

Horizon Europe EIC Pathfinder challenge - Research partners sought for a therapeutic drug delivery work package targeting age-related diseases

Summary

Profile type

Research & Development Request France

Company's country

POD reference

RDRFR20260724003

Profile status

PUBLISHED

Type of partnership

Research and development cooperation agreement

Targeted countries

• All countries

Contact Person

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Term of validity

24 Jul 2026
24 Jul 2027

Last update

24 Jul 2026

General Information

Short summary

A French biotech SME specializing in glyco-chemistry seeks a consortium for the Horizon Europe EIC Pathfinder 2026 "Healthy Ageing" call. The SME offers a modular ligand platform to enhance the intracellular uptake of therapeutics targeting age-related diseases (bone, muscle, heart). The company aims to lead the drug delivery work package. A project coordinator and partners with biotherapeutic, biomarker, or clinical expertise are sought for a research cooperation agreement

Full description

The French biotech SME is preparing to join an EIC Pathfinder consortium under the "Biotechnology for Healthy Ageing" challenge. The company specializes in the development of a versatile ligand platform designed to address the "therapeutic drug delivery" work package. This technology focuses on innovative preventive or therapeutic interventions acting on the hallmarks of ageing.

The platform addresses a critical scientific gap: in many current therapies, only 1% to 3% of the agent reaches its intracellular target due to limited permeability or systemic toxicity. The company's glyco-engineered ligands enhance receptor-mediated uptake and intracellular trafficking, specifically targeting the mannose 6-phosphate receptor (M6PR). This approach enables precise targeting of tissues beyond the liver, such as bone, muscle, heart, prostate, or colon.

The technology is highly modular and can be grafted onto various therapeutic compounds, including enzymes, antibodies, ASOs, or gene-editing tools. With over 10 years of expertise in glyco-chemistry and a solid intellectual property portfolio, the SME provides precise control over the conjugation and characterization process.

The company seeks to integrate its expertise into a high-risk, high-gain project for the October 2026 deadline.

Advantages and innovations

The proposed targeting ligands enable receptor-mediated uptake and intracellular trafficking, addressing a major bottleneck in advanced medicine development. Compared with passive or non-specific targeting strategies, ligands targeting the mannose 6-phosphate receptor (M6PR) offer several key advantages:

- **Efficient cellular uptake:** Enables rapid receptor-mediated internalization (<15 min) and trafficking through the endo-lysosomal network, even for large structures (hundreds of nanometers).
- **High stability:** The ligands are insensitive to phosphatases, unlike the natural M6P ligand, providing excellent blood stability. In addition, the linker remains stable for more than 21 days in blood.
- **Excellent safety profile:** The ligands are small, non-immunogenic and non-toxic. Engineering glycoproteins (e.g. enzymes or antibodies) with these ligands does not induce specific immune responses, even after repeated intravenous administration.
- **Simple and scalable conjugation:** The copper-free click chemistry approach is easy to implement, reproducible and already available at a pre-GMP production scale.
- **High versatility:** Compatible with multiple molecular formats (PEG, peptides, sugars, proteins) and suitable for dual-targeting strategies.
- **Broad therapeutic applicability:** Efficient for delivery beyond the liver, as demonstrated with recombinant enzyme delivery, and applicable to both therapeutic and diagnostic systems.

Technical specification or expertise sought

Stage of development

Lab tested

IPR Status

IPR granted

IPR Notes

Sustainable Development goals

- **Goal 17: Partnerships to achieve the Goal**
- **Goal 3: Good Health and Well-being**
- **Goal 9: Industry, Innovation and Infrastructure**

Partner Sought

Expected role of the partner

The French SME is looking for an existing consortium or partners to form a new one for the Horizon Europe EIC Pathfinder Challenge. The company intends to act as a partner responsible for the 'therapeutic drug delivery' work package and does not seek the coordinator role itself.

The following expertise is specifically sought to complete the consortium:

1. Anti-ageing Biotherapeutics: Academic groups or SMEs developing innovative agents (e.g., mRNA, gene-editing payloads, or recombinant enzymes) that require a precision delivery system to enhance clinical efficacy.
2. Biomarkers & Validation: Research institutions capable of providing and validating biomarkers of ageing to measure the concrete effect of the therapeutic intervention.
3. Clinical Expertise: Clinicians or hospitals with access to longitudinal cohorts of elderly patients for target validation and clinical relevance assessment.

A coordinator is specifically required to lead the proposal submission. Partners from both academia and industry are welcome to contribute to this high-impact R&D project.

Type of partnership

Research and development cooperation agreement

Type and size of the partner

- **Big company**
- **R&D Institution**
- **SME 50 - 249**
- **SME <=10**
- **Other**
- **SME 11-49**

Call Details

Framework program

Horizon Europe

Call title and identifier

HORIZON-EIC-2026-PATHFINDERCHALLENGE-01-02 - Biotechnology for Healthy Ageing

Submission and evaluation scheme

Single-stage evaluation

Anticipated project budget

Coordinator required

Yes

Deadline for EoI

20 Oct 2026

Deadline of the call

28 Oct 2026

Project duration in weeks

Web link to the call

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/HORIZON-EIC-2026-PATHFINDERCHALLENGES-01-02>

Project title and acronym

Dissemination

Technology keywords

- **06001013 - Medical Technology / Biomedical Engineering**
- **06001003 - Cytology, Cancerology, Oncology**
- **06001024 - Medical Biomaterials**
- **06001015 - Pharmaceutical Products / Drugs**

Targeted countries

- **All countries**

Market keywords

- **04006 - Cellular and Molecular Biology**
- **04002 - Monoclonal Antibodies and Hybridomas**
- **04005 - Biochemistry / Biophysics**
- **04017 - Micro- and Nanotechnology related to Biological sciences**
- **04007 - Enzymology/Protein Engineering/Fermentation**

Sector groups involved

- **Health**