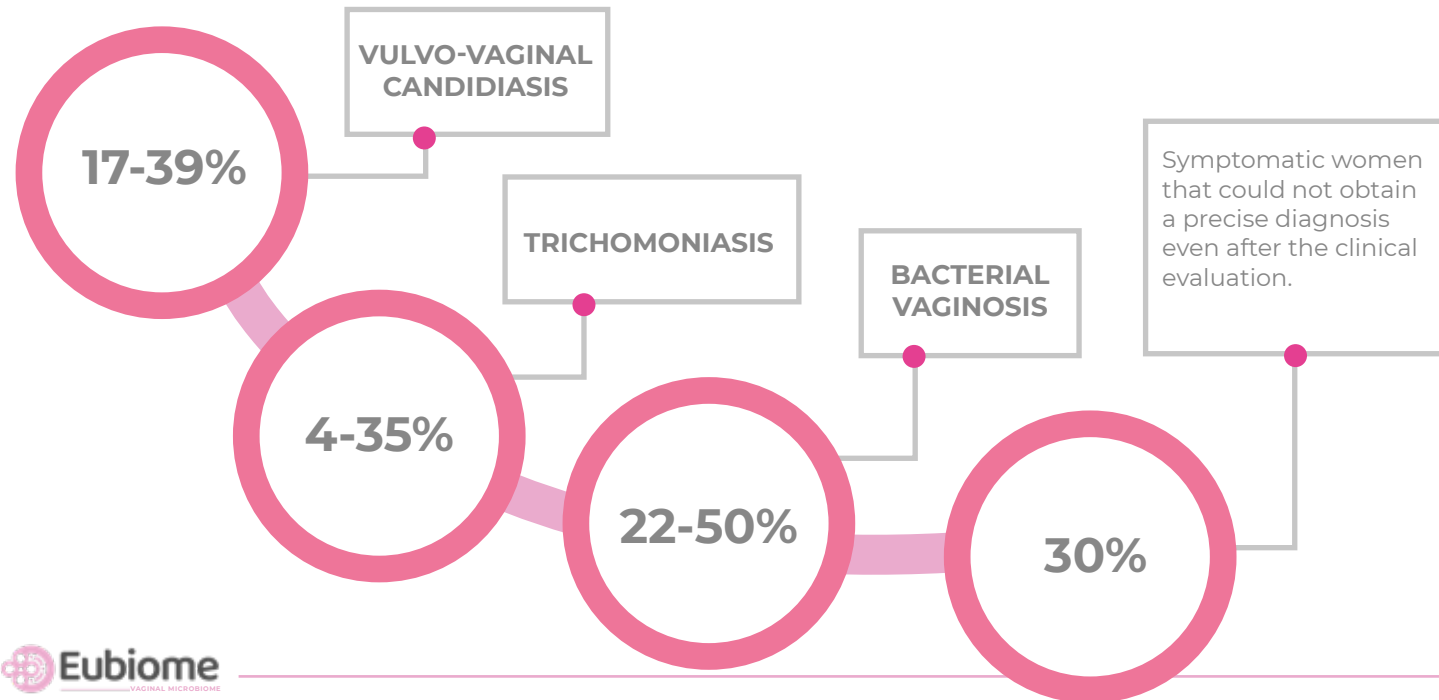


Vaginal infections: balance between commensal and pathogenic bacteria

Vaginitis is an infection of the female vaginal tract; most commonly it is caused by Candida infections (i.e. candidiasis) and a protozoan called Trichomonas vaginalis (i.e. trichomoniasis). Moreover, the reduction in the amount of lactobacilli and the excessive proliferation of endogenous bacteria, may lead to the development of pathological conditions, including bacterial vaginosis, caused by the proliferation of various anaerobic germs.



The critical role of the microbiota

The term **vaginal microbiome** refers to the set of genomes of microorganisms that under physiological conditions colonise the genital district without damaging it (**vaginal microbiota**).

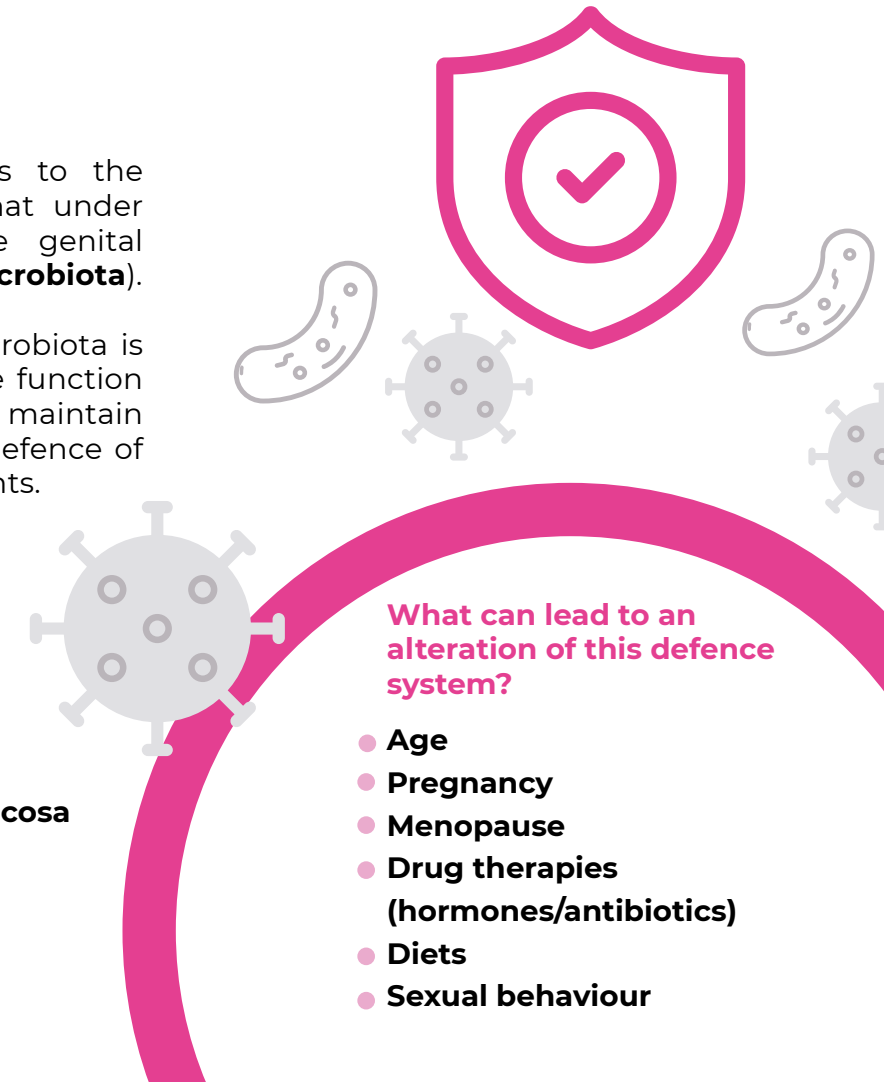
In balanced conditions, the vaginal microbiota is mainly composed of **lactobacilli**, whose function is both to produce lactic acid in order to maintain the acidic vaginal pH, and to act as a defence of the mucosa itself against infectious agents.

A balanced vaginal microbiota:

- Improves mucus secretion
- Maintains a protective acidic pH
- Protects against pathogens
- Protects the integrity of the vaginal mucosa
- Strengthens the immune system

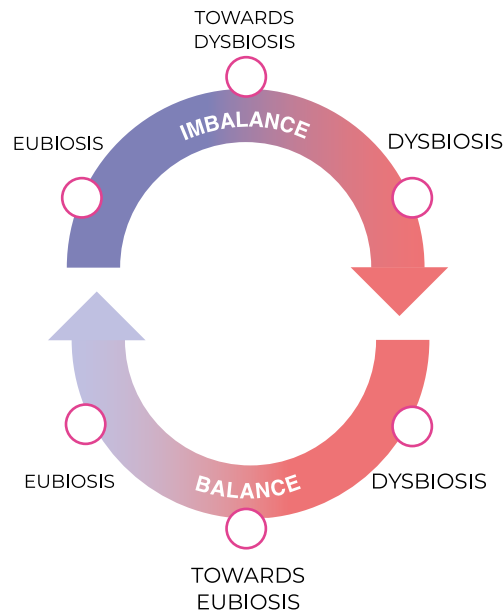
What can lead to an alteration of this defence system?

- Age
- Pregnancy
- Menopause
- Drug therapies (hormones/antibiotics)
- Diets
- Sexual behaviour



How does it work?

Eubiome analyses the vaginal microbiome, identifying and quantifying four different lactobacillary species. It also identifies the presence of opportunistic fungi and bacteria, sexually transmitted pathogens and high-risk virotypes of the human papilloma virus.



Purpose of the test:

Compared to other tests that provide a static assessment of the vaginal district, Eubiome evaluates the health status of the cervical-vaginal district by classifying it into five 'scores', each of which is representative of a characteristic microbial community or 'Community State Type' (CST). By defining the CST, Eubiome provides a dynamic assessment of the balance/imbalance and outlines the microbiota's ability to defend itself against pathogens.



Community State Type: the new parameter for the vaginal ecosystem health.

The term CST (Community State Type) is used in microbiology to describe a microbial community with similar bacterial composition and abundance.

Depending on the identified CST, different clinical strategies **can be evaluated to manage the presence of pathogens:**

- Modulating antibiotic therapy
- Increasing probiotic intake
- Increasing the surveillance programme to follow the progression or regression of the infection.

5 Vaginal Biotypes

- CST I** — Prevalence of *Lactobacillus crispatus*
- CST II** — Prevalence of *Lactobacillus gasseri*
- CST III** — Prevalence of *Lactobacillus iners*
- CST IV** — Lack or low presence of *lactobacilli*
- CST V** — Prevalence of *Lactobacillus jensenii*

Eubiome is targeted to:

Symptomatic patients presenting:

- abnormal vaginal discharges
- itching/burning
- slight bleedings
- pain or discomfort during sexual intercourse
- urinary hesitancy

Asymptomatic patients:

- Women of childbearing age
- Women who struggle to conceive
- Menopausal women
- Women who had unprotected sexual intercourses and at risk for a sexual transmitted disease
- Women who want to assess their health status

Benefits of the test:

- Eubiome clearly and comprehensively defines the health status of the cervico-vaginal district, identifying whether there are infections and whether the vaginal microbiota is in eubiosis or not.
- It allows to provide customised treatment based on the identified CST and the presence or absence of pathogens.
- It allows to follow the progression of the dysbiosis condition. A clinical management can be adapted according to the results of the analysis.
- It can also identify a dysbiosis condition in asymptomatic patients.

Eubiome kit contains:

- 1 a vaginal swab for DNA analysis of microorganisms
- 2 an endocervical swab for HR HPV analysis
- 3 test request form and patient medical history form



Turn around time: 7-10 working days



laboratoriogenoma.eu

info@laboratoriogenoma.eu
Customer care: 06.164161500

Numero Verde
800 501 651



Roma

Laboratories and Medical Studies
Headquarters and Research and Development Laboratory in Molecular Genetics

Via Castel Giubileo, 11 – 00138

Laboratory of Medical Genetics and Molecular Diagnostics
Samples and Consulting

Via Castel Giubileo, 62 – 00138

Milano

Molecular Genetics Laboratory and Medical Studies

Via Enrico Cialdini, 16

Firenze

Laboratories and Medical Studies

Via Camillo Cavour, 168r