

EmbryoScope

CONTINUOUS EMBRYO MONITORING AND IMAGE ANALYSIS

EmbryoScopes are state-of-the-art incubators which enable a stable culture environment for embryos. At the same time, their imaging ability allows for continuous embryo observation throughout the embryo's development without disrupting the culture environment.

What are the benefits of the EmbryoScope?

State-of-the-art culture system

When compared with traditional embryo culture incubators, the EmbryoScope creates a more stable environment for the embryos throughout their development. Unlike most other incubators being used for embryo culture, opening the EmbryoScope to add, remove or view a patient's embryos has no effect on the patient's embryos already in the EmbryoScope. As the EmbryoScope can take an image of each embryo every 7 minutes, there is no need to expose a patient's embryos to the room air environment each time the embryos need to be observed. All observations can be done digitally with no negative effect to the embryo.

Embryo de-selection

Throughout each embryo's development, there are events which relate to the implantation potential of the embryo. Events such as multi-nucleation (where the embryo has too many nuclei), direct uneven cleavage and reverse cleavage (which are not normal) indicate a decreased chance for implantation. These events may happen at any time throughout the development and are likely to go unseen when using traditional culture methods. With the EmbryoScope, these events can be observed.

Embryo selection & Artificial Intelligence

Similar to "de-selection" events, there are observations which can be made during the embryos development which do correlate with improved implantation potential.

In development is an Artificial Intelligence program named "Ivy". While a Scientist can note 8-10 events through the annotation of each embryo, IVY can note 100's of events which occur throughout the embryo's development. By observing more events, and comparing those to the development of embryos known to implant, IVY promises to improve the accuracy of embryo selection over that of a Scientist.

Is the EmbryoScope right for me?

Because of the improved culture environment and the ability to monitor the patient's embryos throughout development, without disruption to embryo culture, the EmbryoScope is the incubator of choice for all patients.

