

EIC Pathfinder Open 2026 call: Industrial partner(s) for preclinical-to-clinical development of dual-targeted small molecules and nanomedicine platforms enhancing cancer immunotherapy are sought







Summary

Profile type Com

Research & Development Request France

Company's country

POD reference

RDRFR20251211005

Profile status

Type of partnership

Targeted countries

PUBLISHED

Research and development cooperation agreement

• France

Poland

Italy

• Slovenia

• Belgium

Hungary

Finland

• Austria

• Sweden

• Serbia

Portugal

Denmark

Luxembourg

• Croatia

Germany

• Spain

• Greece

• Romania

• Estonia

• Lithuania

Switzerland

Contact Person

Term of validity

Last update

Alessandro BILLI

11 Dec 2025 11 Dec 2026 11 Dec 2025

Profile RDRFR20251211005

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General Information

Short summary

As part of an application to the EIC Pathfinder Open 2026 call, EU-based industrial partners are sought to support scale-up, regulatory development, and first-in-human clinical translation of innovative small-molecule modulators and targeted nanomedicine platforms. Dual-action technologies selectively influence mitochondrial and bacterial ion pathways to reprogram tumor immunity and gut microbiota, boosting the efficacy of anti-Programmed death-1 (PD-1) immunotherapy.

Full description

A consortium of ten partners is seeking one or more industrial partners to resubmit an application to the EIC Pathfinder Open in May 2026.

The consortium has developed two complementary therapeutic strategies aimed at overcoming immunotherapy resistance in colorectal cancer and other solid tumors—an important clinical challenge:

Small-molecule modulators selectively targeting evolutionarily conserved mitochondrial and bacterial ion channels involved in tumor metabolism, immune dysfunction, and microbial dysbiosis.

Precision nanomedicine delivery systems, enabling:

- mitochondria-targeted delivery to tumor cells via antibody-functionalized nanoparticles;
- microbiota-selective delivery through probiotic/prebiotic-enhanced carriers.

Although certain proof-of-concept studies are still being consolidated, published scientific work supports the possibility of achieving this dual action, simultaneously modulating antitumor immunity and influencing tumor-associated microbiota. The consortium brings together complementary expertise, including:

- chemists who have developed technologies preferentially targeting mitochondria;
- teams skilled in designing antibody-conjugated nanosensors;
- · specialists in pre- and probiotic engineering;
- as well as strong competencies in immunology, oncology, ion channel biology, and microbiota analysis.

The project was previously evaluated with an excellent score of 4.6/5.0 (ranking 162/2087) in the EIC Pathfinder Open 2025 call, receiving highly positive comments. Evaluators notably recommended integrating an industrial partner to facilitate the transition of compounds and methodologies toward future clinical development. The consortium therefore plans to resubmit the proposal in 2026, ideally with one or several companies, in order to advance toward TRL 4–5.

A strengthened European partnership will support future EIC Transition funding targeting GMP manufacturing, IND/CTA preparation, and early clinical trials.

Multiple industrial partners are sought to cover complementary activities: CMC, CDMO, regulatory, preclinical, and clinical.

A solid foundation of confidential know-how, combined with patents currently being filed, ensures robust conditions for joint IP ownership and valorization.







Advantages and innovations

First-in-class dual-targeting strategy (mitochondria & bacteria) to restore immunotherapy sensitivity

- Applicability to immunotherapy-resistant MSS colorectal cancer (85% of cases)
- Precision delivery limiting systemic toxicity, enhancing clinical benefit
- Platform versatility extendable to other cancers and immune-mediated diseases
- Strong preclinical rationale supporting rapid translational progression
- Prospects of co-patenting and joint licensing agreements with partners

Technical specification or expertise sought

The on-going consortium is seeking industrial partners with competencies in:

- GMP scale-up of small molecules & nanoparticle-based formulations
- IND-enabling preclinical studies (GLP tox, PK/PD, biodistribution)
- Regulatory strategy and clinical design for oncology therapeutics
- Manufacturing under EU regulatory frameworks (EMA compliance)
- · Experience with nanomedicine and/or microbiome-associated drug products is highly appreciated

Collaboration can be structured per technology or as an integrated co-development.

Stage of development

Under development

IPR Status

Secret know-how

IPR Notes

Sustainable Development goals

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

Partner Sought

Expected role of the partner

Industrial partners are sought to:

- Conduct manufacturing, preclinical development and regulatory progression toward FIH trials
- Provide strategic and technical guidance for clinical translation
- Engage in joint IP + co-development and co-valorization
- Participate in EIC Pathfinder 2026 and future EIC Transition proposals







The on-going consortium is open to multi-partner involvement to cover the full translational pathway.

Type of partnership

Research and development cooperation agreement

Type and size of the partner

- R&D Institution
- Big company
- SME 11-49
- SME 50 249

Call Details

Framework program

Horizon Europe

Call title and identifier

EIC Pathfinder Open 2026

Submission and evaluation scheme

Single-stage evaluation

Anticipated project budget

€4.0 M

Deadline for Eol

12 Mar 2026

Project duration in weeks

44

Project title and acronym

Coordinator required

No

Deadline of the call

12 May 2026

Web link to the call

https://eic.ec.europa.eu/eic-fundingopportunities/eic-pathfinder/eic-pathfinder-

open en





Dissemination

Technology keywords

Targeted countries

- France
- Poland
- Italy
- Slovenia
- Belgium
- Hungary
- Finland
- Austria
- Sweden
- Serbia
- Portugal
- Denmark
- Luxembourg
- Croatia
- Germany
- Spain
- Greece
- Romania
- Estonia
- Lithuania
- Switzerland

Market keywords

• 05005014 - Oncology

Sector groups involved

Health

