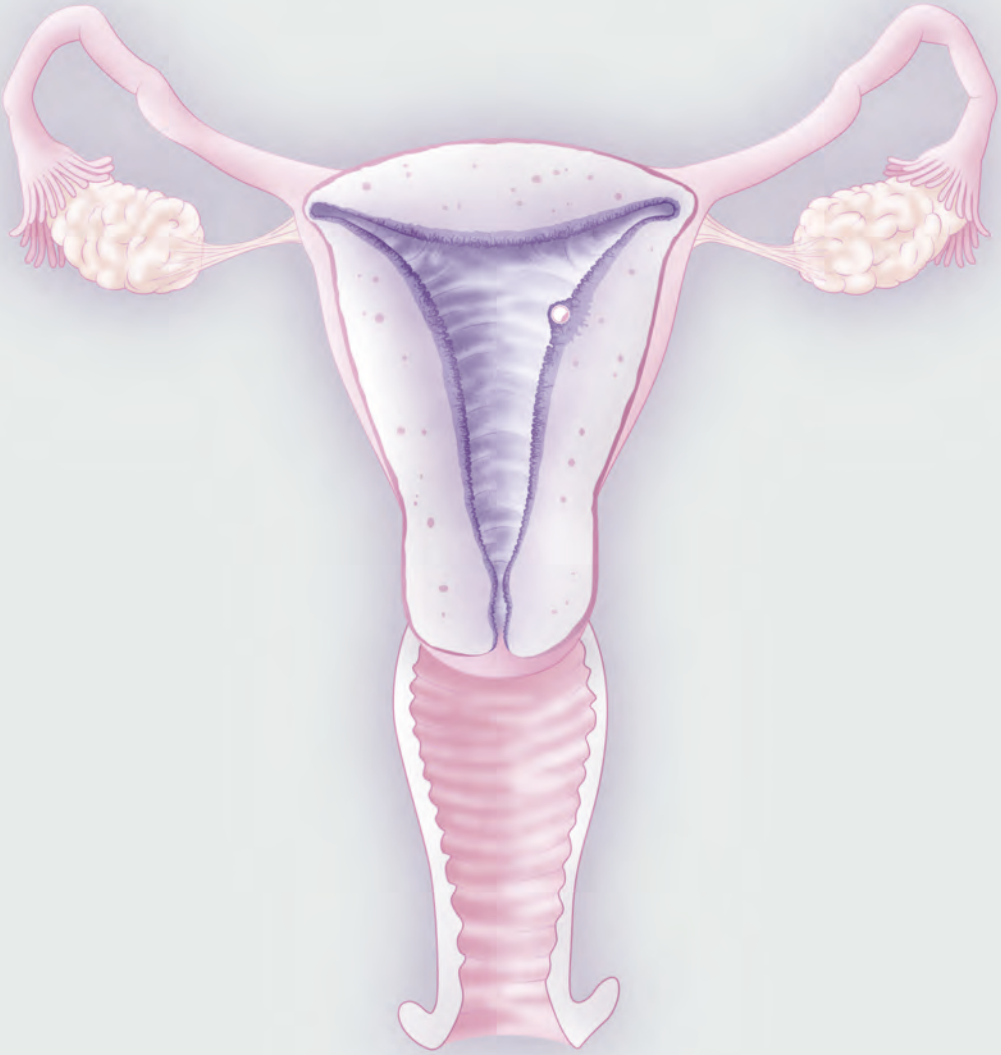
EndomeTRIO

The endometrium matters

by Igenomix®



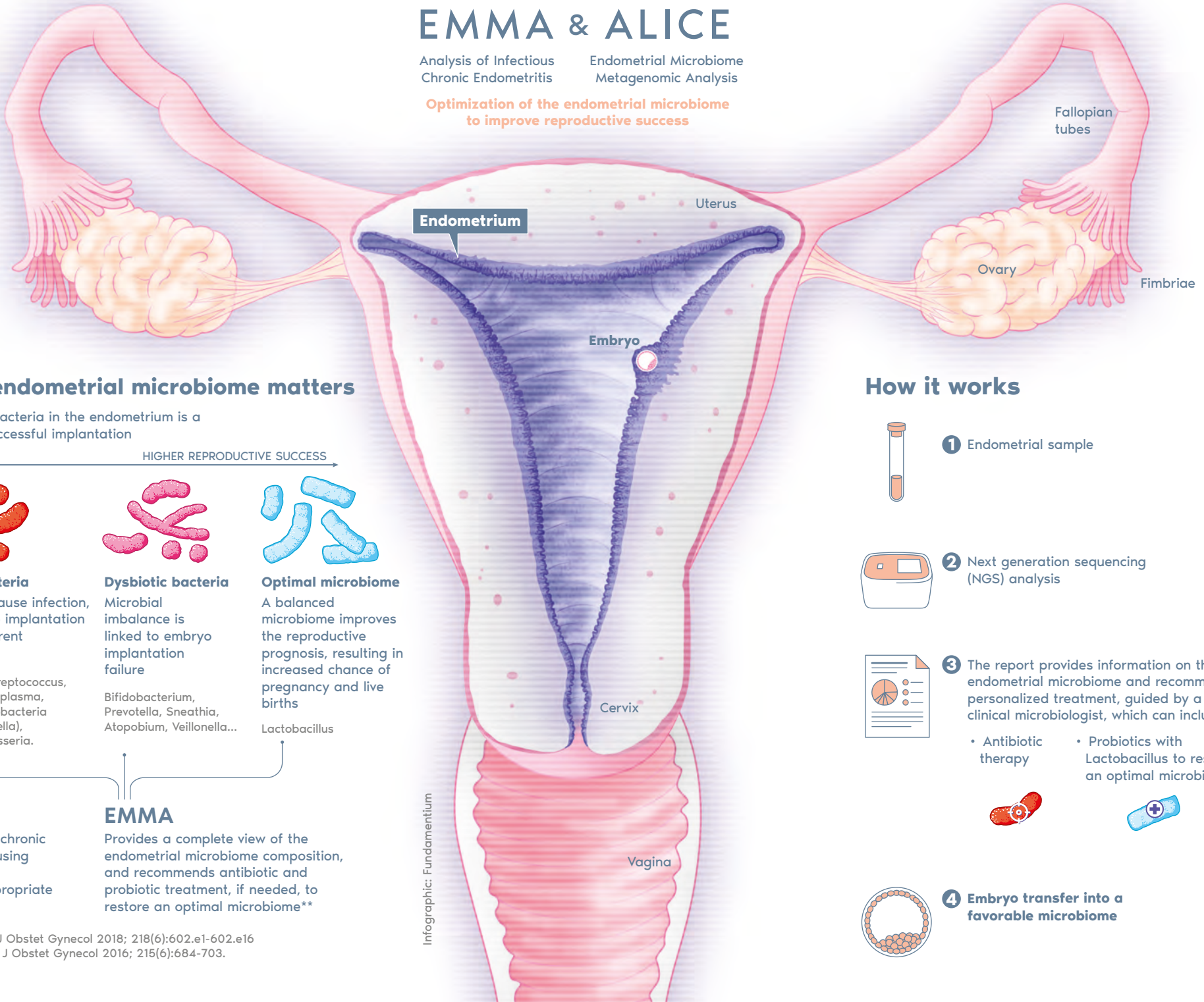
Igenomix®
WITH SCIENCE ON YOUR SIDE

EMMA & ALICE

Analysis of Infectious Chronic Endometritis

Endometrial Microbiome Metagenomic Analysis

Optimization of the endometrial microbiome to improve reproductive success



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

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

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**

*Moreno et al. Am J Obstet Gynecol 2018; 218(6):602.e1-602.e16
**Moreno et al. Am J Obstet Gynecol 2016; 215(6):684-703.

Infographic: Fundamentium

How it works

1. Endometrial sample

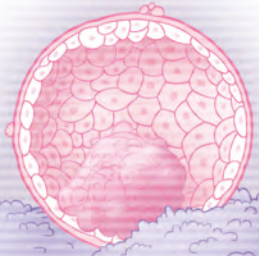
2. Next generation sequencing (NGS) analysis

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

4. **Embryo transfer into a favorable microbiome**

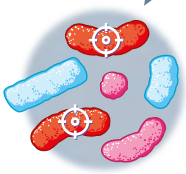
A complete view of endometrial health

Recent studies led by Igenomix indicate that the endometrium is a key factor for reproductive success.



Embryo

Three tests using only one endometrial sample



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 all 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:	ALICE	EMMA	ERA
Endometrial receptivity			✓
Chronic endometritis	✓	✓	
Endometrial flora		✓	

EndomeTRIO ✓✓✓ includes all three tests

ERA® Endometrial Receptivity Analysis

ERA® is a diagnostic test that allows a personalized embryo transfer by synchronizing the embryo with the patient's window of implantation.

The cycle begins

Day 14: 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

1 Window of implantation

The time when the endometrium is receptive to the embryo

Pre-receptive: before day 19

Theoretical window: normally between days 19 and 21 of the cycle

Post-receptive: after day 21

Unknown date

The window of implantation is not the same for all women. 3 in every 10 implantation failure patients have a displaced window of implantation.*

2 Genetic analysis

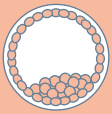
A predictive genetic analysis model of 248 genes to detect endometrial receptivity

3 Report

The results indicate the optimal time for embryo transfer

Personalized window of implantation

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	✓	19	20	21	22	23	24	25	26	27	28



4 Personalized embryo transfer

Performed at the optimal time

* Ruiz-Alonso et al, Fertil Steril. 2013

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