

Al-driven Israeli company Embryonics partners with Indian Fertility Centre

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The data-driven fertility company Embryonics helps increase the success rate of fertility treatments in the Indian subcontinent



Israel-based data-driven fertility company Embryonics announced its first collaboration in India with Jaslok-FertilTree International Fertility Centre. The newly set up partnership will aim to help increase the success rate of fertility treatments in the Indian subcontinent.

Embryonics has trained its algorithms using tens of thousands of data points from large clinics in the USA, Israel, Europe, and Asia and the first product to reach the market is UBAR, CE marked assistive embryo selection tool. Designed to aid embryologists in selecting which embryo(s) to transfer is a huge success. It addresses one of the most crucial steps for IVF success. UBAR's purpose is to assist embryologists in a highly subjective decision-making step, utilizing a more objective data-driven approach and is not intended to replace the human factor.

UBAR, builds on technology using bleeding-edge deep learning in the clinical setting. Trained using a large, multicentre dataset, UBAR is a cloud-based software that uses time-lapse videos or single images of blastocysts to predict implantation probability, automatically annotate morphokinetic events and assist embryo selection using a data-driven approach.

The venture is led under the leadership of Dr. Firuza Parikh who is one of the pioneers in IVf field in India including the first ICSI baby in 1994.

Explaining computer-driven algorithms Dr. Parikh says, "There are characteristics differentiating a good Blastocyst stage embryo which has a possibility of implanting from one that has less potential. Algorithms created by Al and deep machine learning detect signals from developing embryos most likely to result in babies. These include healthy and equal division of embryonic cells. Signals pick up the quality and placement of the inner cell mass which ultimately becomes the baby. The trophectoderm cells surround the inner cell mass from the placenta. The timing of the expansion of the Blastocyst at a particular time point also contributes to its success".

"When we compute these characteristics, the software comes up with a score from 1-5, 5 being the best. We have conducted

an interim analysis and havinexpensive." she added.	ve computed a predictiv	e score most likely t	o result in a pregnancy	. This method is simple and