Launch of WOUNDSENS (https://woundsens.eu), A groundbreaking EIC Pathfinder project to revolutionize health monitoring

Madrid, November 23- A novel European initiative, WOUNDSENS, funded under the prestigious EIC Pathfinder Challenge 2022 "Towards the Healthcare Continuum: technologies to support a radical shift from episodic to continuous healthcare", officially commenced on November 1st. Today, we are excited to announce the project's kickoff at EvoEnzyme's facilities in Madrid.

WOUNDSENS, titled "A Paradigm shift in health monitoring with electrospun enzymatic neomaterials", is one of the eleven elite projects selected for funding. This four-year project is spearheaded by EvoEnzyme, a CSIC spin-off, in collaboration with the Université de Lorraine and the NMI Natural and Medical Sciences Institute in Reutlingen, Germany.

Chronic non-healing wounds, affecting up to 2% of the global population, represent a significant public health challenge. To date, no smart bandages have successfully reached the market, and research continues for an effective, sensitive inspection method. WOUNDSENS addresses this silent epidemic with an innovative solution to improve the quality of life for sufferers and reduce healthcare system burdens.

The project's ambition is to lead the development of a new generation of wearable biosensors, integrating sensor elements directly into the wound dressing material. This integration promises enhanced comfort and operability while being compatible with standard manufacturing processes. The cutting-edge technology behind WOUNDSENS lies in novel hollow fibers with radial bio-signaling, based on engineered enzymes.

The project is set to deliver a pioneering shift in smart wound dressings, employing innovative electrochemical materials, groundbreaking advances in conductive materials, electrospun neofibers, and enzyme engineering. These novel detection biocatalysts, comprising both resurrected and extant enzymes, are designed by directed evolution to ensure sensitive and reliable signaling.

By pushing the boundaries of technology, WOUNDSENS aims to redefine continuous wound control and monitoring, significantly improving the lives of millions. Stay tuned for more updates!