HORIZON-HLTH-2025-01-TOOL-02: Advancing cell secretome-based therapies: public or private entity and experts to reach the clinical trial in dry eye syndrome patients

Summary

Profile type	Company's country	POD reference
Research & Development Request	**Spain**	**RDRES20250523007**
Profile status	**Type of partnership**	**Targeted countries**
PUBLISHED	**Research and development cooperation agreement**	**• World**
Contact Person	**Term of validity**	**Last update**
Enrico FRANZIN	**23 May 2025** **23 May 2026**	**23 May 2025**

General Information

Short summary

A Spanish Hospital is looking for partners for submitting a proposal to the call HORIZON-HLTH-2025-01-TOOL-02: Advancing cell secretome-based therapies. Public or private entity and experts in cell culture under GMP condition, CRO and partners for clinical trial are sought for developing a clinical trial based on the secretome of human uterine cervical mesenchymal stem cells.

Full description

It is estimated that around 40% of the world's population will suffer at some time in their lives from a disease involving an inflammatory or autoimmune process that cannot be satisfactorily controlled with current pharmacological therapies. Faced with this challenging prospect for medicine, the classic pharmaceutical industry dogma of "one disease, one therapeutic target" is clearly insufficient. Given the complexity of pathological processes, the therapeutic use of a few molecules is not enough. Although there have been unprecedented advances over the last decade in mesenchymal stem cells (MSC) research, especially in secretome-based products, the challenge is still to reach the opportunity to carried out a clinical trial based on a secretome-derived from mesenchymal stem cells.
The research team has identified a new source of MSC in the human uterine cervix (hUCESC - from the term "human Uterine Cervical Stem Cell"). These cells can be easily obtained by and once extracted, they show a high proliferative rate in in vitro culture, which allows them to be obtained in large quantities compared to other types of

MSC, as well as the product they secrete (secretome). hUCESC-secretome, or conditioned medium, obtained under culture conditions (even lyophilized) contains substances with regenerative, anti-inflammatory, and immunoregulatory properties, more potent than those obtained by MSC of other origin.
They have also identified in the secretome the presence of a large number of extracellular vesicles that, in addition to reproducing the paracrine biological effects of hUCESC, offer additional advantages for future therapeutic applications, such as being smaller, less complex and less immunogenic than their progenitor cells, since they have a lower content of membrane-bound proteins.

This therapeutic innovation has been protected by a European and international patents by a Spanish biotech company.

Their in vivo studies in experimental models of dry eye in mice and rabbits demonstrated that topical installation of an eye drop based on hUCESC-secretome induced potent regenerative, and anti-inflammatory effects on the damaged cornea of the animals. In addition, they identified in hUCESC-secretome the high presence of cytokines with potent regenerative effects, that they justify, in part, these therapeutic effects.

After successfully completing the pre-clinical animal studies, they have initiated the development of the GMP production of an eye drop for a Phase I-II trial in patients with dry eye syndrome, following the guidelines of the Spanish Agency of Medicines and Medical Products.

So, they have evidenced the regenerative and anti-inflammatory properties of hUCESC-secretome in Dry Eye Syndrome (DES) pre-clinical models and we are looking for all necessary partners (and a coordinator) to reach the Clinical Trial Application (CTA) and perform a Phase I-II trial in patients with dry eye syndrome.

Advantages and innovations

hUCESC can be easily obtained by and once extracted, they show a high proliferative rate in in vitro culture, which allows them to be obtained in large quantities compared to other types of MSC, as well as their secretome.
hUCESC-secretome, or conditioned medium, obtained under culture conditions (even lyophilized) contains substances with regenerative, anti-inflammatory, and immunoregulatory properties, more potent than those obtained by MSC of other origin.
After successfully completing part of the pre-clinical animal studies, the researchers are ready to initiate the development of the GMP production of an eye drop for a Phase I-II trial in patients with dry eye syndrome.

Technical specification or expertise sought

- Coordinator: to develop the project to achieve the clinical trial with the secretome from uterine cervix mesenchymal stem cells.
- Entities with expertise in:
- ethical issues
- biologic/secretome regulatory compliance
- GMP production

Stage of development

Lab tested

Sustainable Development goals

- **Goal 17: Partnerships to achieve the Goal**
- **Goal 3: Good Health and Well-being**

IPR Status

IPR granted

IPR Notes

The European patent has been granted and the PCT has been granted in several countries, such as: USA, Canada, Hong Kong, China, Japan, Australia, Russia, India, …

Partner Sought

Expected role of the partner

- CMO for GMP production
- CRO for clinical trial monitorization
- Entity for regulatory compliance
- Hospitals with Dry Eye Syndrome patients
- Coordinator entity

Type of partnership

Research and development cooperation agreement

Type and size of the partner

- **Other**
- **SME 11-49**
- **Big company**
- **SME <=10**
- **SME 50 - 249**

Call Details

Framework program

Horizon Europe

Call title and identifier

HORIZON-HLTH-2025-01-TOOL-02: Advancing cell secretome-based therapies

Submission and evaluation scheme

Single stage

Anticipated project budget

9-13 million €

Coordinator required

Yes

Deadline for EoI

30 Jun 2025

Deadline of the call

16 Sep 2025

Project duration in weeks

156

Web link to the call

https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/HORIZON-HLTH-2025-01-TOOL-01?order=DESC&pageNumber=1&pageSize=50&sortBy=startDate&keywords=HORIZON-HLTH-2025-01-TOOL-01&isExactMatch=true&status=31094501,31

Project title and acronym

hUCESC-secretome for Dry Eye Syndrome - DESecret

Dissemination

Technology keywords

- **06001002 - Clinical Research, Trials**
- **06001012 - Medical Research**
- **06001019 - Stem cell Technologies**

Market keywords

- **05007002 - Pharmaceuticals/fine chemicals**

Targeted countries

- **World**

Sector groups involved

- **Health**