

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### Effectiveness of prebiotic vaginal gel supplement with metronidazole ablet on treatment and recurrence of bacterial vaginosis

#### Protocol summary

##### Summary

Objectives: This study aims to determine the effect of complementary therapy of vaginal prebiotic gel with tablet metronidazole on treatment and recurrence of bacterial vaginosis. Design: A double blind randomized controlled trial. Setting and conduct: This study will be conducted in Nasir abad health care center. Eligible women will be randomly assigned into 2 groups of 50 subjects with block sizes of 4 and 6. A person from research team not involved in the recruitment and assigning participants will generate the allocation sequence. Opaque sealed sequentially numbered envelopes will be used for allocation concealment. Major inclusion criteria: married; diagnosis of bacterial vaginosis with Amsel criteria and the Nugent scoring system; have willing to participate to study. Exclusion criteria: Having abnormal vaginal bleeding; having other vaginal infections such as candidiasis and trichomoniasis. Interventions: After diagnosis bacterial vaginosis, in addition to metronidazole tablet 250 milligrams 3 times a day (each 8 hours) for 7 days, the patient's will be used prebiotic vaginal gel one applicator (5 milligrams) every night for 7 nights. The control group will use metronidazole tablet 250 milligrams 3 times a day (each 8 hours) for 7 days and placebo vaginal gel one applicator (5 milligrams) every night for 7 nights. Main outcome measures: Clinical and laboratory criteria based on amsel and nugent scoring system; malodon discharge; itching; dyspareunia; having bad smell during sexual and secondary outcomes include: assessment of vaginal pH; client satisfaction; change in Clue cells will be evaluated baseline, 10±1 day after intervention, 12±1 week after intervention.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT2015121721917N5**

Registration date: **2016-02-03, 1394/11/14**

Registration timing: **prospective**

Last update:

Update count: **0**

##### Registration date

2016-02-03, 1394/11/14

##### Registrant information

###### Name

Sevil Hakimi

###### Name of organization / entity

Tabriz University of Medical Sciences

###### Country

Iran (Islamic Republic of)

###### Phone

+98 41 3479 6770

###### Email address

hakimis@tbzmed.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

Vice chancellor for research, Tabriz University of Medical Sciences

##### Expected recruitment start date

2016-02-09, 1394/11/20

##### Expected recruitment end date

2016-06-09, 1395/03/20

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Effectiveness of prebiotic vaginal gel supplement with metronidazole ablet on treatment and recurrence of bacterial vaginosis

**Public title**

Effect of Complementary therapy of vaginal prebiotic gel with metronidazole tablet on treatment and recurrence of bacterial vaginosis: a randomized controlled trial

**Purpose**

Treatment

**Inclusion/Exclusion criteria**

Inclusion Criteria: 18 to 35 years old; married; diagnosis of bacterial vaginosis with contemporary presence of at least 3 out of 4 Amsel criteria and gain score 4 to 6 with clue cells or score 7 to 10 without clue cells in the Nugent scoring system; have willing to participate to study; husband's monogamous; absence of menstruation during the intervention. Exclusion criteria: pregnant or breastfeeding, or menopause; having abnormal vaginal bleeding; consumption of vaginal medication; douching during 48 hours ago; use of alcohol and smoking; use of anticoagulants such as Coumadin and Disulfiram; having other vaginal infections such as candidiasis and trichomoniasis; having known medical disease such as diabetes, thyroid disease and liver diseases according to patient's report; not having tendency to use prebiotic gel.

**Age**

From **18 years** old to **45 years** old

**Gender**

Female

**Phase**

2-3

**Groups that have been masked**

*No information*

**Sample size**

Target sample size: **100**

**Randomization (investigator's opinion)**

Not 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**

Ethics committee of Tabriz University of Medical Sciences

**Street address**

Azadi avenue, Golgasht street, third floor, number 2 central building, research and technology department, Tabriz University of Medical Sciences

**City**

Tabriz

**Postal code**

118-51665

**Approval date**

2015-06-28, 1394/04/07

**Ethics committee reference number**

TBZMed.REC.1394.736

**Health conditions studied****1****Description of health condition studied**

Bacterial vaginosis

**ICD-10 code**

N73.9

**ICD-10 code description**

Female pelvic inflammatory disease, unspecified

**2****Description of health condition studied**

Bacterial vaginosis

**ICD-10 code**

N74.8

**ICD-10 code description**

Female pelvic inflammatory disorders in other diseases classified elsewhere

**3****Description of health condition studied**

Bacterial vaginosis

**ICD-10 code**

N76.8

**ICD-10 code description**

Other specified inflammation of vagina and vulva

**Primary outcomes****1****Description**

Clinical and laboratory criteria based on Amsel and Nugent scoring system

**Timepoint**

Baseline, 10±1 day after intervention, 12±1 week after intervention

**Method of measurement**

Measured by clinical measurements of diseases and laboratory tests

**2****Description**

Malodon discharge

**Timepoint**

Baseline, 10±1 day after intervention, 12±1 week after intervention

**Method of measurement**

Measured by asking from patient

### 3

**Description**

Itching

**Timepoint**

Baseline, 10±1 day after intervention, 12±1 week after intervention

**Method of measurement**

Measured by asking from patient

### 4

**Description**

Dyspareunia

**Timepoint**

Baseline, 10±1 day after intervention, 12±1 week after intervention

**Method of measurement**

Measured by asking from patient

### 5

**Description**

Having bad smell during sexual intercourse

**Timepoint**

Baseline, 10±1 day after intervention, 12±1 week after intervention

**Method of measurement**

Measured by asking from patient

## Secondary outcomes

### 1

**Description**

Assessment of vaginal pH

**Timepoint**

Baseline, 10±1 day after intervention, 12±1 week after intervention

**Method of measurement**

pH paper scale

### 2

**Description**

Client satisfaction

**Timepoint**

Baseline, 10±1 day after intervention, 12±1 week after intervention

**Method of measurement**

Self-report

### 3

**Description**

Change in Clue cells

**Timepoint**

Baseline, 10±1 day after intervention, 12±1 week after intervention

**Method of measurement**

direct observation

## Intervention groups

### 1

**Description**

Intervention group: After diagnosis bacterial vaginosis, in addition to Metronidazole tablet 250 milligrams 3 times a day (each 8 hours) for 7 days, the patient's will be used Prebiotic vaginal gel one applicator (5 milligrams) every night for 7 nights

**Category**

Treatment - Drugs

### 2

**Description**

The control group will use Metronidazole tablet 250 milligrams 3 times a day (each 8 hours) for 7 days and placebo vaginal gel one applicator (5 milligrams) every night for 7 nights

**Category**

Placebo

## Recruitment centers

### 1

**Recruitment center****Name of recruitment center**

Nasir Abad health care center

**Full name of responsible person**

Faranak Farhan

**Street address**

east Hatami, Jannat Abad street

**City**

Tehran

## Sponsors / Funding sources

### 1

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

Vice chancellor for research, Tabriz University of Medical Sciences

**Full name of responsible person**

Rashidi Mohammad Reza

**Street address**

Number 2 central building, third floor, research and technology department, Golgasht street, Azadi avenue, Tabriz University of Medical Sciences

**City**

Tabriz

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

Yes

**Title of funding source**

Vice chancellor for research, Tabriz University of Medical Sciences

**Proportion provided by this source**

**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*

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

Women's Reproductive Health Research Center,  
Tabriz University of Medical Sciences

**Full name of responsible person**

Mostafa Ghare Baghi Parvin

**Street address**

Alzahra Hospital, South Artesh Ave

**City**

Tabriz

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

Yes

**Title of funding source**

Women's Reproductive Health Research Center, Tabriz  
University of Medical Sciences

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

Tabriz University of Medical Sciences

**Full name of responsible person**

Sevil Hakimi

**Position**

PhD of reproductive health

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

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**Postal code**

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faranak.farhan39@yahoo.com

**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*