

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### The effect of a long-term period interval and continuous exercise on some markers and inflammatory cytokines in breast cancer survivors

#### Protocol summary

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

#### Study aim

The effect of a long-term period interval and continuous exercise on some markers and inflammatory cytokines in breast cancer survivors

Last update: **2019-09-05, 1398/06/14**

Update count: **0**

#### Registration date

2019-09-05, 1398/06/14

#### Design

45 women breast cancer survivors will be randomly divided into three groups (high intensity interval training, moderate intensity continuous training, and control). Each group will perform its own training protocol. Pre-test and post-test blood samples will be taken from the subjects to measure biochemical values.

#### Registrant information

##### Name

Babak Hooshmand Moghadam

##### Name of organization / entity

Ferdowsi University of Mashhad

##### Country

Iran (Islamic Republic of)

##### Phone

+98 51 3881 0540

##### Email address

babak.hooshmand@mail.um.ac.ir

#### Settings and conduct

The location of the research will be Tehran and the Laboratory of Sport Physiology.

#### Recruitment status

**Recruitment complete**

#### Funding source

#### Participants/Inclusion and exclusion criteria

Inclusion criteria:1. A definitive diagnosis of cancer and a history of cancer based on medical records 2. Exposure to stage one, two or three diseases and completion of treatment courses (Breast Removal Surgery, Chemotherapy, Radiotherapy) at least in the last 6 months 3.Menopause 4.Body mass index more than 25 kg/m<sup>2</sup> 5.Body fat more than 30%. Exclusion criteria:1.Cardiovascular disease 2.Diabetes 3.Thyroid diseases 4.smoking

#### Expected recruitment start date

2019-08-23, 1398/06/01

#### Expected recruitment end date

2019-11-22, 1398/09/01

#### Actual recruitment start date

empty

#### Actual recruitment end date

empty

#### Trial completion date

empty

#### Intervention groups

Control, high intensity interval training, moderate intensity continuous training

#### Scientific title

The effect of a long-term period interval and continuous exercise on some markers and inflammatory cytokines in breast cancer survivors

#### Main outcome variables

Effect of high intensity interval training and moderate intensity continuous training on IL-8: Leptin: Adiponectin: IGF-1: IGFBP-3: TAC: MDA: OHdG-8

#### Public title

The effect of a long-term period interval and continuous

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20190731044398N2**

Registration date: **2019-09-05, 1398/06/14**

exercise on some markers and inflammatory cytokines in breast cancer survivors

## Purpose

Supportive

## Inclusion/Exclusion criteria

### Inclusion criteria:

A definitive diagnosis of cancer and a history of cancer based on medical records. Exposure to stage one, two or three diseases and completion of treatment courses (Breast Removal Surgery, Chemotherapy, Radiotherapy) at least in the last 6 months Menopause Body mass index more than 25 kg/m<sup>2</sup> Body fat more than 30%

### Exclusion criteria:

Cardiovascular disease Diabetes Thyroid diseases smoking

## Age

No age limit

## Gender

Female

## Phase

N/A

## Groups that have been masked

No information

## Sample size

Target sample size: 45

## Randomization (investigator's opinion)

Randomized

## Randomization description

Randomization method: Simple randomization, randomization unit: individual, randomization tool: random number table

## 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

Research Ethics Committee of Physical Education and Sport Sciences

##### Street address

impasse 5, district 7, Tehran, Iran

##### City

Tehran

##### Province

Tehran

##### Postal code

1587958711

#### Approval date

2019-07-01, 1398/04/10

## Ethics committee reference number

IR.SSRI.REC.1398.055

## Health conditions studied

### 1

#### Description of health condition studied

Breast cancer

#### ICD-10 code

C50

#### ICD-10 code description

Malignant neoplasm of breast

## Primary outcomes

### 1

#### Description

Serum levels of IL-8

#### Timepoint

Before and after intervention

#### Method of measurement

Blood sampling and using ELISA method

### 2

#### Description

Serum levels of Leptin

#### Timepoint

Before and after intervention

#### Method of measurement

Blood sampling and using ELISA method

### 3

#### Description

Serum levels of Adiponectin

#### Timepoint

Before and after intervention

#### Method of measurement

Blood sampling and using ELISA method

### 4

#### Description

Serum levels of IGF-1

#### Timepoint

Before and after intervention

#### Method of measurement

Blood sampling and using ELISA method

### 5

#### Description

Serum levels of IGFBP-3

#### Timepoint

Before and after intervention

#### Method of measurement

Blood sampling and using ELISA method

## 6

### **Description**

Serum levels of TAC

### **Timepoint**

Before and after intervention

### **Method of measurement**

Blood sampling and using ELISA method

## 7

### **Description**

Serum levels of MDA

### **Timepoint**

Before and after intervention

### **Method of measurement**

Blood sampling and using ELISA method

## 8

### **Description**

Serum levels of 8-OHdG

### **Timepoint**

Before and after intervention

### **Method of measurement**

Blood sampling and using ELISA method

## **Secondary outcomes**

empty

## **Intervention groups**

### 1

#### **Description**

high intensity interval training group: During the study, this group will perform high intensity interval training for 12 weeks and 3 weeks each week.

#### **Category**

Rehabilitation

### 2

#### **Description**

moderate intensity continuous training group: During the study, this group will perform moderate intensity continuous training for 12 weeks and 3 weeks each week.

#### **Category**

Rehabilitation

### 3

#### **Description**

Control group: During the study, this group will not perform any exercise.

#### **Category**

Lifestyle

## **Recruitment centers**

## 1

### **Recruitment center**

#### **Name of recruitment center**

Private

#### **Full name of responsible person**

Babak Hooshmand Hoghadam

#### **Street address**

Faculty of Physical Education and Sport Science of  
Tehran University, Northern Kargar Ave, Tehran, Iran

#### **City**

Tehran

#### **Province**

Tehran

#### **Postal code**

1417614418

#### **Phone**

+98 21 8835 1730

#### **Email**

b.hooshmand.m@gmail.com

## **Sponsors / Funding sources**

### 1

#### **Sponsor**

##### **Name of organization / entity**

Private

##### **Full name of responsible person**

Babak Hooshmand Moghadam

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Faculty of Physical Education and Sport Science of  
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##### **Email**

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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**

Private

#### **Proportion provided by this source**

100

#### **Public or private sector**

Private

#### **Domestic or foreign origin**

Domestic

#### **Category of foreign source of funding**

*empty*

#### **Country of origin**

#### **Type of organization providing the funding**

Persons

## Person responsible for general inquiries

### Contact

**Name of organization / entity**

University of Tehran

**Full name of responsible person**

Parisa Pournemati

**Position**

Assistant Professor

**Latest degree**

Ph.D.

**Other areas of specialty/work**

Physiology

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Tehran University , North Kargar Ave, Tehran, Iran

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## Person responsible for scientific inquiries

### Contact

**Name of organization / entity**

University of Tehran

**Full name of responsible person**

Parisa Pournemati

**Position**

Assistant Professor

**Latest degree**

Ph.D.

**Other areas of specialty/work**

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## Person responsible for updating data

### Contact

**Name of organization / entity**

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**Full name of responsible person**

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**Position**

PhD student

**Latest degree**

Master

**Other areas of specialty/work**

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## 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**

Not applicable

**Informed Consent Form**

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

**Clinical Study Report**

Yes - There is a plan to make this available

**Analytic Code**

Not applicable

**Data Dictionary**

Not applicable

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

Personal information of patients is confidential. But access to the research method and the information obtained from the research is not a problem

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

After printing in a journal

**To whom data/document is available**

All students and enthusiasts

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

In order to use data to carry out research work in this area

**From where data/document is obtainable**

The authors of this article b.hooshmand.m@gmail.com

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

By sending email the author will work with the applicant as soon as possible

**Comments**