



ER-CompleteSM Test

Identifying the right time and right environment for your embryo transfer



CooperSurgical[®]
Fertility Solutions

What is the endometrium?

Understanding your menstrual cycle

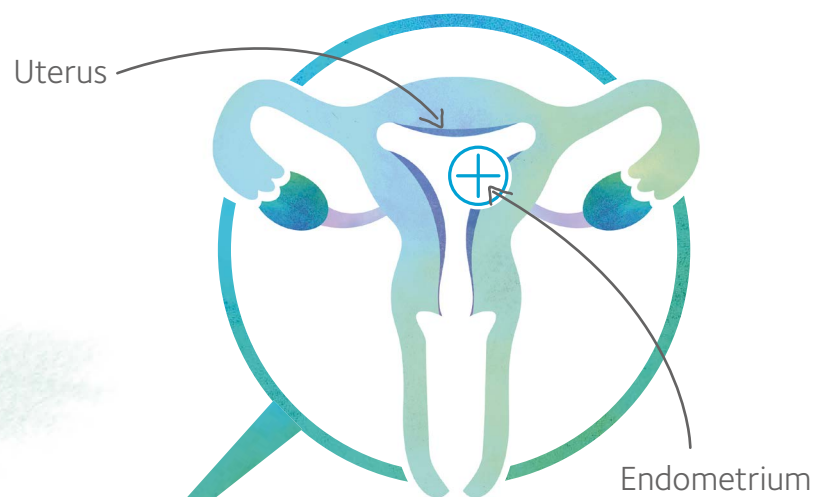
During your menstrual cycle, the endometrium thickens to prepare for a possible pregnancy. If pregnancy doesn't occur, the endometrium (the inner lining of your uterus) breaks down and the cycle starts again.

A developing embryo implants into the thickened endometrium to receive the oxygen and nutrients it requires to grow. If the endometrial environment isn't ideal or an embryo is transferred at a suboptimal time, even a good quality embryo may fail to implant.

It can be helpful to check if your endometrium is ready and in the ideal environmental condition for an embryo to implant. This is known as endometrial receptivity.



The **ER-CompleteSM test** may help determine a personalized **transfer time** and **optimal environment** for your embryo(s) to implant



Research has highlighted the importance of the interaction between the embryo and endometrium for successful embryo implantation during IVF.¹



1. K. Diedrich, B.C.J.M. Fauser, P. Devroey, G. Griesinger, on behalf of the Evian Annual Reproduction (EVAR) Workshop Group, The role of the endometrium and embryo in human implantation, Human Reproduction Update, Volume 13, Issue 4, July/August 2007, Pages 365-377

Why is it important to check endometrial receptivity?

Endometrial testing could help you if:

- You have a history of recurrent implantation failure (RIF)
- You only have a single embryo to transfer
- You want to understand if your endometrium is at an ideal state for embryo transfer

Our **ER-Complete test** can help ensure the endometrium timing and environment is most optimal for an embryo transfer. It provides you a complete view of your endometrium, with **actionable results** and may give you a **better chance of a successful pregnancy**.

Your IVF clinician will determine if ER-Complete is right for you, guide you through the testing process, and help you understand your results.

How can ER-Complete help me?

ER-Complete is a test performed on a biopsy (small sample) taken from your endometrium during a mock IVF cycle. This test gives you three results which help you and your IVF clinician:



- Determine your personalized embryo transfer time
- Evaluate your endometrial environment
- Understand if specific reproductive tract bacteria are present

ER-Complete is a comprehensive assessment of your endometrial receptivity, combining both **ERPeak** and **ERBiome** tests.



ERPeak[®]



ERBiomeSM

Please note that ERPeak test and ERBiome test can also be ordered separately.

ERPeak® Test

The right time is key for successful embryo transfer

Your endometrium is at its most receptive for an embryo during a period known as the window of implantation (WOI). If you are undergoing IVF, the WOI is usually five full days after you begin taking progesterone (or seven days after the LH surge in a natural cycle). Your doctor may refer to this as P+5 (or LH+7) and they will commonly schedule an embryo transfer for this day. However, for some women the WOI may occur earlier or later, e.g., at P+4 or P+6, (or LH+6 or LH+8.)

How can ERPeak help me?

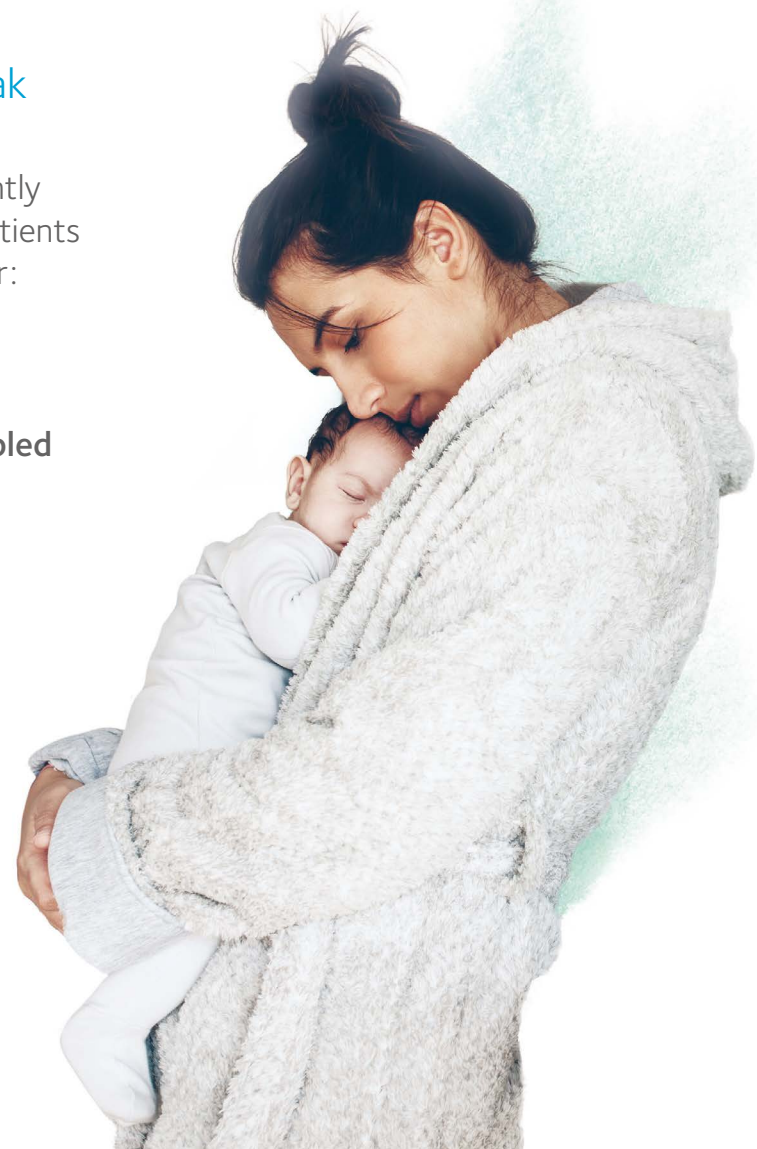
The **ERPeak test** helps to **determine your window of implantation and when your endometrium may be most receptive.**² This will guide your IVF team with a precise embryo transfer window.



Improved outcomes with ERPeak

In an independent study involving 550 patients,² **ERPeak** resulted in significantly better outcomes for RIF patients vs patients not using personalized embryo transfer:

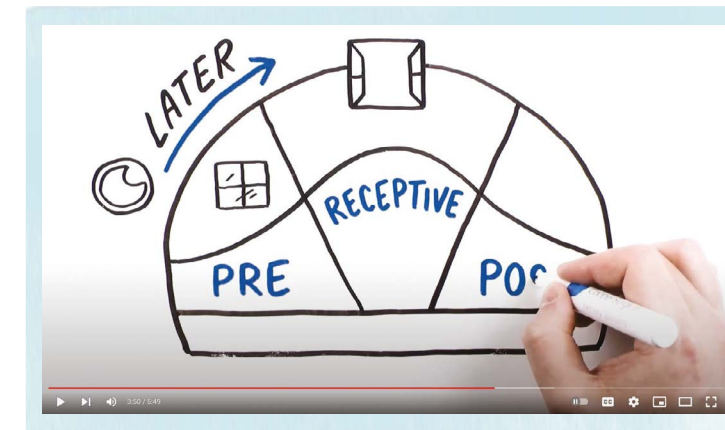
- 2^x** Clinical pregnancy rates doubled
- 3^x** Birth rates tripled
- 50%** Miscarriage rates halved



Window of Implantation

43.5%
of women

with **RIF** experience a displaced WOI and this may cause some embryos to fail to implant.²



Our latest video gives you a visual guide to understand how your WOI is identified to help improve transfer success.

Watch it now at:

fertility.coopersurgical.com/genomics/erpeak-endometrial-receptivity-test/

Easy result interpretation



Pre-Receptive

Your window of implantation may be later than when you had your biopsy



Receptive

Your window of implantation mirrors when you had your biopsy



Post-Receptive

Your window of implantation may be earlier than when you had your biopsy



2. Ohara et al, Clinical relevance of a newly developed endometrial receptivity test for patients with recurrent implantation failure in Japan. Reprod Med Biol, 2022

The right environment is key for successful embryo transfer

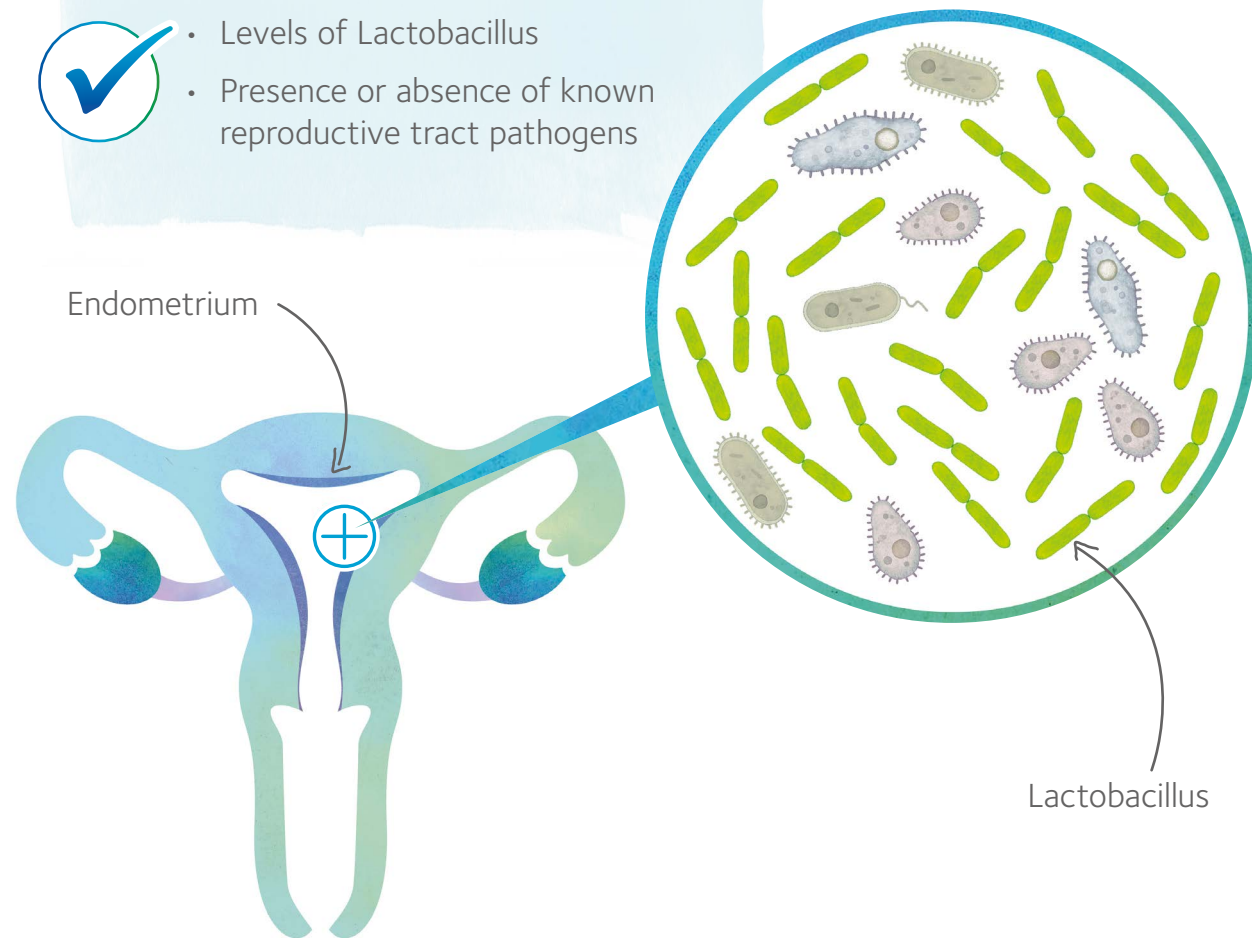
Research shows that dysbiosis (an imbalance of microbes) in your endometrium may cause an inflammatory and unfavorable environment that can negatively impact implantation.³

Presence in the endometrium of a certain type of bacteria (Lactobacillus) is associated with positive outcomes, such as an increased embryo implantation rate. An endometrium with greater than or equal to 90% lactobacillus has been known to have higher implantation rates.^{4,5}

Other microbes which are known to be disease-spreading (pathogens) are associated with reduced implantation rates as they can have an adverse impact on implantation of an embryo, or other serious health consequences.^{4,5}

How can ERBiome help me?

- Levels of Lactobacillus
- Presence or absence of known reproductive tract pathogens



ERBiome test results

Easy result interpretation

A **Lacto-dominant** or **Non-Lacto-dominant** result is given along with detected reproductive tract pathogens known to negatively impact implantation outcomes.



Lacto-dominant (favorable endometrial environment):

Your endometrial sample was found to have a composition of **greater than or equal to: 90% lactobacillus**



Non-lacto-dominant (less favorable):

Your endometrial sample was found to have a composition of **less than: 90% lactobacillus**

Your clinician will interpret the results and let you know if they recommend any type of treatment.

The ERBiome test is considered a screening test and should not be used alone to diagnose or treat any condition

3. Toson, Bruno et al. "The Endometrial Microbiome and Its Impact on Human Conception." International journal of molecular sciences vol. 23,1 485. 1 Jan. 2022, doi:10.3390/ijms23010485

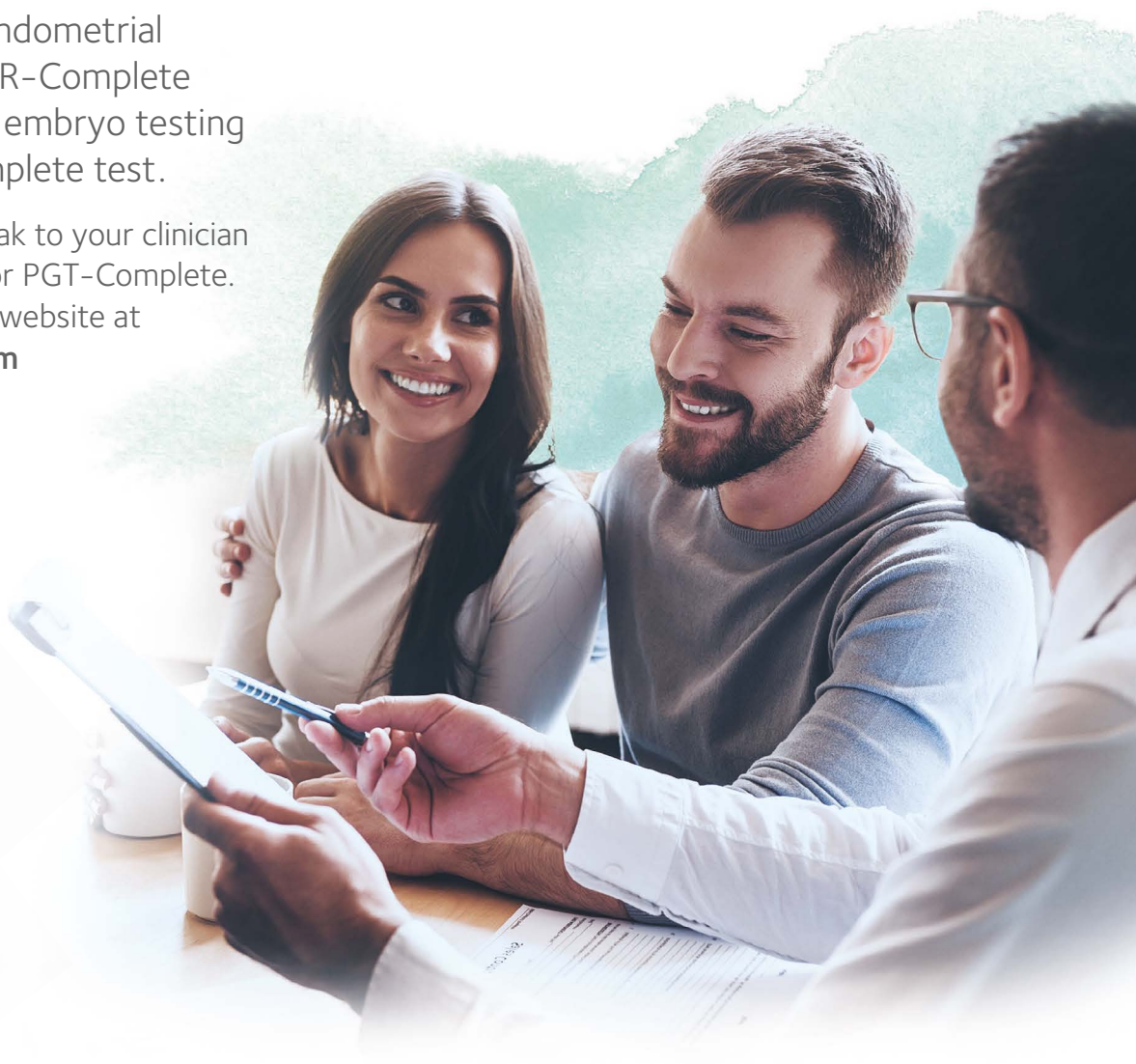
4. Moreno et al, Evidence that the endometrial microbiota has an effect on implantation success or failure. Am J Obstet Gynecol. 2016

5. Elashar, A.M. Impact of endometrial microbiome on fertility. Middle East Fertil Soc J, 2021

ER-CompleteSM can be combined with PGT-CompleteSM

If thinking about endometrial testing using our ER-Complete test, we also offer embryo testing with our PGT-Complete test.

To find out more, speak to your clinician about ER-Complete or PGT-Complete. You can also visit our website at coopergenomics.com



Our Complete genetic testing portfolio

PGT-Complete SM
4-in-1 genetic test
PGT-A via PGTai [®]
Parental QC
Genetic PN check
Parent of Origin of Aneuploidy



ER-Complete SM
3-in-1 endometrial test
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Abundance of lactobacillus
Reproductive tract pathogens

