



# PROCELTECH

Technologies for a better cell protection during storage

#### MATURATION

#### BENEFITS

Optimised preservation

Increased effectiveness

Long-term storage without impact

#### **KEY WORDS**

Stem cells

**Biological tissues** 

Preservation

Cryogenics

### INTELLECTUAL PROPERTY

1 patent Specific know-how

# LABORATORIES



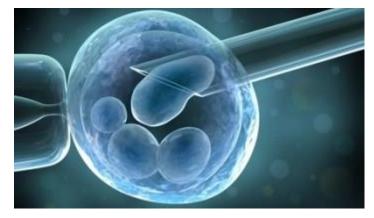
# MATURITY

TRL 4 Prototype available at LPSC - Modane

# CONTACT

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# PROTECTION AGAINST THE HARMFUL EFFECTS OF COSMIC RAYS ON CRYOGENISED CELLS



#### CONTEXTE

With advances in science, the need for medium- and long-term storage of biological tissues and in particular stem cells is increasing. Storage solutions are introduced to be able to make these tissues available for biological and medical purposes. The key issue is to ensure the integrity of the DNA molecule during storage and suitable protection of it.

#### TECHNOLOGY

The cryogenised storage solution developed includes protection against natural radioactivity and cosmic rays - major issues to ensure cell protection within a long term storage program. It is based on designing a cryostat that meets these criteria.

#### **ADVANATAGES**

- Ensure the integrity of the DNA molecule and protect it during storage.
- Increase cell efficiency at the moment of usage.

#### **APPLICATIONS**

Storage solutions for all biological tissues destined to be stored for a long time span at low temperatures.

#### STATE OF PROGRESS

A storage prototype has been designed and installed to begin tests on cells. A scale demonstrator is currently being developed and will be available at the mid 2019.