

VITRICELL: The safest key for cryopreserving your valuable cells

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VITRICELL is a future spin-off company aiming at providing standard and customized solutions for safe and efficient cryopreservation of valuable and sensible eukaryotic cells. Developed in the Embryology unit of the Faculty of Veterinary Medicine of the University of Liège, the core methodology relies on aggregation of inventor's pioneering expertises in the fields of stem cells engineering, vitrification of gametes and embryos and in assisted reproductive technologies.

VITRICELL will soon provide researchers and clinicians with vitrification kits, allowing upgrade of the current yields and safety after cryopreservation of their high-value cells. The benefits of our method are the most prominent with fragile cell lines limited in expansion ability.

VITRICELL's current product is based on a novel and user-friendly, aseptic and automatable vitrification method in sealed french straws, with bio-safe and chemically defined media. The absence of any ice crystal formation avoids excessive cell dehydration and injuries to cell membranes. As a consequence, VITRICELL's method results in a higher efficiency (recovery rates, morphology, pluripotency...) than conventional slow freezing for cryopreserving human pluripotent stem cells (hPSCs) and other sensitive stem cell-like lines and embryos from human and non-human species.

VITRICELL's future products developments focuses on (i) vitrification of higher cells numbers in larger containers, (ii) implementation of the method to current automation processes.