

Partnering Opportunity

Profile status : Published

Research Development Request

H2020-EIC-FTI: Hungarian SME is looking for manufacturing/trading company of laboratory equipment or medical devices, and an academic research group with outstanding scientific excellence in extracellular vesicles research.

Summary

A Hungarian biotechnology R&D company is developing a novel platform for isolation of extracellular vesicles from biofluids. The device enables high-quality, scalable, and cost-efficient isolation from any biofluid. The company seeks partners to develop the platform to a market-ready device in the H2020 EIC-FTI call. Partners needed: (1) manufacturing company with strong market position and distribution network, (2) university research group with experience in extracellular vesicles research.

Creation Date	11 August 2020
Last Update	13 August 2020
Expiration Date	30 September 2020
Reference	RDHU20200811001
Public Link	https://een.ec.europa.eu/tools/services/PRO/Profile/Detail/26212f1b-e141-4bf5-a869-fcc8b7782656

Details

Description

Exosomes are small, cell-derived lipid vesicles that play key roles in intercellular communication. Despite their

outstanding potential in diagnostic and therapeutic use, the transition of exosome-based applications from laboratory research to clinical practice is hindered by the lack of a gold standard, optimal technology for the isolation of exosomes from bodily fluids. The novel platform provides the solution to the above problem. It is a highly effective isolation platform for exosomes, with high throughput, good reproducibility, decreasing the required effort and time for isolation. The innovative platform is essentially scalable, has low initial costs, and requires minimal experience from the user. Therefore, its widespread use will decrease the barriers for exosome-based applications. The aim is to provide a special equipment, customised consumables, and methodology to the specific needs in exosome isolation from different biofluids, such as blood or urine.

The coordinator of the planned project is a Hungarian biotechnology R&D company developing novel in-house R&D projects and providing innovative preclinical and clinical R&D services since 2003. The company is a worldwide R&D service provider with opinion leader scientific management. As technological development of the device has reached the prototype stage, the coordinator company is now preparing for further development in a Fast Track to Innovation project.

The planned project will build upon the SME Instrument Phase 1 project recently carried out by the coordinator company. The deadline for the targeted call (EIC-FTI) is 27 October 2020. The project will be carried out by a small consortia of 3 to 5 partners.

Partners sought:

- manufacturing company with strong market position and distribution network. Tasks: manufacturing of the novel extracellular vesicles isolation platform
- academic research group with outstanding scientific excellence in extracellular vesicles research. Tasks: isolation of targeted, specific sub-population of extracellular vesicles

Deadline for EOIs: 30 September 2020.

Advantages and innovations

The novel platform enables high-quality, scalable, and cost-efficient isolation of extracellular vesicles from all types of biofluids. The novel chromatography platform specifically tailored for the isolation of exosomes from biofluids combines size exclusion chromatography (SEC) and immune affinity chromatography (IAC). The platform has a user-friendly and modularly expandable control platform that supports multi-channel operation. Ready-to-use SEC and IAC columns are available as customized consumables.

As a first minimum viable product the novel platform can be developed as a laboratory equipment for the life science research market. Extracellular vesicles is a booming research field based on the dramatically increasing number of scientific publications with an immediate need for a high-quality, scalable, and cost-efficient isolation platform. Growth drivers include cancer diagnosis and treatment as well as advanced applications of exosomes for e.g. drug delivery.

The platform has the potential to be further developed for clinical use as an In Vitro Diagnostic (IVD) and/or for therapeutic use as well.

Stage of development

Prototype available for demonstration

Keywords

Technology

01002003

Electronic engineering

Ref: RDHU20200811001

06001005	Diagnostics, Diagnosis
06001012	Medical Research
06001013	Medical Technology / Biomedical Engineering
06002007	In vitro Testing, Trials

Market

05001001	Diagnostic services
05001002	In-vitro diagnostics
05004003	Laboratory equipment
05004005	Diagnostic equipment

Network Contact

Issuing Partner

ZACHODNIOPOMORSKI UNIWERSYTET TECHNOLOGICZNY W SZCZECINIE

Contact Person

ZEBROWSKI Pawel

Phone number

+48 91 449 43 64

Email

pzebrowski@zut.edu.pl

Open for EOI: **Yes**

Dissemination

Relevant sector groups

Healthcare

Client

Type and Size of Organisation Behind the Profile

Industry SME <= 10

Year Established

0

Already Engaged in Trans-National Cooperation

Yes

Languages Spoken

English
Hungarian

Client Country

Hungary

Partner Sought

Type and Role of Partner Sought

Partner 1

- Type of partner sought: Industry
- Specific area of activity of the partner: Commercial production and/or distribution of laboratory equipment and/or medical devices, In Vitro Diagnostics
- Task to be performed: During the project the partner's tasks will include contribution to the requirements specification; manufacturing of the novel extracellular vesicles isolation platform; and contribution to dissemination and exploitation activities aiding future commercialization. After the project, the partner would be involved in the commercialization of the project results, providing the novel extracellular vesicles isolation platform to be used by research laboratories.

Partner 2

- Type of partner sought: Academic Research Group
- Specific area of activity of the partner: Isolation of targeted, specific sub-population of extracellular vesicles as well as validation of performance of the isolation platform.
- Task to be performed: testing the novel extracellular vesicles isolation platform in their everyday laboratory practice by isolation of targeted, specific sub-population of extracellular vesicles.

Type of Partnership Considered

Research cooperation agreement

Program - Call

Framework Program

H2020

Call title and identifier

Fast Track to Innovation (FTI), EIC-FTI

Submission and evaluation scheme

continuous submission scheme

Anticipated Project Budget

€3 million

Coordinator required

No

Deadline for EOI

30 Sep 2020

Deadline of the Call

27 Oct 2020

Weblink to the call

<https://ec.europa.eu/programmes/horizon2020/en/h2020-section/fast-track-innovation-pilot>

Attachments
