ER Map® is a new personalised test to diagnose the receptivity status of the endometrium during the window of Implantation (WOI). ER Map® is able to identify the best endometrial moment for an embryo to be transferred increasing the chances of a successful implantation and pregnancy. ER Map® is a molecular tool based on the expression analysis of genes with functional relevance in the process of endometrial receptivity and the immunological response associated to successful embryo implantation.

Patent pending.

**METHODOLOGY**

1. Biopsy of endometrial tissue P+5.5 / LH+7
2. Introduction in the ER Map® cryotube
3. Refrigeration at 4°C (at least 4 hours)
4. Sample shipment at room temperature
5. Analysis of gene expression
6. Results in 10 working days

ER Map® is able to identify the best endometrial moment for an embryo to be transferred increasing the chances of a successful pregnancy.
What is Endometrial Receptivity?

The endometrium is the inner layer of the uterus where embryo implantation takes place. It undergoes periodic changes throughout the menstrual cycle and it reaches a receptive status, when it is ready for embryonic implantation, around day 19-21 of the cycle. This period of time is known as the “window of implantation” (WOI) and it occurs 7 days after the peak of endogenous LH (LH+7). We know that the endometrium is refractory to pregnancy in other moments of the menstrual cycle outside of the WOI. Recent studies have reported a specific gene expression profile during the WOI and this transcriptomic signature can be used for the evaluation of the endometrial function¹.

What is ER Map® for?

Endometrial Receptivity Map can assess the endometrial status of a patient and determine if an endometrium is receptive or not at the time of the biopsy¹. ER Map® results allow the precise timeframe identification of the WOI. Based on the test results, a personalised embryo transfer can be performed at the highest endometrial receptivity moment, increasing the chances of ART success².

Who can benefit from ER Map®?

All patients undergoing assisted reproduction treatment can benefit from the precise determination of the window of implantation. Approximately 30% of patients have a displaced WOI. This test can be useful even in patients with no apparent endometrial problems, normal uterus and normal endometrial thickness. ER Map® is recommended especially in couples who have experienced failed cycles or pregnancy loss after the transfer of good quality embryos.

Why using ER Map®?

Classical histologic dating of the endometrium is quite subjective and presents limitations determining which is the best endometrial moment to perform the embryo transfer. Molecular diagnosis of endometrial status by ER Map® provides a more reliable method to determine specific stages of an endometrial cycle.

ER Map® is a more comprehensive alternative to the endometrial receptivity tests currently available. It is the only endometrial receptivity test, which includes the evaluation of immune response genes closely linked to the implantation process. Moreover, unlike other tests, it has been specifically designed to be applied not only in Caucasian patients, but also in women with different ethnic backgrounds.