

Partnership and/or Licensing Opportunities

INJECTABLE SOLUTION FOR CELLS PRESERVATION

Hematopoietic stem and progenitors cells cannot be preserved for long time at +4°C. They are especially vulnerable after ex-vivo expansion. Before injection to the patient, these cells are usually resuspended in human serum albumin solution, which does not ensure their conservation over several hours. It is possible to preserve hematopoietic cells at +4°C without freezing by more complex media, which are, however, not injectable. The EFS proposes an injectable solution to preserve functional hematopoietic stem and progenitors cells, which avoids rinsing step before their injection to the patients.

Invention:

An **innovative injectable solution (SEC)** allowing the preservation for at least 48 hours at 4°C of cord blood cells, bone marrow cells and peripheral blood cells.

This invention is the result of the work of the EFS laboratory located in Bordeaux.

This invention is patented.

Keywords:

Injectable solution, cells conservation and preservation, graft, cord blood cells, peripheral blood cells, bone marrow cells, cells transplantation

Description:

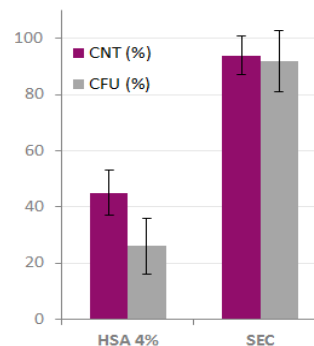
Solution which preserves the quality / quantity and the functionality of cells during at least 48 hours at 4°C.

Proof of the concept examples:

Ex-vivo expanded CD34+ cord blood cells (most vulnerable cells) were stored at 4°C in two media: 4 % of Human Serum Albumin (HAS 4%) and Injectable solution (SEC).

CNT: Yield of viable nucleated cell

CFU: Yield of colony forming unit



Advantages:

- **Injectable solution** of hematopoietic graft to patients, without previous rinsing.
- All components of the solution are approved as injectable by the drug approval administrations (FDA, EMA, ANSM).
- Solution compatible with any kind of injection (intravenous, intramuscular....).
- The viability and the functionality of stem cells compatible with therapeutic uses.
- Can be used for: Fresh cells, previously frozen cells or ex-vivo expanded cells.

Applications:

- Potential solution for cells transportation and storage in view of transplantation, it should be conducted in 48 – 72 hours.

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PATENTS:

Pending:

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