

# SpermSlow™

## The natural alternative to PVP

- Natural and biodegradable alternative to PVP
- One step immobilization and selection of mature sperm for ICSI
- Improved embryo quality and development
- Approaching “physiological” ICSI



## SpermSlow™

### The natural alternative to PVP

SpermSlow™ presents a natural alternative to PVP as it is made principally of hyaluronate (HA), a naturally occurring substance found in the cumulus complex. SpermSlow™ does not have any toxic or immunological effects on sperm or eggs. SpermSlow™ is CE marked and 510K cleared.

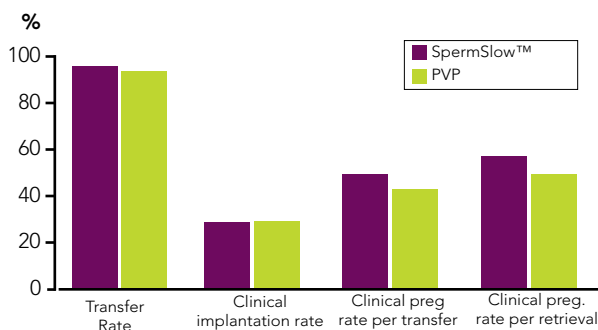
Two main factors distinguish HA from PVP:

- 1) Increased safety factor: HA is a part of the natural environment of the oocyte and is completely biodegradable.
- 2) Quality-based sperm selection: The selection principle in SpermSlow™ is based on sperm binding to HA via receptors on the sperm heads. Only mature spermatozoa will effectively bind, therefore it is possible to select only competent sperm with better developmental maturity and DNA integrity.

#### Clinical documentation

The clinical efficacy of SpermSlow™ has been shown to be equivalent to that of PVP (Bacer Kermavner et al., 2008) or better with improved embryo quality (Shimizu et al., 2009), improved implantation rate (Parmegiani et al., 2010b) and improved embryo development (Bacer Kermavner et al., 2008; Parmegiani et al., 2010a).

Ménézo et al. (2004) injected the oocytes from 2 equally aged (mean: 33.6 yrs) patient groups with sperm immobilized in PVP Clinical Grade (n=110) and SpermSlow™ (n=92).



There were no significant differences in the Embryo Scoring and the number of embryos transferred: SpermSlow™ 166/88 and PVP 195/105= 1.86; There were five miscarriages in each group.

	SpermSlow™	PVP
Motility	High	Low
Immobilization	High	Low
Selection of mature sperm	High	Low
Harmless to oocytes during ICSI procedures	High	Low
Biodegradable	High	Low

#### References

- Bacer Kermavner et al. (2008) Sperm selection with hyaluronan for ICSI procedures and blastocyst development. Abstract from ESHRE, Barcelona.
- Parmegiani et al. (2010a) "Physiologic ICSI" Hyaluronic acid (HA) favors selection of spermatozoa without DNA fragmentation and with normal nucleus, resulting in improvement of embryo quality. Fert. Steril. 93,598-604.
- Parmegiani et al. (2010b) Efficiency of hyaluronic acid (HA) sperm selection, J. Assist. Reprod. Genet 27,1,13-16.
- Shimizu et al., (2009) Selection of the most mature sperm for ICSI by SpermSlow™ and clinical data. Presented at 14th meeting of Japanese Society of Clinical Embryologists.

#### Quality control testing

- Sterility
- Endotoxin
- Sperm survival

Note: The results of each batch are stated on a Certificate of Analysis, which is available on [www.origgio.com](http://www.origgio.com).

#### Catalog No.

1094 4000 SpermSlow™, 4 x 0.1 ml

#### Contact

Please visit [www.origgio.com](http://www.origgio.com) to find your local ORIGIO MediCult Media distributor or contact ORIGIO directly at the address listed below.