

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

26 Jun 2026

### The effect of propolis on glycemic control, Lipid profile, renal function and inflammatory biomarkers in patients with type 2 diabetes mellitus: A randomized double blind clinical Trial.

#### Protocol summary

##### Summary

The purpose of this study is to evaluate the effect of propolis on glycemic control, Lipid profile, renal function and inflammatory biomarkers in patients with type 2 diabetes. In this placebo controlled double blind clinical trial study, 100 volunteer patients with diabetes mellitus that has Hemoglobin A1c (HbA1c) Test between 5.9-8% and Fast blood sugar between 126-200 mg/dl which only use oral hypoglycemic agents and were diagnosed less than 10 years will be randomly selected and divided to control and treatment groups. Patients in treatment group take 2 capsules of propolis daily whereas in control group 2 placebo capsules will given to patients. Level of fast blood sugare, 2 hours postprandial glucose, hemoglobine A1C , high density lipoprotein, low density lipoprotein, Total cholesterol, triglyceride, serum Insulin, blood urea nitrogen, creatinine, uric acid, alkanin phosphatase and liver enzymes, inflammation factors like TNFa, IL10, IL6, hs-CRP and also height and weight will be evaluated in the beginning and in the end of study. Patients will be asked not changing their physical exercises, diet and life style duration of study which take 90 days. In the end effect of propolis on measured factors will be statistically evaluated and reported.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT2016092730008N1**  
Registration date: **2017-09-07, 1396/06/16**  
Registration timing: **registered\_while\_recruiting**

Last update:

Update count: **0**

##### Registration date

2017-09-07, 1396/06/16

#### Registrant information

##### Name

Maryam Jenabi

##### Name of organization / entity

Ahvaz Jundishapur University of Medical Sciences

##### Country

Iran (Islamic Republic of)

##### Phone

+98 61 3161

##### Email address

jenabi.m@ajums.ac.ir

#### Recruitment status

##### Recruitment complete

#### Funding source

Ahvaz Jundishapour of Medical Sciences

#### Expected recruitment start date

2016-11-21, 1395/09/01

#### Expected recruitment end date

2019-06-21, 1398/03/31

#### Actual recruitment start date

empty

#### Actual recruitment end date

empty

#### Trial completion date

empty

#### Scientific title

The effect of propolis on glycemic control, Lipid profile, renal function and inflammatory biomarkers in patients with type 2 diabetes mellitus: A randomized double blind clinical Trial.

#### Public title

The effect of propolis in diabetic patients

#### Purpose

Treatment

#### Inclusion/Exclusion criteria

Inclusion criteria: age 25-80 years; Hemoglobin A1c

(HbA1c) Test between 5.9-8%; Fast blood sugar between 126-200 mg/dl; patients were diagnosed less than 10 years; patients should only use oral hypoglycemic agents  
Exclusion criteria: Pregnancy and lactation; Insulin dependent diabetes; sensitivity to honey or bee products; Severe renal or hepatitis failure

#### **Age**

From **25 years** old to **80 years** old

#### **Gender**

Both

#### **Phase**

N/A

#### **Groups that have been masked**

*No information*

#### **Sample size**

Target sample size: **100**

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

Randomized

#### **Randomization description**

#### **Blinding (investigator's opinion)**

Double blinded

#### **Blinding description**

#### **Placebo**

Used

#### **Assignment**

Parallel

#### **Other design features**

## **Secondary Ids**

empty

## **Ethics committees**

### **1**

#### **Ethics committee**

##### **Name of ethics committee**

Ahvaz Jundishapour University of Medical Sciences

##### **Street address**

Golestan

##### **City**

Ahvaz

##### **Postal code**

#### **Approval date**

2017-07-29, 1396/05/07

#### **Ethics committee reference number**

IR.AJUMS.REC.1396.430

## **Health conditions studied**

### **1**

#### **Description of health condition studied**

Type 2 diabetes

#### **ICD-10 code**

E11.9

#### **ICD-10 code description**

Non-insulin-dependent diabetes mellitus

## **Primary outcomes**

### **1**

#### **Description**

Fasting Blood Serum

#### **Timepoint**

in the beginning, monthly and in the End of Intervention

#### **Method of measurement**

mg/dl with using specific serum kit

### **2**

#### **Description**

Body Mass Index (BMI)

#### **Timepoint**

in the beginning and in the End of Intervention

#### **Method of measurement**

kg/m2 by measuring height and weight and use of scale

### **3**

#### **Description**

Blood pressure

#### **Timepoint**

in the beginning and in the End of Intervention

#### **Method of measurement**

mmHg by using indicator

### **4**

#### **Description**

2 hours post prandial glucose

#### **Timepoint**

in the beginning and in the End of Intervention

#### **Method of measurement**

mg/dl by using specific serum kit

### **5**

#### **Description**

HbA1C

#### **Timepoint**

in the beginning and in the End of Intervention

#### **Method of measurement**

% by using specific serum kit

### **6**

#### **Description**

Triglyceride

#### **Timepoint**

in the beginning and in the End of Intervention

#### **Method of measurement**

mg/dl by using specific serum kit

### **7**

#### **Description**

cholesterol

#### **Timepoint**

in the beginning and in the End of Intervention

#### **Method of measurement**

mg/dl by using specific serum kit

## **8**

### **Description**

High Density Lipoprotein (HDL)

### **Timepoint**

in the beginning and in the End of Intervention

### **Method of measurement**

mg/dl by using specific serum kit

## **9**

### **Description**

Low Density Lipoprotein (LDL)

### **Timepoint**

in the beginning and in the End of Intervention

### **Method of measurement**

mg/dl by using specific serum kit

## **10**

### **Description**

Very Low Density Lipoprotein (VLDL)

### **Timepoint**

in the beginning and in the End of Intervention

### **Method of measurement**

mg/dl by using specific serum kit

## **11**

### **Description**

ALANIN AMINOTRANSFERASE

### **Timepoint**

in the beginning and in the End of Intervention

### **Method of measurement**

mg/dl by using specific serum kit

## **12**

### **Description**

ASPARTATE AMINOTRANSFERASE

### **Timepoint**

in the beginning and in the End of Intervention

### **Method of measurement**

mg/dl by using specific serum kit

## **13**

### **Description**

ALKALIN PHOSPHATASE

### **Timepoint**

in the beginning and in the End of Intervention

### **Method of measurement**

mg/dl by using specific serum kit

## **14**

### **Description**

BLOOD UREA NITROGEN

### **Timepoint**

in the beginning and in the End of Intervention

### **Method of measurement**

mg/dl by using specific serum kit

## **15**

### **Description**

Creatinine

### **Timepoint**

in the beginning and in the End of Intervention

### **Method of measurement**

mg/dl by using specific serum kit

## **16**

### **Description**

URIC ACID

### **Timepoint**

in the beginning and in the End of Intervention

### **Method of measurement**

mg/dl by using specific serum kit

## **17**

### **Description**

Serum Insulin

### **Timepoint**

in the beginning and in the End of Intervention

### **Method of measurement**

IU/ml by using specific serum kit

## **18**

### **Description**

IL6

### **Timepoint**

in the beginning and in the End of Intervention

### **Method of measurement**

Pg/ml by using specific serum kit

## **19**

### **Description**

IL1-B

### **Timepoint**

in the beginning and in the End of Intervention

### **Method of measurement**

Pg/ml by using specific serum kit

## **20**

### **Description**

Tumor Necrosis Factor a

### **Timepoint**

in the beginning and in the End of Intervention

### **Method of measurement**

Pg/ml by using specific serum kit

## **21**

### **Description**

High sensitivity C- reactive protein

### **Timepoint**

in the beginning and in the End of Intervention

### **Method of measurement**

ng/ml by using specific serum kit

## 22

### **Description**

Estimated Glomerular Filtration Rate

### **Timepoint**

in the beginning and in the End of Intervention

### **Method of measurement**

mg/min/1.73m<sup>2</sup> by using formula

## 23

### **Description**

Homeostasis model assessment Insulin resistance

### **Timepoint**

in the beginning and in the End of Intervention

### **Method of measurement**

%by using formula

## 24

### **Description**

Homeostasis model assessment of  $\beta$ -cell function

### **Timepoint**

in the beginning and in the End of Intervention

### **Method of measurement**

%by using formula

## **Secondary outcomes**

### 1

#### **Description**

sensitivity

#### **Timepoint**

in the beginning, monthly and in the end of intervention

#### **Method of measurement**

patient complain, physical examination

## **Intervention groups**

### 1

#### **Description**

Propolis, capsule 500mg, oral, twice daily, 3 month

#### **Category**

Treatment - Drugs

### 2

#### **Description**

Soya, capsules 500mg, oral, twice daily, 3 month

#### **Category**

Placebo

## **Recruitment centers**

### 1

#### **Recruitment center**

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

Diabetes Treatment Center of Golestan Hospital

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

Dr. Mehrnoosh Zakerkish, Endocrine Specialist

##### **Street address**

Golestan

##### **City**

Ahvaz

## **Sponsors / Funding sources**

### 1

#### **Sponsor**

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

Ahvaz Jundishapour University of Medical Sciences

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

DR. Narges Zaeemzadeh

##### **Street address**

Pharmacology Department, Diabetes center, Ahvaz  
Jundishapour University of Medical Sciences

##### **City**

Ahvaz

##### **Grant name**

##### **Grant code / Reference number**

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

Yes

##### **Title of funding source**

Ahvaz Jundishapour 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**

School of Pharmacy, Ahvaz Jundishapour University of  
Medical Sciences

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

Maryam Jenabi

##### **Position**

Phd candidate of Pharmacology

##### **Other areas of specialty/work**

##### **Street address**

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## Person responsible for scientific inquiries

### Contact

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## Person responsible for updating data

### Contact

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## 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*