

# SAMOTHRACE “SiciliAn MicronanOTech Research And Innovation Center”

CUP: B73D21014940004, PROJECT CODE ECS00000022

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## Partnership

- Fondazione SAMOTHRACE – HUB
- University of Pittsburgh Medical Center Italy –  
*Leader Spoke 8*
- Advanced Medical Engineering Devices s.r.l., Bcame s.r.l, EHT S.C.p.a., Etna Digital Growth s.r.l., Istituto Ortopedico Rizzoli –  
*Affiliates Spoke 8*

**Total cost of Intervention € 2,106,753.46**

**NRRP contribution € 1,053,376.73**

The SAMOTHRACE Innovation Ecosystem brings together some of the world’s most prominent players in research, advanced scientific education, and industry, all connected to the value chain of microelectronics and micro and nanotechnologies, applied across six major strategic areas: Energy, Environment, Smart Mobility, Smart Agriculture, Health, Cultural Heritage.

The Ecosystem promotes and benefits from the interdisciplinarity and complementarity of its teams and the activities of its various partners, aiming to strengthen their interconnections and foster the sharing of knowledge and best practices. The SAMOTHRACE project, promoted by the SAMOTHRACE Ecosystem, consists of numerous scientific and technological research activities with a high level of technological readiness (TRL), with applications across various industrial sectors, organized into 9 spokes, each defined by specific activities and objectives.

UPMC Italy is the leader of Spoke 8, which aims to develop an organizational model for implementing telemedicine systems across various application scenarios, including

site identification, participant recruitment, data collection and analysis, as well as the potential to develop predictive models for health monitoring and decision support in assessing health conditions.

UPMC Italy has engaged some of its top researchers, who are conducting highly significant clinical research with the goal of developing new therapies and innovative diagnostic protocols. The studies include:

- **Innovative telemonitoring strategies for managing patients affected by chronic liver disease.** The primary objective is to assess, in a randomized controlled trial, the feasibility of testing a telemedicine model for patients with liver cirrhosis. The explored outcome is the hospital readmission rate and the mortality of patients with severe liver disease.
- **Innovative telemonitoring for patients with advanced chronic respiratory failure.** The objective is to develop an innovative clinical management system for patients with advanced lung disease, using lung transplant patients as a pilot model, through a Home Care Service based on remote monitoring. The main objective is also to assess the feasibility of applying the telemonitoring system.

Both studies have the ambition to pilot-test the hypothesis that a Home Telemonitoring service is more effective than standard treatment in preventing readmissions and, more generally, in reducing mortality and morbidity while overall improving the patient’s quality of life.