I'm impressed. How would this benefit me again?

Let's summarize.

1. **Optimal embryo development and better selection means more pregnancies.**
   Miri® TL has a very stable and maximum controlled conditions which provides better culture environment for your embryos.

2. **One Patient, One Chamber.**
   The Miri® TL has six individual chambers which allow embryologists to culture embryos such that there is one independent chamber for each patient, which helps reduce cross contamination.

3. **Capture the very beginning of your baby's life.**
   Since Miri® TL is capable of recording pictures and videos, you can see the very beginning of your future baby's life.

4. **Documentation and analysis**
   New information can be obtained as basis for better selection to improve the success of pregnancy. The stored images and videos can be used in cases where more embryo information is desired. It is also helpful in cases with repeated implantation failure and recurrent miscarriage.

5. **Best conditions**
   State of the art incubator conditions is vital for embryo development conditions. The ultimate target are to get better embryos and less embryo transfer to minimize the risk of multiple pregnancies.

Miri® TL provides the best possible conditions for embryo development which lead to more viable embryos. Some of these embryos can be vitrified or stored in case you planned to have another baby.

---

**About Esco Medical**

Esco Medical is a leading manufacturer and innovator of high-quality equipment such as long-term embryo incubators, ART workstations, anti-vibration table, time-lapse incubators and is continuously developing advanced technologies to meet the increasing demand of the IVF industry. Most products are designed in Denmark and manufactured in the EU. Esco Medical is a business unit of the Esco Group, being a global life sciences tools provider in containment, clean air, pharmaceutical, and laboratory equipment technologies with active sales in over 100 countries and direct company offices in the top ten geographical markets.

---

**Miri® TL**

*Selecting the most viable embryo made easier through time-lapse enabled assessment*

---

**Ask your Doctor about Miri® Time-lapse!**
What is conventional \textit{in-vitro} fertilization?

When you undergo a routine \textit{in-vitro} fertilization (IVF) or an intra-cytoplasmic sperm injection (ICSI) cycle, your embryos will be kept in an incubator with strictly controlled environment. Conventionally, the embryos must be taken out from the incubator periodically to assess cleavage and morphology. After checking, the embryos must be returned to the incubator as quickly as possible to avoid any potential damages. This procedure is often done daily during the days of culturing, in order to assess the embryo quality and select the best embryo(s) to be transferred.

When you get to choose the best embryo for transfer, you may have better chances of getting pregnant.* The Miri® TL uses an advanced and sophisticated software that allows the embryologists to continuously monitor, compare the embryo development and select the most viable embryo for transfer. These evaluations can be done completely without disturbing the environment inside the incubator and allows the embryologist to detect abnormal events that might occur.

The environmental condition inside the Miri® TL is as good as the standard incubator. Several studies have already proven that time-lapse observation using an incubator with an integrated optical microscope is safe for clinical practice.

Additional changes for time-lapse might occur, please ask your clinic for more information.

How does frequent assessment of my embryo outside the incubator affects its growth?

The embryos are very sensitive to changes on its culture conditions. When embryos are evaluated in an uncontrolled environment, they may suffer from undesirable shock or stress due to sudden fluctuations in the parameters such as temperature, gas concentration and pH. Such changes might lead to hamper embryo growth or cause chromosomal aberrations.

Such adverse affects associated with conventional incubators poses limitations on the frequency on which embryos can be observed. Thus, fewer data gathered obtained at discrete time points might not give the embryologists the complete picture they need to properly evaluate the embryo. The Miri® TL improves on the concept of the Silent Embryo Hypothesis by further minimizing stressful factors that may be introduced when taking the dishes out of the incubator. The Miri® TL enables time-lapsed image monitoring of the growing embryos and thus gives the embryologist a valuable tool in the embryo decision making process and patient communication.

The Time-Lapse incubator keeps true to Esco’s world class expertise and quality in IVF technology.

How does it improve my chances of getting pregnant?

When you get to choose the best embryo for transfer, you may have better chances of getting pregnant.* The Miri® TL uses an advanced and sophisticated software that allows the embryologists to continuously monitor, compare the embryo development and select the most viable embryo for transfer. These evaluations can be done completely without disturbing the environment inside the incubator and allows the embryologist to detect abnormal events that might occur.

Is this procedure generally safe?

The environmental condition inside the Miri® TL is as good as the standard incubator. Several studies have already proven that time-lapse observation using an incubator with an integrated optical microscope is safe for clinical practice.

Additional changes for time-lapse might occur, please ask your clinic for more information.

* Pregnancy is still dependent on several factors such as the patient’s age, smoking pattern, general health factors, fallopian tube disease, endometriosis, etc. Please consult your doctor.

What is Miri® TL Incubator and what are its advantages?

The Miri® TL is a multi-room incubator with a built-in camera and microscope that allows embryologists to view the development of the embryo from fertilization until the day of transfer without any disturbances. This reduces the environmental stress of the embryo, which can lead to improved embryo competences and higher pregnancy rates.

This technology also allows important events to be observed which helps in assessing the viability of embryos for implantation and make a healthy baby.

Common Stressors:
- Temperature fluctuations
- Gas concentration fluctuations
- Non-optimal pH
- Volatile Organic Compounds (VOCs)

Step 1: ICSI or IVF of the oocyte

Step 2: Conventional technique requires embryo to be taken out from the incubator at certain time-points for assessment.

Step 3: The embryo is viewed under the microscope as quickly as possible in order to avoid potential damages.

The Miri® TL is equipped with sophisticated annotation tools that helps embryologists in the assessment of the embryos.