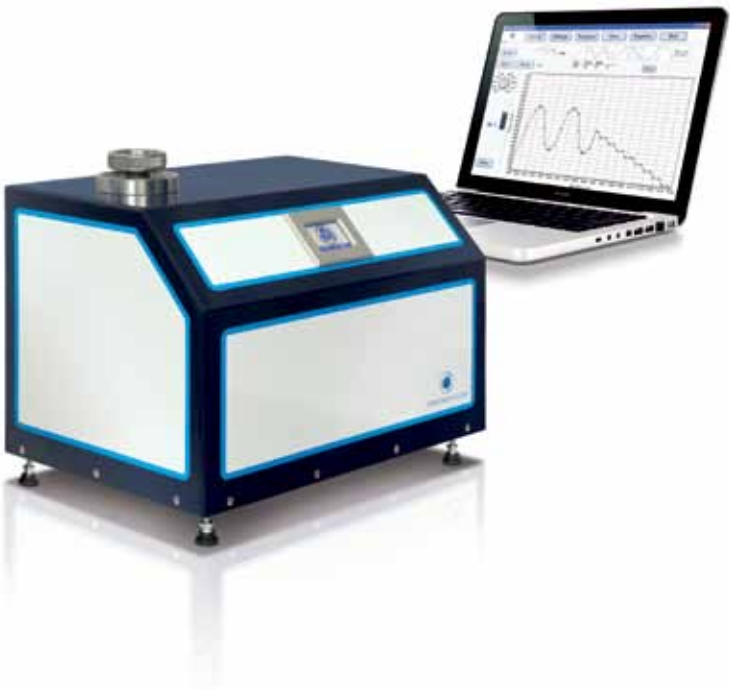




CRYO INNOVATION

HHP 100

“Stress for stress tolerance”



A well defined and properly applied **high hydrostatic pressure (HHP)** treatment of cells induces general adaption and increases cell survival and developmental competence.

A fundamentally new approach

Controlled stress enhances cell functionality

Why does controlled stress enhance cell functionality?

- Induces transient cellular stress reaction
- Cells prepare to the forthcoming detrimental effects

Unlike any other stresses, hydrostatic pressure:

- Acts immediately, no gradient effects or penetration problems
- Affects every point of the sample in every direction
- Most precisely controlled
- Works with the largest safety margin

HHP 100 is offered for the treatment of:

- Embryos
- Oocytes
- Stem cells
- Cell suspensions

HHP treatment increases cell survival and developmental competence after cryo-preservation, enucleation and SCNT, IVM and IVC.

The HHP treatment can be easily inserted into any protocol. For example:

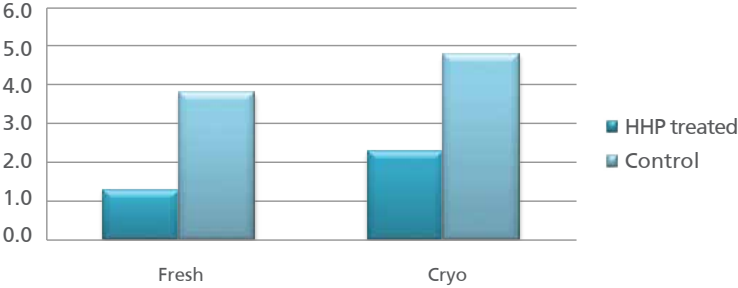


Conventional consumables are used to keep the samples for the treatment.

Published effects of the HHP treatment

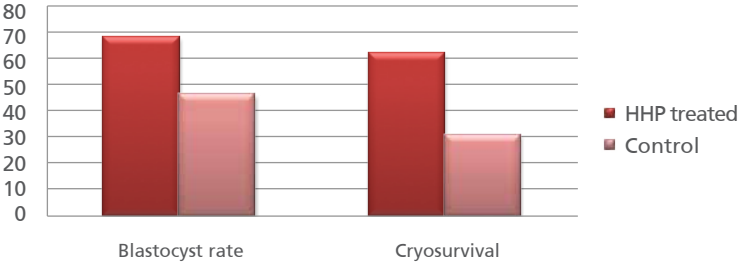
Results when blastocysts were treated

Picnotic index of fresh and cryopreserved ovine blastocysts with/without HHP treatment



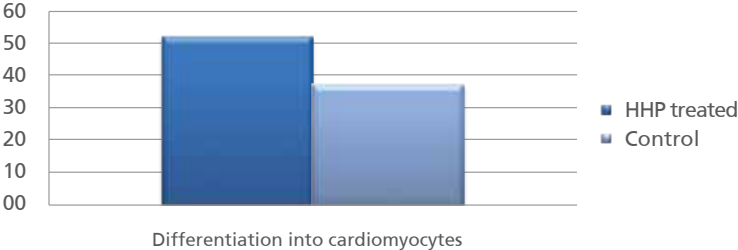
Results when oocytes were treated

Success rates (%) of porcine SCNT, PA, IVC and cryopreservation if recipient oocytes were treated with HHP



Results when stem cells were treated

Post-warming differentiation rates (%) of mouse embryoid bodies with/without HHP treatment before vitrification



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Patented and several patents pending