Andrology

An integrated system for sperm evaluation, preparation, selection & cryopreservation
The importance of male factor in fertility

Since the advent of assisted reproduction, the scientific focus on infertility has mainly concentrated on female issues. This point of view, however, is now shifting as more and more evidence accumulates on the importance of the male factor. Evaluating the fertility of men can be very challenging, as this can only be proven based on the outcomes of their female partners. It is nevertheless estimated that male factor is involved in 40–50% of all infertility cases.

At CooperSurgical, we believe that by increasing the focus on andrology, we can help couples realize their ultimate dream – parenthood.

Minimizing DNA fragmentation in the andrology process

Sperm DNA damage may result in lower fertilization rates, impaired implantation and an increase in pregnancy loss rates. Sperm DNA fragmentation can occur due to extrinsic factors, such as storage temperatures, media used, handling conditions, time after ejaculation, and several others. Minimizing any risk of DNA fragmentation is critical throughout each step of your sperm processing and assessment.

CooperSurgical provides high-quality products and through our expert knowledge, we can offer advice on how you can optimize every step in the andrology process. This helps to minimize DNA fragmentation build-up and ultimately provides the best quality sperm sample for fertilization.

At CooperSurgical, we have a team of experts ready to assist with any question you might have.

Train with CooperSurgical and optimize your performance, learn new skills and network with international peers

We invite our customers and partners to come and learn new techniques and share best practices in our fully equipped laboratories.

At the CooperSurgical Centre of Excellence in New Jersey, we provide evidence-based training by skilled, experienced embryologists, including demonstrations and hands-on training in a comprehensive range of ART processes.

40–50%

Of all infertility cases is due to male factor

Helping you improve success rates

As the field of ART evolves, CooperSurgical continually supports you with high quality and novel solutions that improve the diagnosis and treatment of male subfertility.

We employ industry experts and partner with leading scientists to produce the best possible solutions for you. We approach each challenge with one ultimate aim – enabling you to select the healthiest sperm to maximize success rates.
Committed to every aspect of andrology

At CooperSurgical, we aim to always ensure that you have the necessary tools to optimize your work along each step of the andrology process. This is why we offer state-of-the-art products to help you analyze, select, prepare and preserve the highest quality sperm samples.

CooperSurgical can support you with a comprehensive range of products – from microscopes to the HBA® diagnostic assay.

NEW PRODUCT!

ANALYSIS

Reliable prognostic information is critical in helping you make the right choices for your patients. The right analysis of sperm function, DNA integrity and physiology enables you to accomplish this.

PREPARATION

Using high-quality products contributes to safe and low-risk sperm preparation and facilitates the optimization of outcomes for you and your patients.

FERTILIZATION

Isolating and injecting the best possible sperm without unnecessary time delays is vital for successful fertilization.

CRYOPRESERVATION

An effective protocol and high-quality products are important elements in sperm cryopreservation and patient management.

We offer both the equipment required and a broad range of media for safe and low-risk sperm preparation.

We offer a variety of quality products, ranging from oil to micropipettes and micromanipulators, to support your complete treatment approach – whether you are doing IUI, IVF or ICSI.

We offer cryopreservation media to meet all your needs.
Hyaluronan – a natural biomarker for sperm quality

Picking the right sperm is essential for enhancing your chances of achieving a successful ICSI outcome. Unfit sperm may lead to a compromised embryo and increase the risk of pregnancy loss. Hyaluronan is a natural substance found in the cumulus oophorous complex surrounding the oocyte and the ability of sperm cells to bind to hyaluronan is an important biomarker for sperm maturity and quality. Only fully mature sperm that have completed the last crucial stages of spermatogenesis have developed receptors for hyaluronan. Immature sperm have not developed hyaluronan receptors and cannot bind. By integrating hyaluronan biomarker tools into your workflow you can select sperm of the highest quality across all the necessary parameters.

**Hyaluronan – a natural biomarker for sperm quality**


**Sperm selection with PICSI Dish reduces clinical pregnancy loss for patients with low HBA scores**

- Lower rates of chromosomal aneuploidy
- Lower rates of DNA fragmentation
- Increased chromatin integrity
- Normal head morphology

**Failure of sperm to bind to hyaluronan correlates to¹:**

- Reduced pregnancy rates
- Increased miscarriage rates

**HBA® ASSAY**

**Designed with duplicate hyaluronan-coated chambers**

The HBA Assay allows you to distinguish between mature sperm that express hyaluronan receptors and those that do not. Assessing the proportion of sperm with receptors can be used to decide which treatment is best for your patients.

- Sperm sample evaluation in minutes
- HBA score correlates to fertilization, pregnancy and cleavage rates²

**SPERM SELECTION**

**PICSI® DISH**

ICSI dish with hyaluronan microdots for sperm selection

The PICSI Dish is convenient, easy-to-use and allows for the selection of an individual sperm with enhanced genetic and developmental integrity.

- Lower rates of chromosomal aneuploidy and DNA damage in hyaluronan-selected sperm¹
- Reduces early miscarriage rates for patients with low HBA scores³

Diagnosis: Device

Ability of sperm to bind to hyaluronan correlates to¹:

- Lower rates of chromosomal aneuploidy
- Lower rates of DNA fragmentation
- Increased chromatin integrity
- Normal head morphology

Randomized, controlled trial of 802 couples treated with ICSI at 10 sites across the USA; *p-value <0.05

**Control (ICSI)**

**HBA Bound (PICSI)**

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<th>HBA score (%)</th>
<th>Pregnancy loss rates</th>
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<tbody>
<tr>
<td>&lt;65%</td>
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<td>&gt;65%</td>
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## Andrology product range

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<th>Analysis</th>
<th>Sperm Preparation</th>
<th>Fertilization</th>
<th>Cryo Media</th>
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<td>Quinn's Advantage™ Sperm Freezing Medium</td>
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