

EVEREST Project Aims to Revolutionise Biomedical Research with Extracellular Vesicles in 2025.

The project will bring together 21 institutions from 11 countries with a budget of €1.3 million to advance the study of extracellular vesicles (EVs)

EVs, small particles that act as messengers between cells, have the potential to transform early diagnosis and targeted treatments for diseases such as cancer and cardiovascular conditions.

Dublin, 12 November 2024 – The EVEREST project, bringing together 21 leading institutions from 11 countries, is set to push the frontiers of biomedical research by exploring the transformative potential of extracellular vesicles (EVs). EVs are small particles that act as messengers between cells which could transform early diagnosis and targeted treatments for diseases such as cancer and cardiovascular conditions. The project, funded through the *Marie Skłodowska-Curie Actions (MSCA)* programme under *Horizon Europe GA101183034*, has a budget of €1,311,000 and will run for 48 months, starting in January 2025.

Extracellular vesicles are released by cells and carry proteins, lipids, and nucleic acids, making them key vehicles for cell-to-cell communication. *EVEREST* will focus on standardising methods for isolating and characterising these vesicles, facilitating their use in non-invasive diagnostics and personalised therapies to improve the precision and effectiveness of treatments for complex diseases.

The EVEREST consortium unites top academic and non-academic partners across Europe. Academic members include *University College Dublin (Ireland)*, *Trinity College Dublin (Ireland)*, *University of Vigo (Spain)*, *Universidade Nova de Lisboa (Portugal)*, *Luxembourg Institute of Science and Technology (Luxembourg)*, *Justus-Liebig University Giessen (Germany)*, *South East Technological University (Ireland)*, *Linköping University (Sweden)*, *Comenius University Bratislava (Slovakia)*, *Queen's University Belfast (UK)*, *State Research Institute Centre for Innovative Medicine (Lithuania)*, and *Fundación Progreso y Salud GENYO (Spain)*. Non-academic partners include *SiriusXT (Ireland)*, *Bioreperia (Sweden)*, *Fox Biosystems (Belgium)*, *Pharmahungary (Hungary)*, *Acousort AB (Sweden)*, *Mursla (UK)*, *Xenopat (Spain)*, *De Rotos y Descosidos (Spain)*, and *Vesiculab Ltd (UK)*. This multidisciplinary and cross-sector approach enables the project to cover everything from basic research to commercial

application, maximising the impact of scientific advances on clinical and societal outcomes.

Pharmahungary Group is proud to participate in this interdisciplinary collaboration, providing state-of-the-art research facilities and expert guidance in the field of biomedical innovation. Pharmahungary Group laboratories located in Semmelweis University, Budapest, Hungary and University of Szeged, Szeged, Hungary offer a dynamic environment for impactful research and discovery. Professor Péter Ferdinandy, MD, PhD, MBA, the Founder & CEO of Pharmahungary Group, highly-cited researcher, expressed his enthusiasm: *“We are proud to support the goals of EVEREST as it represents a bold step forward in the quest for innovative medical solutions. Since its foundation in 2001, Pharmahungary Group core expertise is cardiovascular drug development including miRNA therapies, an especially current field as the Nobel Prize in Physiology or Medicine was awarded in 2024 for the discovery of miRNAs. We also have over a decade of experience with extracellular vesicles research evidenced by several scientific publications and an SME Instrument Champion title received for our extracellular vesicle isolation platform called Vezics. We are enthusiastic to continue our innovative research and drug development activities as part of EVEREST.”*

EVEREST consortium benefits from the prestigious Marie Skłodowska-Curie Actions (MSCA) Staff Exchange programme, which provides unique funding opportunities for international, interdisciplinary collaboration. The programme fosters knowledge exchange and innovation, driving the development of solutions that can address global challenges in healthcare.