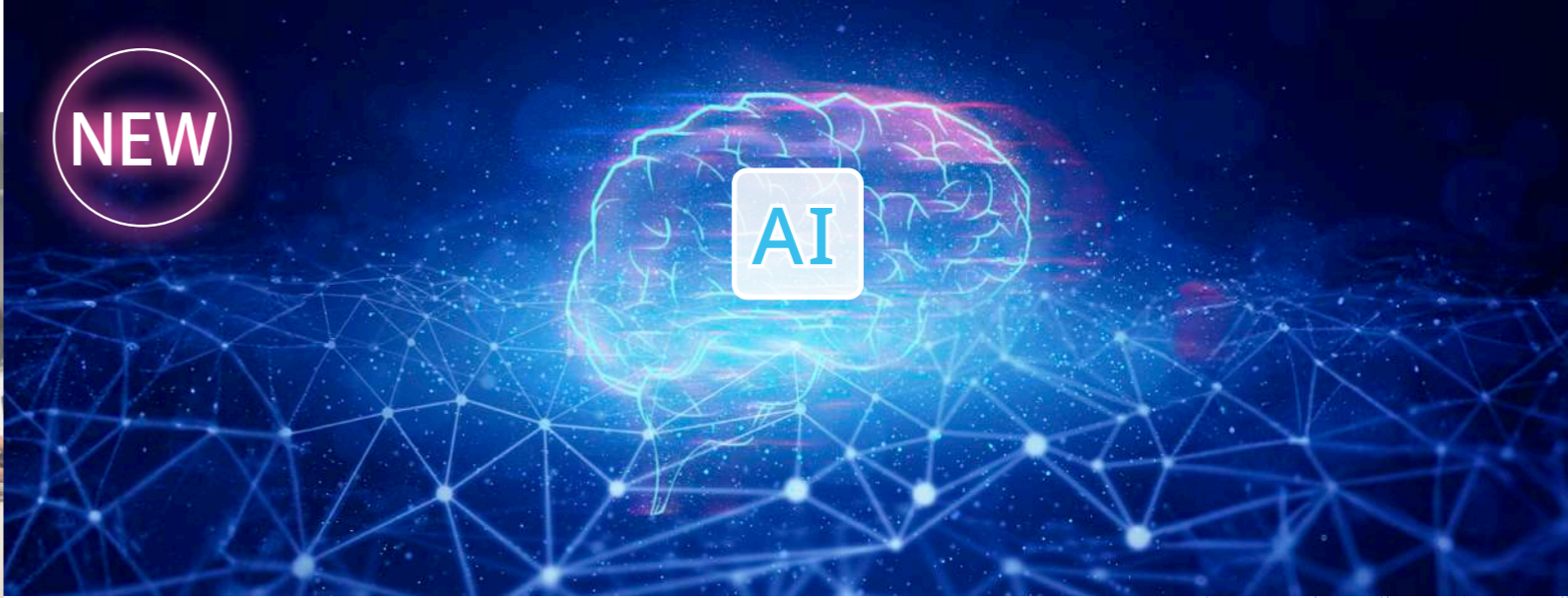NEW

AI

IVF 2.0

- This product is a service provided by UK-based IVF2.0.
  It can be used with an inverted microscope, a PC, and an internet connection.
  For more details, please refer to the specifications below.

- SiD™ and ERICA™ are sold as a set under an annual contract and can be used without limitations on image volume or data capacity. They are not available for purchase separately.

- SiD™ exclusively links with external cameras and does not retrieve data from the PC

- ERICA™ requires embryo images to be uploaded via the internet, but personal information is not required. Additionally, the data is strongly encrypted for security.

- Handling of personal information complies with GDPR and HIPAA.

Recommended PC Specifications and Connectivity

SiD™

· **OS** : Windows10 or more
   (Minimum requirements : Updated Windows 8.1 or later)
· **CPU** : Intel Core i7-12700 or higher
   (Minimum requirements: Intel Core i5 with 8GB RAM, 4 multi-threaded cores, or 8 single cores)
   *Series with T, F, P, or Y at the end, such as Intel Core i5-9400T,
    do not have integrated graphics unless the computer has a dedicated GPU.
    It is recommended to have a GPU (Nvidia RTX3060 or higher)
· **Memory** : 16GB RAM or more
· **Storage** : SSD or NVME storage (10GB of available space for software use)
· **Must be compatible with microscope capture function installed** (Equipped with DirectX)
· **The following devices have been confirmed to be compatible.**
   · Hamilton Thorn
   · WAT-902H Ultimate
   · OCTAX 1.3 MPixel
   · LUMENERA LW1135c
   · Octax EYE Camera
   · JAI

ERICA™

PC capable of transferring images over the internet and within the hospital network.

For a free trial and service consultation,
please apply from the product website.

https://kitazato.co.jp/en/products/SiD-ERICA/

Kitazato Corporation
◄ SiD™/ERICA™ Product website

Specification may change without pre-notice for purpose of product improvement.

Advanced Sperm Selection AI

SiD
SPERM SELECTION ASSISTANT
BY IVF 2.0 LIMITED

Blastocyst Grading AI

ERICA
EMBRYO RANKING INTELLIGENT CLASSIFICATION ASSISTANT

Inquiries/orders regarding products

Kitazato Corporation

TOKYO : 1-1-8 Shibadaimon, Minato-ku, Tokyo 105-0012 JAPAN

URL https://www.kitazato.co.jp/   Mail contact@kitazato.co.jp

KITAZATO®

SiD
SPERM SELECTION ASSISTANT BY IVF 2.0 LIMITED

Advanced Sperm Selection AI

Real-time sperm detection and tracking AI software that automatically selects high-quality sperm based on motion parameters and ranks them.

- Reduced work time
- Consistent sperm selection
- Decreased variability in subjective assessment
- Improved fertilization and blastocyst formation rate
- Clear selection criteria, and easy patient explanation
- Selection from a wide field at low magnification
- Simple installation

SiD™ SCORE

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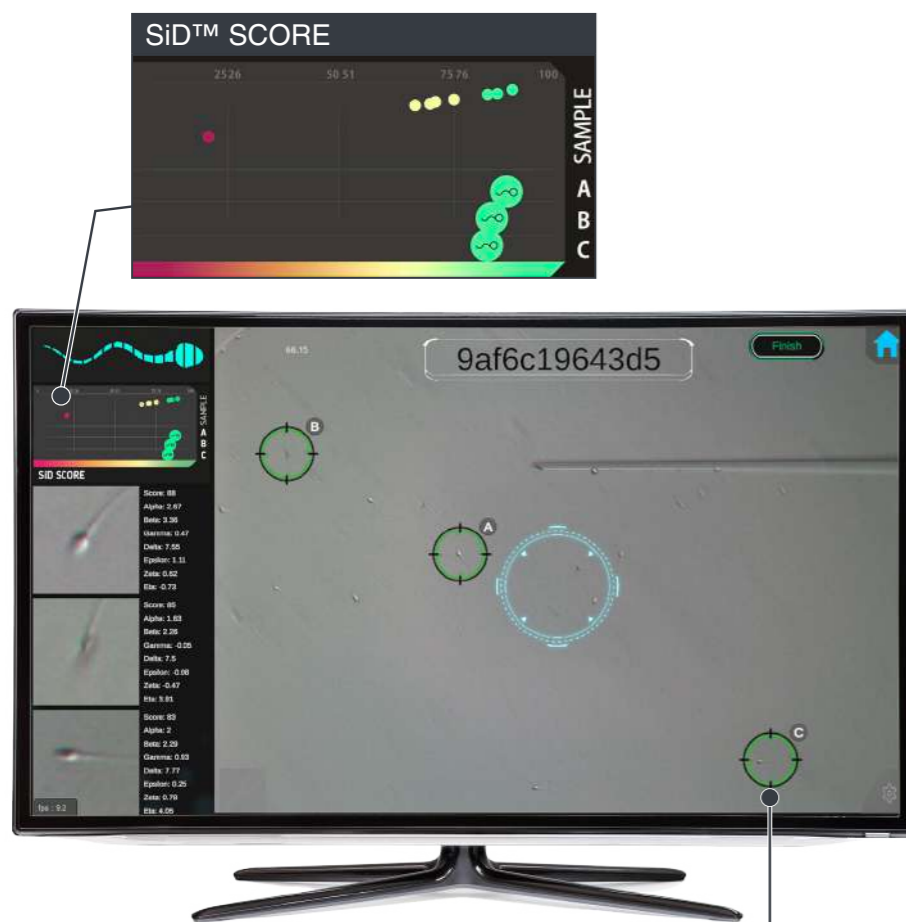
Classified into 4 levels, the top 3 sperm displayed.

Best | Good | Medium | Low

Real-time automatic detection criteria:

Utilizing straight-line speed (VSL), curvilinear velocity (LIN), and head movement frequency (HMP) to calculate a unique SiD™ score and select the top three within the field of view.

The excellent parameters presented by SiD™ ensure to lead good fertilization and blastocyst formation rates.
Using SiD™ resolves challenges related to embryologist proficiency leading to improved and stabilized outcomes.

Table 1:
Comparison of ICSI Results after Sperm Selection by SiD™ and Embryologists

	SiD ICSI (n=326)	ICSI (n=320)
Fertilization Rate	83.1%	82.4%
Cleavage Rate	97.6%	97.2%
Day2 Embryo Development Rate	70.6%	74.6%
Day3 Embryo Development Rate	72.9%	70.6%
Blastocyst Development rate on day5	49.0%	44.8%
Good-quality blastocyst development rate on day5	45.1%	41.5%

Sperm selection using SiD™ demonstrates comparable outcomes to those of embryologists.

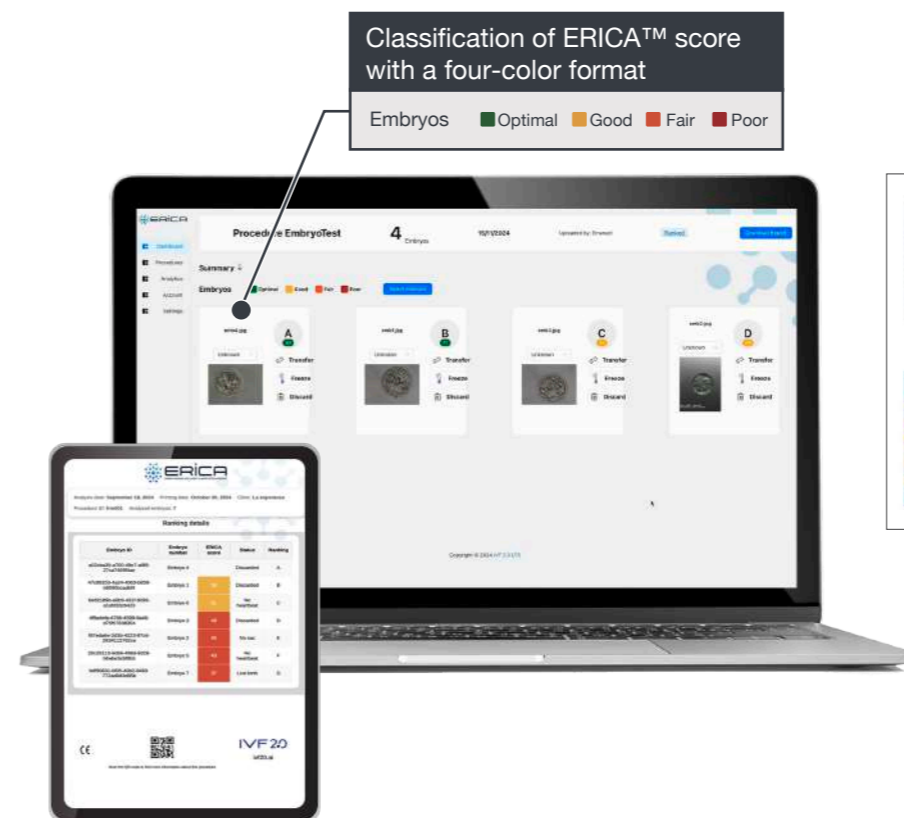Please watch the demo video for a better understanding.

CE

REFERENCE :
Montjean, D. et al. Automated Single-Sperm Selection Software (SiD) during ICSI: A Prospective Sibling Oocyte Evaluation. Medical Sciences 12, 19 (2024).
Mendizabal-Ruiz, G. et al. Computer software (SiD) assisted real-time single sperm selection associated with fertilization and blastocyst formation. Reprod. Biomed. Online 45, 703–711 (2022).

ERICA
EMBRYO RANKING INTELLIGENT CLASSIFICATION ASSISTANT

## AI for Automatic Blastocyst Grading

ERICA™ is an artificial intelligence application trained to look for aneuploidy and implantation potential that is specifically designed to assist reproductive medicine clinicians to select the best embryo for transfer. ERICA™ analyzes computerized image data for each embryo and provides a ranking.

- Automatic report generation
- Non-invasive evaluation
- Embryo selection support
- No additional hardware purchase

Classification of ERICA™ score with a four-color format

Embryos: Optimal | Good | Fair | Poor
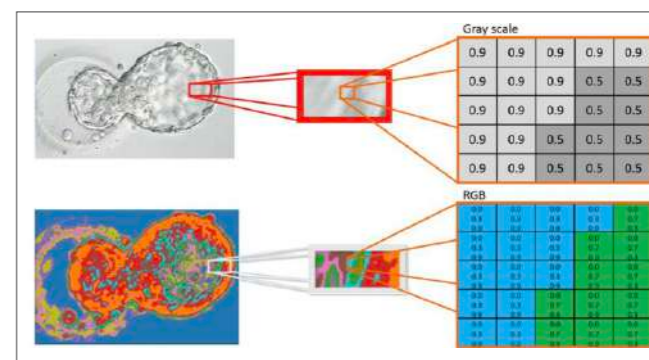
ERICA™ identifies and evaluates more than 100 morphological features of embryos that cannot be detected through microscope observation alone, scoring and ranking them accordingly.

ERICA™ analyzes blastocyst images to predict embryo euploidy with ERICA™ score, which is displayed in a four-color format. By helping to identify embryos with higher implantation potential, it is expected to improve pregnancy and live birth rates while reducing miscarriage rates. ERICA™ also helps simplify daily operations by reducing the workload of embryo selection for transfer.

Upload images from your microscope or time-lapse system to obtain results quickly. In addition to evaluating expanded blastocysts on Day 5-6, ERICA™ also assesses hatching blastocysts, providing broader applicability in clinical practice.

Miscarriage Rates Classified by ERICA™ Score

Classification	ERICA™ Score	Miscarriage Rate*(%) (n=506)
Optimal	Above 70	11.2
Good	50 to 69	17.9
Fair	30 to 49	22.2
Poor	Less than 30	22.9

*Average age 35.4 years.

Blastocysts with higher ERICA™ scores have a lower early miscarriage rate (before 9 weeks of pregnancy).

Please watch the demo video for a better understanding.

CE

REFERENCE :
Chavez-Badiola, A. et al. O-235 ERICA (Embryo Ranking Intelligent Classification Assistant) AI predicts miscarriage in poorly ranked embryos from one static, non-invasive embryo image assessment. Hum. Reprod. 36, (2021).
Glatstein, I., Chavez-Badiola, A. & Curchoe, C. L. New frontiers in embryo selection. J. Assist. Reprod. Genet. 40, 223–234 (2023).
Chavez-Badiola, A. et al. Predicting pregnancy test results after embryo transfer by image feature extraction and analysis using machine learning. Sci. Rep. 10, 4394 (2020).
Farias, A. F.-S. et al. Automated identification of blastocyst regions at different development stages. Sci. Rep. 13, 15 (2023).
Chavez-Badiola, A., Flores-Saiffe-Farias, A., Mendizabal-Ruiz, G., Drakeley, A. J. & Cohen, J. Embryo Ranking Intelligent Classification Algorithm (ERICA™): artificial intelligence clinical assistant predicting embryo ploidy and implantation. Reprod. Biomed. Online 41, 585–593 (2020).
Chavez-Badiola, A. et al. ERICA (Embryo Ranking Intelligent Classification Assistant) AI predicts miscarriage in poorly ranked embryos from one static, non-invasive embryo image assessment. Hum.Reprod. 36.i135(2021)