

# COMPOSITIONS FOR USE IN A METHOD OF PROVIDING IMPROVED HEMATOPOIETIC STEM CELL ENGRAFTMENT

A research group from CIBER, CIEMAT and FIIS-FJD have developed a new method of providing hematopoietic stem cell engraftment

## The Need

Hematopoietic stem cell transplantation is used to treat cancer, blood disorders and other diseases. To facilitate the engraftment, a conditioning step is required. Actual conditioning treatments have many side effects.

A high need exists for finding alternative and effective non-genotoxic conditioning regimens which can avoid side effects through specificity for the hematopoietic stem and progenitors' cells and not for other cell types or tissues, improves engraftment and ultimately survival.

## The Solution

Combination of a monoclonal antibody directed against a protein expressed on hematopoietic cells and a cell mobilization agent to improve cell engraftment in a subject.

## Innovative Aspects

- Method applicable to any diseases that can be treated by autologous or allogeneic hematopoietic progenitors and stem cell transplant.
- Significant higher exogenous engraftment with therapeutic efficacy, lower risk of engraftment failure and similar kinetics of hematopoietic recovery, thanks to the synergistic effect of the method developed.

## Stage of Development:

Pre-clinical assays have been performed with human primary cells and mouse disease models, with promising results.

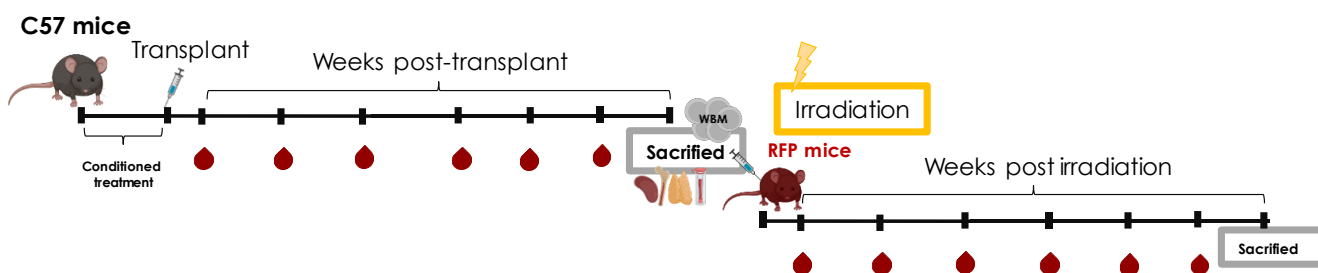


Figure 1. Chart of mice studies performed

## Intellectual Property:

- European patent application submitted in August 2023.
- Suitable for PCT application.

## Aims

Looking for a partner interested in a license and/or a collaboration agreement to develop and exploit this asset.

## Contact details