



THE UNIVERSITY
of ADELAIDE

Sperm Sorter for IVF

Selecting the best sperm, the way nature does.

Benefits

- Sophisticated design mimics natural sperm selection in the female reproductive tract.
- Selects for sperm quality and DNA integrity, significantly exceeding current motility and morphology criteria.
- One-step device for quick, simple selection of healthy sperm.

Background

Around half of those seeking IVF treatment are affected by male infertility. Successful fertilisation requires healthy sperm with DNA integrity. Current methods select sperm only on the basis of motility and morphology, not integrity and competence. This is a major cause of conception failure.

Technology overview

In a world-first, our novel device closely mimics the female reproductive tract, with multiple selective features to remove inviable sperm. Our multi-disciplinary solution combines biology, chemistry and engineering, for superior sperm preparation in a user-friendly form.

Applications

Applicable to the greater than 2.5 million annual IVF cycles conducted globally.

Development status

- Prototype device.
- Demonstrated quality of human and mouse sperm recovery.

IP status

Australian Provisional Patent Application No. 2023902280.

Opportunity

We are seeking a commercial partner in the IVF or device field.

Inventors

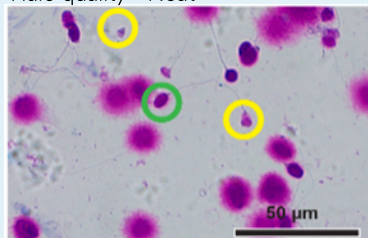
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- Prof. Krasimir Vasilev, Flinders University
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Commercial contact

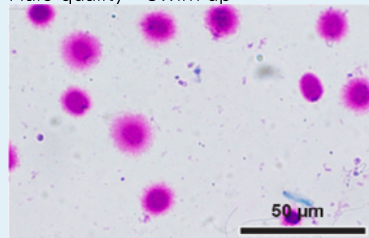
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Sperm quality

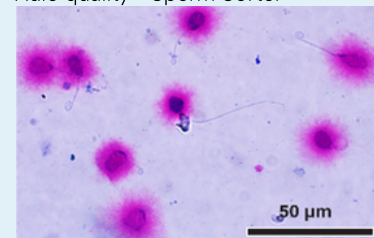
Halo quality - Neat



Halo quality - Swim up



Halo quality - Sperm Sorter



Halo analysis evidences superior sperm quality with Sperm Sorter - reduced number of sperm with DNA damage (absent or small halo).