Andrology

Integrated solutions for sperm evaluation, preparation, selection & cryopreservation
The importance of male factor

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 factors. 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 even more couples realize their ultimate dream – parenthood.

40–50% of all infertility cases are wholly or in part due to a 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.
Minimizing DNA fragmentation in the andrology process

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

CooperSurgical provides high quality products and, through our expert knowledge, we can offer advice on optimization of each step in the andrology process. To minimize DNA fragmentation and ultimately ensure 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 our training labs, we provide evidence-based training by skilled, experienced embryologists, including demonstrations and hands-on training in a comprehensive range of ART processes.
Committed to every aspect of andrology

At CooperSurgical, we aim always to 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.

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

Good procedure and good quality products for sperm preparation are prerequisite for optimal outcomes.

We offer both the equipment required and media for sperm preparation.

New product!
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.

Selecting functionally competent, high quality sperm can be enhanced using hyaluronan binding techniques such as PICSI® or SpermSlow™.

The ergonomic design of the Integra™ micromanipulation system makes for ease of use and quick, efficient working.

We offer cryopreservation media to meet all your needs.

An effective protocol and high-quality products are important elements in sperm cryopreservation and patient management.
Hyaluronan – a natural biomarker for sperm quality

Selecting the right sperm is essential to enhance the chances of achieving a successful ICSI outcome. Compromised sperm may lead to impaired embryo development and an increased 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. By integrating hyaluronan biomarker tools into your workflow you can select sperm of the highest quality.

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
**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

**SPERMSLOW™**

A semi-viscous medium containing Hyaluronan for sperm selection

One step immobilization and selection of mature sperm for ICSI without the use of PVP

- Significantly higher embryo developmental rate²

- Better embryo quality²

- Lower rates of DNA damage in Hyaluronan-selected sperm⁴

- Lower rates of early miscarriage⁵


**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 with PICSI Dish reduces clinical pregnancy loss for patients with low HBA scores³

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

<table>
<thead>
<tr>
<th>&gt;65% HBA score (%)</th>
<th>≤65% HBA score (%)</th>
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<tbody>
<tr>
<td>Control (ICSI)</td>
<td>HBA Bound (PICSI)</td>
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<tr>
<td>3.5</td>
<td>15.1</td>
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<tr>
<td>5.3</td>
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<td>n=114</td>
<td>n=133</td>
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**DIAGNOSTIC DEVICE**
## Andrology product range

<table>
<thead>
<tr>
<th>ORIGIO MEDIA</th>
<th>SPERM ANALYSIS</th>
<th>SPERM PREPARATION</th>
<th>FERTILIZATION</th>
<th>CRYO MEDIA</th>
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</thead>
<tbody>
<tr>
<td>NEW! ORIGIO Sperm Wash</td>
<td></td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>NEW! ORIGIO Gradient (100%, 90%, 40/80%)</td>
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<td>✓</td>
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<tr>
<td>Sperm Preparation Medium</td>
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<tr>
<td>Sperm Freezing Medium</td>
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**SAGE™ MEDIA**

- PureCeption™ (gradient 100%, 40%, 80%)
- Quinn’s Advantage™ Sperm Freezing Medium

**HYALURONAN PRODUCTS**

- HBA® Assay
- PICSI® Dish
- SpermSlow™

**ADDITIONAL PRODUCTS**

- Makler® Chamber
- Centrifuges
- Microscopes
- Micromanipulators
- Oil
- PVP
- IUI Catheters
- ICSI Micropipettes