

Cofinanciado por:



UNIÃO EUROPEIA
Fundo Europeu
de Desenvolvimento Regional

Project name | TEX4WOUNDS Development of advanced textile materials for the treatment of wounds

Project code | POCI-01-0247-FEDER-047029

Support | Incentive System for Technological Research and Development (SI ID&T) | Business R&D - Projects in Co-promotion - Notice SI/17/2019

Leading entity | SOMANI - SOCIEDADE TÊXTIL, S.A.

Co-promoters | FOURMAG LDA | TECHNOLOGICAL CENTER FOR THE TEXTILE AND CLOTHING INDUSTRIES OF PORTUGAL-CITEVE | PORTUGUESE CATHOLIC UNIVERSITY

Purpose | TO 1 - Reinforce research, technological development and innovation

Project Location | NUTS II - NORTH

Approval Date | 2021-08-10

Start date | 2021-07-01

Completion date | 2023-06-30

Amounts involved

Total Investment: 1,193,071.42 Euros

Total Eligible Investment: 1,160,986.66 Euros

Financial Support (Non-Refundable Incentive): ERDF 826,543.34 Euros

Project Summary

Taking into account the context and the social and economic impact of wounds on users, caregivers and health systems, as well as technological developments, the cost, constraints and difficulties of using dressing materials already described, the TEX4WOUNDS consortium intends to develop a range of advanced devices that provide an effective and cost-effective response to wound care. The TEX4WOUNDS project has as its global objective a range of products for cleaning and treating wounds based on new textile architectures, using terry-weave knitted structures, and functional fibres and natural additives for impregnation. To this end, 2 groups of devices will be developed:

- 1) Dressing material for cleaning and debridement;
- 2) Dynamic, absorbent and healing-promoting dressing material: It will be developed in two concepts, according to the type of wound:
 - a. Laminated structure dressing: for superficial and shallow wounds with medium to high exudate.
 - b. Core structure dressing: for deep, local wounds with a medium to a high amount of exudate.

Two global R&D lines are planned to achieve the proposed objectives: R&D in new materials for application wounds treatment (R&D of new textile structures/architectures and natural additives) and R&D in additives application processes to the new textile architectures and their assemblage.

To ensure the project's success, a consortium was created with complementary skills consisting of two companies (SOMANI and FOURMAG) and two entities of the R&D System (CITEVE and UCP). The project will be developed by R&D teams equipped with the necessary competencies to guarantee an adequate execution that enhances its results through the added value and degree of innovation of the final products.

Activities

1. Technical management and project coordination
2. Preliminary studies and specifications
3. R&D of textile architectures for wound dressing materials
4. Prototypes building
5. Evaluation and validation of the solutions developed
6. Dissemination of the project

Activities

Predicted probability of success (considering the risk associated with the R&D project): Medium-High – 60% to 80%;

Result indicator (Companies' R&D expenditure in GVA): 7.87