

# PREFER: DEVELOPMENT OF A BIO- COMPATIBLE PRODUCT FOR THE THERAPY OF DIFFICULT WOUNDS



## THE PROJECT

Difficult wounds (diabetic foot, ulcers) are serious pathologies that can lead to amputation and are very common in the elderly population. PREFER is a project that aims to create an Advanced Therapy Medicinal Product (ATMP) that is able to revascularize the tissues affected by such wounds, and by doing so, to heal them. The project is divided into 4 macro activities:

- Refine an existing protocol for the identification, evaluation and use of extracellular matrices to support (scaffold) the growth of human endothelial cells with the addition of growth factors;

- Perform in-vitro and in-vivo efficacy tests to evaluate healing from a clinical, histological and functional point of view;
- Automate the expansion of endothelial cells, making the comparison between culture in static and in bioreactor;
- Implement the procedure on conditions of "good manufacturing practice" (GMP), preparatory to production for future clinical trials (phase I / II clinical trial - following the closure of the project), aimed at the marketing of a new medicinal product of advanced therapy .

**3%** INCIDENCE IN THE POPULATION OVER **65 YEARS**

## THE OBJECTIVES

- Improve existing therapies for the healing of difficult wounds by developing an innovative product based on the combination of an extracellular matrix, autologous endothelial cells and growth factors to stimulate the formation of blood vessels and the regrowth of the skin epithelium;
- Commercialize the medicinal product to be developed thanks to its low cost production with automated bioreactors.

**30**  
MONTHS

**1,102,085**  
TOTAL BUDGET (EUROS)

**4**  
PARTNERS



**POR FESR  
2014 2020**  
Friuli Venezia Giulia



UNIVERSITÀ  
DEGLI STUDI DI TRIESTE

REGIONE AUTONOMA FRIULI VENEZIA GIULIA  
Azienda Sanitaria Universitaria  
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