# The effectiveness of a probiotic food supplement to restore the vaginal microbiota in postmenopausal women

Submission date	Recruitment status  No longer recruiting	Prospectively registered		
03/10/2022		☐ Protocol		
<b>Registration date</b> 06/10/2022	Overall study status Completed	Statistical analysis plan		
		[X] Results		
<b>Last Edited</b> 26/02/2024	Condition category Urological and Genital Diseases	Individual participant data		

# Plain English summary of protocol

Background and study aims

The existence of communication between the vagina and the gut has long been recognized. It is therefore important to maintain a healthy microbiota community (microorganisms including bacteria that live in the digestive tract) for the regulation of infection in the urogenital tract. Probiotic supplementation has been suggested to maintain, through the gut microbiota, the physiological vagina microbiota with a reduction of pathogen (harmful bacteria) colonization. In this context, the use of probiotics could support women during the postmenopausal period when they are more susceptible to infections. The main aim of this study is to evaluate the effectiveness of a food supplement based on the SynBalance® Femme probiotic formulation at improving the vaginal microbiota and reducing inflammation due to vaginal infections.

Who can participate?

Healthy postmenopausal women, aged 45-65 years

What does the study involve?

The study involves taking food supplements for 28 days. The probiotic product should be taken for 4 consecutive weeks, one capsule per day. Assessments will be carried out at the time of recruitment and the start of the study and at the end of treatment with the food supplement, after 4 weeks. A telephone assessment will be performed after a 4-week follow-up period.

What are the possible benefits and risks of participating?

Risks associated with the intake of the product are considered from low to very low. The benefits associated with product use are improvement of symptoms of postmenopausal and vaginal infections.

Where is the study run from? Colledoro Medical Centre - Siena (Italy)

When is the study starting and how long is it expected to run for? April 2022 to March 2023

Who is funding the study? SynBalance srl (Italy)

Who is the main contact?

Dr Franco Vicariotto, ginecologia@vicariotto.com

# **Contact information**

# Type(s)

Scientific

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#### Type(s)

Principal Investigator

#### Contact name

Dr Franco Vicariotto

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# Additional identifiers

# **EudraCT/CTIS** number

Nil known

#### **IRAS** number

# ClinicalTrials.gov number

Nil known

## Secondary identifying numbers

Nil known

# Study information

#### Scientific Title

Observational prospective study on the efficacy of a food supplement containing a probiotic blend to restore the physiological vaginal microbiota in postmenopausal women

#### Acronym

Menopause 2022

#### **Study objectives**

The main objective of this prospective, observational study is to evaluate the potential effectiveness of a food supplement based on the SynBalance® Femme probiotic formulation in improving vaginal dysbiosis, typical of menopause, and in reducing inflammation due to vaginal infections, mainly caused by aerobic microorganisms.

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Approved 03/06/2022, Derming Ethics Committee (Via Valassina 29, 20159 Milano, Italy; +39 (0) 3420399117; adele.sparavigna@derming.com), ref: not applicable

#### Study design

Prospective single-center interventional non-randomized study

#### Primary study design

Interventional

# Secondary study design

Non randomised study

# Study setting(s)

GP practice

# Study type(s)

Prevention

# Participant information sheet

Not available in web format, please use the contact details to request a participant information sheet

# Health condition(s) or problem(s) studied

Vaginal dysbiosis and vaginal infections

#### **Interventions**

50 postmenopausal women, aged between 45 and 65 years will be subjected to oral administration of a food supplement containing the SynBalance® Femme blend, consisting of Lactiplantibacillus plantarum PBS067, Bifidobacterium animalis subsp. lactis BL050 and Lacticaseibacillus rhamnosus LRH020. The probiotic product should be taken for 4 consecutive weeks, one capsule per day.

The assessments relating to the state of health and effectiveness of the treatment will be carried out at the time of recruitment and the start of the study (T0) and at the end of treatment with the food supplement, after 4 weeks (T1). A telephone assessment will be performed after a 4-week follow-up period (T2).

#### Intervention Type

Supplement

#### Primary outcome measure

Composition of the vaginal microbiota. The effect of the probiotic treatment on the initial menopausal vaginal dysbiosis will be evaluated as an increase in lactobacillary presence and an improvement of healthy microbiota. Measured at baseline and 4 weeks.

#### Secondary outcome measures

- 1. Vaginal pH measured using litmus paper at baseline and 4 weeks
- 2. Dosage of pro-inflammatory cytokines (IL-6, IL-1 $\beta$ , TNF- $\alpha$  and IL-8) measured using human cytokine ELISA kits at baseline and 4 weeks
- 3. Vaginal well-being measured using the vaginal health index (VHI) at baseline, 4 and 8 weeks

#### Overall study start date

22/04/2022

## Completion date

31/03/2023

# Eligibility

#### Key inclusion criteria

- 1. Postmenopausal women, aged 45-65 years, with last menstrual cycle more than 18 months ago
- 2. Women with body mass index (BMI)  $\leq$ 27 kg/m<sup>2</sup>
- 3. Women with vaginal pH ≥5
- 4. Postmenopausal women with typical menopausal disorders
- 5. Women who intend to use the probiotic product and undergo checkups

#### Participant type(s)

Other

#### Age group

Adult

#### Lower age limit

45 Years

#### Upper age limit

65 Years

#### Sex

Female

#### Target number of participants

#### Total final enrolment

50

#### Key exclusion criteria

- 1. Women under hormone therapy (HT)
- 2. Women with BMI >27 kg/m<sup>2</sup>
- 3. Women who intend to use probiotic products or that used them in the last 2 weeks
- 4. Women with a proven allergy to the product
- 5. Women who have undergone antimicrobial treatment in the last 4 weeks

#### Date of first enrolment

19/09/2022

#### Date of final enrolment

31/12/2022

# Locations

#### Countries of recruitment

Italy

## Study participating centre Studio Medico Colledoro

Via Colledoro 9 Siena Italy 53100

# Sponsor information

#### Organisation

SynBalance srl

#### Sponsor details

Via Milani, 24 Origgio (VA) Italy 28100 +39 (0)296799831 info@synbalance.care

#### Sponsor type

Industry

#### Website

https://synbalance-probiotics.com/

# Funder(s)

## Funder type

Industry

#### **Funder Name**

SynBalance srl

# **Results and Publications**

## Publication and dissemination plan

Planned publication in a high-impact peer-reviewed journal

# Intention to publish date

01/09/2023

## Individual participant data (IPD) sharing plan

The datasets generated and/or analysed during the current study will be published as a supplement to the subsequent results publication

## IPD sharing plan summary

Published as a supplement to the results publication

## **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		30/01/2024	26/02/2024	Yes	No