

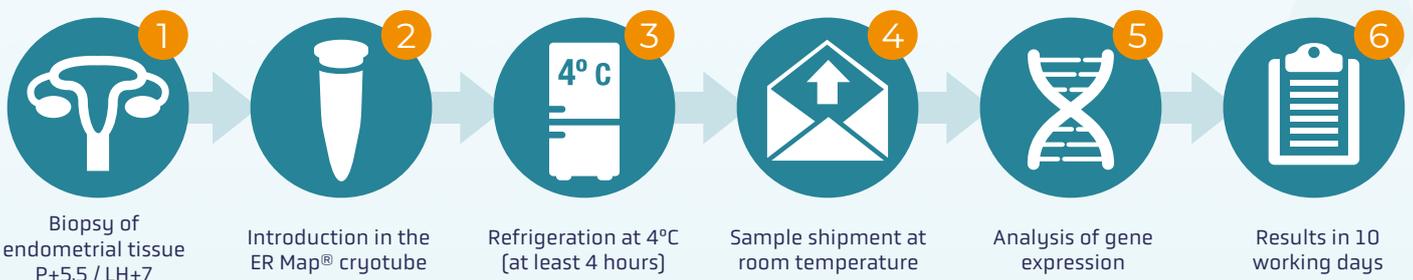
The ER Map[®] test identifies the optimal endometrial timing for embryo transfer at the moment most likely to result in pregnancy.



We know that the endometrium is refractory to pregnancy in other moments of the menstrual cycle outside the so-called "Window Of Implantation" (WOI). Recent studies have shown a specific gene expression profile during the WOI and this transcriptomic signature can be used for the endometrial function test¹.

ER Map[®] is a molecular tool based on the analysis of the genes' expression with functional relevance in the process of endometrial receptivity and the immunological response associated with successful embryo implantation.

The process



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).

ER Map[®] test description

Endometrial Receptivity Map can assess the endometrial status of patient and determine if it 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.

Benefits & value-added

All patients undergoing assisted reproduction treatment can benefit from the precise determination of the window of implantation. Approximately 30% of patients have a displaced WOI². This test can be useful even in patients with no apparent endometrial problems, normal uterus and normal endometrial thickness. ER Map[®] is indicated especially in couples who have experienced failed cycles or pregnancy loss after the transfer of good-quality embryos.

Indications

Classical histologic dating of the endometrium is quite subjective and presents limitations in 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 that includes the evaluation of immune response genes closely linked to the implantation process.

1. Enciso M. et al.- Hum Reprod 2018; 33(2): 220–228.
2. Enciso M. et al.- Sci Rep 2021; 11(1): 1–8.

