



Vaginal Microbiome

Complete genome sequencing of
the vaginal microbiome

SYNLAB 
SOLUTIONS IN DIAGNOSTICS

www.synlab-sd.com



Why undergoing this examination?

The vaginal microbiome is one of the most important defense mechanisms of the vaginal tract against the colonization of opportunistic microorganisms and pathogens responsible for sexually transmitted infections (STIs).

Despite the considerable variability from one woman to another, the "healthy state of the vaginal microbiome" in women of reproductive age is defined by the dominant presence of one or, at most, two species of *Lactobacillus*.

Imbalances in the vaginal microbiome are primarily caused by the depletion of *Lactobacillus* spp. Numerous studies associate this decrease with an increased risk of sexually transmitted infections (STIs), as well as complications in pregnancy (miscarriage, preterm birth...) and poorer in vitro fertilization outcomes (lower implantation rates and a higher number of late abortions). For all these reasons, it has been recognized in recent years that the microbial community of the lower genital tract plays a fundamental role in maintaining women's sexual and reproductive health.

What is the exam?

The **Vaginal Microbiome** test allows for the analysis of the relative abundance of bacterial species that make up the vaginal microbial community using shotgun metagenomic sequencing. This avoids the amplification bias inherent in conventional studies based on 16S rRNA analysis and provides more precise information at the species level. The use of massive sequencing molecular techniques has made it possible to classify the vaginal microbiome into the so-called five community states (CST). Additionally, the test includes the analysis (PCR-RT) of infection by *Chlamydia trachomatis*, *Neisseria gonorrhoeae*, *Trichomonas vaginalis*, *Mycoplasma genitalium/hominis*, *Ureaplasma urealyticum/parvum*, and the following 7 species of *Candida*: *C. albicans*, *C. glabrata*, *C. parapsilosis*, *C. krusei*, *C. dubliniensis*, *C. tropicalis*, and *C. lusitaniae*.

For whom is it indicated?

- Women with infertility problems (recurrent implantation failure and repeated miscarriages);
- Recurrent vaginal infections (bacterial vaginosis, *Candida* spp, among others);
- Chronic pelvic pain;
- Those considering motherhood and/or wishing to proactively assess their vaginal health.

Technology

Shotgun Metagenomic Sequencing by Next Generation Sequencing (NGS).

Advantages

SYNLAB GROUP

Guaranteed by the experience of the absolute European leader in laboratory diagnostics.

COMPLETE

- Comprehensive view of the vaginal microbiome, allowing characterization of the patient's CST;
- Objectively establishes different states of dysbiosis through internally validated clinical cutoffs;
- Optimizes the therapeutic approach to frequent vaginal tract infections.

Extra Information

DOCUMENTATION – Available on the SYNLAB Direct for clients

- Informed Consent;
- Clinical Questionnaire;
- Medical prescription.

PREPARATION

- It is recommended to stop antibiotics, vaginal creams, ovules, and antiseptic solutions one month before sample collection.



Delivery Time

18 business days

Sample Type

Vaginal exudate with specific kit provided by Synlab