ovarian morphology on ultrasound Women aged from 18 to 40 years old Normal prolactin normal thyroid function 17-OH progesterone No evidence of Androgenic hormone secretory tumors No Cushing's syndrome or acromegaly  
**Exclusion criteria:**  
Using either oral contraceptives or steroids hormones during 1 month before the onset of the trial Using medications that could modify the metabolism during 1 month before the onset of the trial

**Age**  
From **18 years** old to **40 years** old

**Gender**  
Female

**Phase**  
3

**Groups that have been masked**

- Participant
- Investigator

**Sample size**  
Target sample size: **80**

**Randomization (investigator's opinion)**  
Randomized

**Randomization description**  
block randomization method

**Blinding (investigator's opinion)**  
Double blinded

**Blinding description**  
The supplement and placebo will be prepared in identical shape, color and smell. Investigators and participants will be blind of the allocation process.

**Placebo**  
Used

**Assignment**  
Parallel

**Other design features**

**Secondary Ids**  
empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Ethics Committee of Endocrinology Metabolism Research Institute, Tehran University of Medical Scienc

##### Street address

Endocrinology & Metabolism Research Institute, 5th floor, Shariati Hospital, North Kargar Avenue

##### City

Tehran

##### Province

Tehran

##### Postal code

1411413137

##### Approval date

2017-11-30, 1396/09/09

##### Ethics committee reference number

IR.TUMS.EMRI.REC.1396.00163

## Health conditions studied

### 1

#### Description of health condition studied

polycystic ovarian syndrome

#### ICD-10 code

E28.2

#### ICD-10 code description

Polycystic ovarian syndrome

## Primary outcomes

### 1

#### Description

S.H.B.G) Sex Hormon Binding Globolin)

#### Timepoint

Before and 12 weeks after the intervention

#### Method of measurement

blood test

### 2

#### Description

FSH

#### Timepoint

Before and 12 weeks after the intervention

#### Method of measurement

blood test

### 3

#### Description

LH

#### Timepoint

Before and 12 weeks after the intervention

#### Method of measurement

blood test

#### 4

**Description**

fasting blood sugar

**Timepoint**

Before and 12 weeks after the intervention

**Method of measurement**

blood test

#### 5

**Description**

testosterone

**Timepoint**

Before and 12 weeks after the intervention

**Method of measurement**

blood test

#### 6

**Description**

DHEA-S

**Timepoint**

Before and 12 weeks after the intervention

**Method of measurement**

blood test

### Secondary outcomes

#### 1

**Description**

HDL-C

**Timepoint**

Before and 12 weeks after the intervention

**Method of measurement**

blood test

#### 2

**Description**

LDL-C

**Timepoint**

Before and 12 weeks after the intervention

**Method of measurement**

blood test

#### 3

**Description**

Total cholesterol

**Timepoint**

Before and 12 weeks after the intervention

**Method of measurement**

blood test

#### 4

**Description**

TG

**Timepoint**

Before and 12 weeks after the intervention

**Method of measurement**

blood test

#### 5

**Description**

Cr

**Timepoint**

Before and 12 weeks after the intervention

**Method of measurement**

blood test

#### 6

**Description**

Hs-CRP

**Timepoint**

Before and 12 weeks after the intervention

**Method of measurement**

blood test

#### 7

**Description**

HbA1C

**Timepoint**

Before and 12 weeks after the intervention

**Method of measurement**

blood test

#### 8

**Description**

Insulin

**Timepoint**

Before and 12 weeks after the intervention

**Method of measurement**

blood test

#### 9

**Description**

prolactin

**Timepoint**

Before and 12 weeks after the intervention

**Method of measurement**

ng/mL

#### 10

**Description**

TSH

**Timepoint**

Before and 12 weeks after the intervention

**Method of measurement**

blood test

### Intervention groups

#### 1

**Description**

Intervention group: oral intake of oligopin (50mg capsule) after lunch, once a day for 12 weeks

**Category**

Treatment - Drugs

2**Description**

Control group: oral intake of placebo after lunch, once a day for 12 weeks.

**Category**

Placebo

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

Endocrinology &amp; Metabolism Research Institute

**Full name of responsible person**

Saeed Hosseini

**Street address**

Endocrinology &amp; Metabolism Research Institute, 5th floor, Shariati Hospital, North Kargar street

**City**

Tehran

**Province**

Tehran

**Postal code**

1411413137

**Phone**

+98 21 8822 0071

**Email**

saeedhmdphd@hotmail.com

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

Alborz University of Medical Sciences

**Full name of responsible person**

Mostafa Qorbani

**Street address**

Alborz University of Medical Sciences, North Taleqani Blvd, Taleqani Square

**City**

Karaj

**Province**

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**Postal code**

-

**Phone**

+98 21 8822 0071

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mqorbani1379@yahoo.com

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

Yes

**Title of funding source**

Alborz University of Medical Sciences

**Proportion provided by this source**

50

**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

2**Sponsor****Name of organization / entity**

Endocrinology and Metabolism Research Institute

**Full name of responsible person**

Saeed Hosseini

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Endocrinology &amp; Metabolism Research Institute, 5th floor, Shariati Hospital, North Kargar Avenue, Tehran, Iran

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saeedhmdphd@hotmail.com

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

Yes

**Title of funding source**

Endocrinology and Metabolism Research Institute

**Proportion provided by this source**

50

**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**

Endocrinology and Metabolism Research Institute

**Full name of responsible person**

Saeed Hosseini

**Position**

Assistant professor

**Latest degree**

Specialist

**Other areas of specialty/work**

Nutrition

**Street address**

Endocrinology & Metabolism Research Institute, 5th floor, Shariati Hospital, North Kargar Avenue, Tehran, Iran

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**Phone**

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**Email**

saeedhmdphd@hotmail.com

**Latest degree**

Master

**Other areas of specialty/work**

Nutrition

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**Province**

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**Email**

asiehmansour@yahoo.com

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

Endocrinology and Metabolism Research Institute

**Full name of responsible person**

Saeed Hosseini

**Position**

Assistant professor

**Latest degree**

Ph.D.

**Other areas of specialty/work**

Nutrition

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**City**

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**Province**

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**Phone**

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saeedhmdphd@hotmail.com

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

Endocrinology & Metabolism Research Institute

**Full name of responsible person**

Asieh Mansour

**Position**

PhD. student

**Sharing plan****Deidentified Individual Participant Data Set (IPD)**

Yes - There is a plan to make this available

**Study Protocol**

No - There is not a plan to make this available

**Statistical Analysis Plan**

No - There is not a plan to make this available

**Informed Consent Form**

No - There is not a plan to make this available

**Clinical Study Report**

Yes - There is a plan to make this available

**Analytic Code**

No - There is not a plan to make this available

**Data Dictionary**

No - There is not a plan to make this available

**Title and more details about the data/document**

Data collected for the primary and secondary outcomes will be shared.

**When the data will become available and for how long**

access starting 18 months after publication

**To whom data/document is available**

The data will only be available for people working in academic institutions.

**Under which criteria data/document could be used**

The data of our study will only be accessible by other researchers, for conducting Meta-analysis.

**From where data/document is obtainable**

To access the required data, the researchers can contact Ms. Asieh Mansour: email address:asiehmansour@yahoo.com

**What processes are involved for a request to access data/document**

The researcher should provide a brief description of the aims of his study. The request will be assessed by the researchers, and if we agree to the request, the requested data will be emailed.

**Comments**