The endometrium matters
Recent studies led by Igenomix indicate that the endometrium is a key factor for reproductive success. A complete view of endometrial health includes:

- **ALICE** (Analysis of Infectious Chronic Endometritis): Detects pathogenic bacteria. ALICE detects chronic endometritis, a condition affecting 30% of infertile patients that is linked to implantation failure and recurrent miscarriage.

- **EMMA** (Endometrial Microbiome Metagenomic Analysis): Indicates the endometrial microbiome balance. EMMA provides information on the proportions of healthy endometrial bacteria, including those linked to higher pregnancy rates. Includes ALICE.

- **ERA** (Endometrial Receptivity Analysis): Determines the window of implantation. ERA establishes the time when the endometrium is receptive, and reports the optimal time for personalized embryo transfer.

### Analyzes:

- **Endometrial receptivity**
- **Chronic endometritis**
- **Endometrial flora**

*EndomeTRIO includes all three tests*
Pathogenic bacteria
These bacteria cause infection, which is linked to implantation failure and recurrent miscarriage
Staphylococcus, Streptococcus, Enterococcus, Mycoplasma, Ureaplasma, Enterobacteria (Escherichia, Klebsiella), Chlamydia and Neisseria.

Dysbiotic bacteria
Microbial imbalance is linked to embryo implantation failure
Bifidobacterium, Prevotella, Sneathia, Atopobium, Veillonella...

Optimal microbiome
A balanced microbiome improves the reproductive prognosis, resulting in increased chance of pregnancy and live births
Lactobacillus

Why the endometrial microbiome matters
The balance of bacteria in the endometrium is a key factor for successful implantation

ALICE
This test detects chronic endometritis-causing bacteria and recommends appropriate antibiotics*

EMMA
Provides a complete view of the endometrial microbiome composition, and recommends antibiotic and probiotic treatment, if needed, to restore an optimal microbiome**

How it works
1. Endometrial sample
2. Next generation sequencing (NGS) analysis
3. The report provides information on the endometrial microbiome and recommends personalized treatment, guided by a clinic microbiologist, which can include:
   - Antibiotic therapy
   - Probiotics with Lactobacillus to restore an optimal microbiome
4. Embryo transfer into a favourable microbiome

More than 32,000 women in 70 countries have been tested by ERA. This test determines the window of implantation - the precise time when the endometrium is receptive. The ERA test resulted in a 73% pregnancy rate in patients with implantation failure.

The cycle begins

Day 14: ovulation

1 **Window of implantation**
The time when the endometrium is receptive to the embryo

2 **Genetic analysis**
A predictive genetic analysis model of 248 genes to detect endometrial receptivity

3 **Report**
The results indicate the optimal time for embryo transfer

4 **Personalized embryo transfer**
Performed at the optimal time

* Clemente-Ciscar et al, 2018, submitted
www.igenomix.com