PARTNERS INFORMATION

- Exus S.A
- University Hospital of Grenoble
- Commissariat à l’Energie Atomique et aux Energies Alternatives
- CSEM Centre Suisse ‘Electronique et de Microtechnique’ SA
- European Wound Management Association
- Euroresearch
- Haemopharm Biofluids
- Institute of Communications and Computer Systems
- Smith & Nephew Wound Management
- Swissinnov
- Università DI Pisa

EXPECTED BENEFITS

The envisaged benefits provided by the real-time wound monitoring incorporated within SWAN-iCare system, will impact at numerous points along the patient’s treatment pathway for both the patient and medical support teams. This will result in improved treatment and a faster healing wound.

PROJECT DETAILS

European Project FP7-ICT-2011-8
Time Scale 2012 - 2016

Objectives:

- Proven Clinical Prototype System to manage hard to heal chronic diabetic foot and venous leg ulcers.
- Real time monitoring and communication with Clinical Support Teams.
- Reduced costs to the Healthcare provider by tailoring treatment to meet the patients individual needs.

WEB site  http://www.swan-icare.eu/
More than **10 million people** in Europe suffer from chronic wounds, a number which is expected to grow due to an aging population. Foot and leg ulcers are common wound types caused by diabetes and vascular problems respectively but a remarkable number of them are also due to the co-morbidity influence of many other diseases.

The aim of the SWAN-iCare project is to develop a device that allows for monitoring and personalised management of hard-to heal Diabetic Foot Ulcers (DFU) and Venous Leg Ulcers (VLU).

The projected device is a wearable negative pressure device equipped with Information and Communication Technologies to continuously monitor and provide real time data to the Medical Support teams. Such a device will allow users to:

- Accurately monitor many wound parameters via non-invasive integrated micro-sensors.
- Identify infection early.
- Provide if necessary personalized second-line therapy to supplement the Negative Pressure Wound Therapy.

**SYSTEM OVERVIEW**

**DIABETIC FOOT ULCER**

SWAN-iCare will provide a safe and effective alternative to prolonged hospitalization for patients with hard to heal DFU.

The patient will be able to remain at home with the clinical support remotely monitoring the wound healing process.

(Marie Muller MD Dpt. of Diabetology Grenoble University Hospital, France)

**VENOUS LEG ULCER**

Because the SWAN-iCare device allows for continuous monitoring of medical parameters, it provides the opportunity to reduce the risk of developing complications. This will in turn improve quality of life, whilst reduce cost to the healthcare system.

(Marco Romanelli, MD PhD Assistant Professor Dept. of Dermatology University of Pisa, Italy)