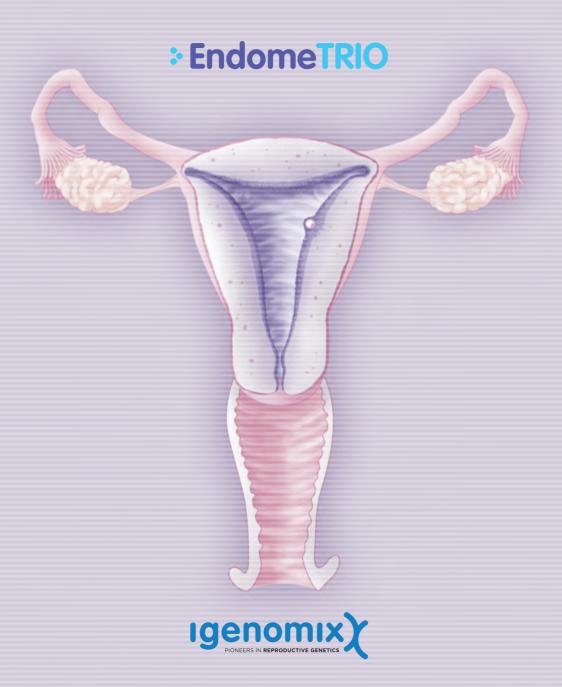
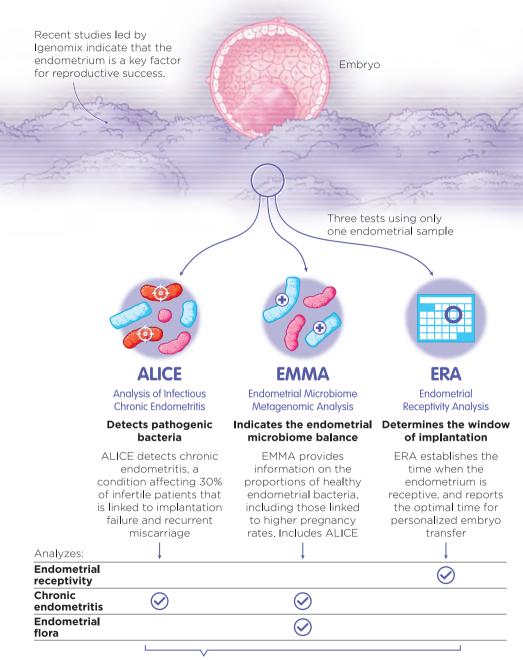
The endometrium matters



A complete view of endometrial health



ALICE & EMMA

Analysis of Infectious **Chronic Endometritis** **Endometrial Microbiome** Metagenomic Analysis

Uterus

Embryo

Cervix

Vagina

Optimization of the endometrial microbiome to improve reproductive success

ENDOMETRIUM

Why the endometrial microbiome matters

The balance of bacteria in the endometrium is a key factor for successful implantation

HIGHER REPRODUCTIVE SUCCESS



Pathogenic bacteria

These bacteria cause infection, which is linked to implantation failure and recurrent miscarriage

Enterococcus, Mycoplasma, Ureaplasma, Enterobacteria (Escherichia, Klebsiella), Chlamydia and Neisseria.

Dysbiotic bacteria Microbial

imbalance is linked to embryo implantation failure

Prevotella, Sneathia,

Optimal microbiome

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

Lactobacillus

ALICE

This test detects chronic endometritiscausing 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**

*Moreno et al. Am J Obstet Gynecol 2018: 218(6):602.e1-602.e16

How it works



1 Endometrial sample



Next generation sequencing (NGS) analysis

Fallopian

tubes



- 3 The report provides information on the endometrial microbiome and recommends personalized treatment, guided by a clinical microbiologist, which can include:
 - Antibiotic therapy
- Probiotics with Lactobacillus to restore an optimal microbiome

Fimbriae







Embryo transfer into a favorable 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 Day 14: begins ovulation 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 Window of implantation The time when the endometrium is receptive to the embryo Pre-receptive: Theoretical Post-receptive: before day 19 window: after day 21 normally between days 19 and 21 of the cycle **Unknown date**

> The window of implantation is not the same for all women. Around 35% of women with recurrent implantation failure are pre-receptive or post-receptive during this theoretical window

Genetic analysis

* Ruiz-Alonso et al. Fertil Steril. 2013

* Clemente-Ciscar et al, 2018, submitted

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





The results indicate the optimal time for embryo transfer

Personalized window of implantation





Personalized embryo transfer Performed at

the optimal time

^{**}Moreno et al. Am J Obstet Gynecol 2016; 215(6):684-703.



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