

Testing a new cannabidiol cream for vulvar pain relief: what the research shows

Submission date 05/07/2025	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered
		<input checked="" type="checkbox"/> Protocol
Registration date 11/07/2025	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
Last Edited 07/07/2025	Condition category Urological and Genital Diseases	<input type="checkbox"/> Individual participant data
		<input checked="" type="checkbox"/> Record updated in last year

Plain English summary of protocol

Background and study aims

This study is looking at a condition called vestibulodynia (VBD), which causes chronic pain around the opening of the vagina. Many women with VBD feel burning, stinging, or sharp pain, especially during sex or when using tampons. The study aims to test whether a gel containing cannabidiol (CBD) and myrcene—two natural substances with anti-inflammatory and pain-relieving properties—can help reduce this pain. Researchers believe that using these ingredients together might work better than using either one alone.

Who can participate?

Women aged 18 or older who have not yet gone through menopause can take part. They must have had VBD for at least six months, experience moderate to severe pain during most sexual activity, and have pain limited to the vestibule (the area around the vaginal opening). Participants must also have a stable sexual partner and be willing to try sexual activity during the study.

What does the study involve?

Participants will be randomly assigned to use either the CBD plus myrcene gel or a placebo gel (which looks the same but has no active ingredients). They will apply the gel once a day for 60 days. The study includes medical exams, pain assessments using rating scales, and questionnaires at the beginning and end of the study. Doctors will also check for any side effects.

What are the possible benefits and risks of participating?

Participants may experience relief from pain and discomfort. However, there is no guarantee of benefit. As with any treatment, there may be side effects, although the gel is expected to be safe. Participants will be monitored closely throughout the study.

Where is the study run from?

Ospedale dei Bambini Vittore Buzzi (Italy)

When is the study starting and how long is it expected to run for?

January 2024 to August 2025.

Who is funding the study?
Italian Vulvodynia Association

Who is the main contact?
Professor Filippo Murina, filippo.murina@unimi.it

Contact information

Type(s)

Public, Scientific, Principal investigator

Contact name

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Additional identifiers

Protocol serial number

SDSM-2024-01.1

Study information

Scientific Title

Efficacy and safety of topical 5% cannabidiol plus myrcene for the treatment of vestibulodynia: a multi-centric randomized controlled trial. RELIEF with topical cannabinoids for Vestibulodynia

Acronym

RELEVA

Study objectives

The Research Hypothesis for the present study is to prospectively document the efficacy and safety of the topical association cannabidiol (CBD) plus myrcene in patients with vestibulodynia (VBD)²¹. The abundant distribution of cannabinoid receptors on skin nerve fibers and mast cells provides implications for an anti-inflammatory, anti-nociceptive action of cannabinoid receptor agonists and suggests their putatively broad therapeutic potential

Ethics approval required

Ethics approval required

Ethics approval(s)

approved 21/01/2024, V. Buzzi Hospital (Via Castelvetro 24, Milan, 20124, Italy; +390263635420; prenotagine@asst-fbf-sacco.it), ref: protocol code 14/2024

Study design

Randomized double blind multicentric controlled trial

Primary study design

Interventional

Study type(s)

Treatment, Safety, Efficacy

Health condition(s) or problem(s) studied

Treatment of patients with vestibulodynia, the most common manifestation of the vulvodynia

Interventions

One or more members of the staff who do not work directly with the subject will be responsible for assignment to active or placebo treatment based on random assignment. The patients will be trained to apply the gel to the vulvar vestibule (2 puff of the dispenser) once a day for 60 days, before the bedtime, with a follow-up after 60 days after the end of therapy.

Intervention Type

Drug

Phase

Phase III/IV

Drug/device/biological/vaccine name(s)

Cannabidiol (CBD) plus myrcene (brand name Edonelle Plus)

Primary outcome(s)

1. Pain intensity is measured using a 0–10 point visual analog scale (VAS) at baseline, 60 days, and 120 days
2. Dyspareunia is measured using a 0–10 point visual analog scale (VAS) at baseline, 60 days, and 120 days
3. Vestibular pain sensitivity is measured using the cotton swab test at baseline, 60 days, and 120 days
4. Percentage change in pain scores is measured using a 0–10 point visual analog scale (VAS) at baseline, 60 days, and 120 days
5. Absolute change in pain scores is measured using a 0–10 point visual analog scale (VAS) at baseline, 60 days, and 120 days

Key secondary outcome(s)

There are no secondary outcome measures

Completion date

31/08/2025

Eligibility

Key inclusion criteria

1. Women are at least 18 years of age and premenopausal, defined as having menstruated within the past 12 months
2. Women experience moderate to severe pain, defined as a minimum score of 4 out of 10 on a numeric rating scale, in at least one of three parameters (pain, dyspareunia, or swab test) during at least 90% of sexual intercourse attempts
3. Pain is localized to the vestibule during vaginal intercourse and during activities that exert pressure on the vestibule, such as tampon insertion, wearing tight jeans or pants, cycling, or horseback riding
4. Women have had a diagnosis of vestibulodynia (VBD) for at least 6 months, confirmed using a standardized gynecological examination protocol

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Upper age limit

50 years

Sex

Female

Total final enrolment

40

Key exclusion criteria

1. Women have active vulvovaginal infections at the time of their gynecological examination
2. Women have genital bleeding of unknown origin
3. Women are concurrently enrolled in other interventional clinical trials
4. Women are unwilling to provide informed consent to participate in the trial
5. Women have used topical drugs in the past 30 days

Date of first enrolment

15/03/2025

Date of final enrolment

30/03/2025

Locations**Countries of recruitment**

Italy

Study participating centre**Vittore Buzzi Hospital**

Via Castelvetro 24

Milan

Italy

20124

Study participating centre**ARNAS - Garibaldi Hospital**

PiazzaSantaMariadiGesù5

Catania

Italy

95124

Sponsor information

Organisation

Ospedale dei Bambini Vittore Buzzi

ROR<https://ror.org/044ycg712>

Funder(s)

Funder type

Research organisation

Funder Name

Italian Vulvodynia Association

Results and Publications

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are not expected to be made available due to legal and ethical and local institutional rules.

IPD sharing plan summary

Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol file	version 1		07/07/2025	No	No