

## ONCORELIEF PILOTS

The project's results will be validated in in real world settings in two pilot applications, focusing on Colorectal Cancer and Acute Myeloid Leukaemia, respectively. During the pilot execution, patients, informed through appropriate recruitment processes and consent forms, will use the Guardian Angel application, which will collect data directly from them (as PROs and PREMs). The collected data will be used to validate the theoretical concept and approach of the project and its impact on patients and healthcare professionals.



## PROJECT CONSORTIUM



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# ONCORELIEF

A Digital Guardian Angel Enhancing  
Cancer Patient Wellbeing and Health  
Status Improvement Following  
Treatment



This project has received funding from the European Union's Horizon 2020 Framework Programme for Research and Innovation under grant agreement no 875392.

## | CONTEXT

Improvements in early detection and treatment of cancer have improved patient survival. As a consequence, the number of cancer survivors is increasing, creating the need to improve not only treatment but also wellness and follow-up care.



## | PROJECT AIMS

ONCORELIEF aims to deliver a **mobile application (ONCORELIEF Guardian Angel)**, which will extract insights about the patient's life and condition and make suggestions for wellbeing. The app will be connected with the patients' sensing devices and with the **ONCORELIEF back-end data collection platform** and, and will use models produced by the **ONCORELIEF AI engine** to produce **QoL (Quality of Life) indices**, recommendations and warnings.

## | THE ONCORELIEF VISION

ONCORELIEF is a 36-month action that will leverage the following key factors:

- 1** Improved cancer survival rate;
- 2** Proliferation of smartphones;
- 3** Increased importance of health-related quality of life (HRQOL),
- 4** Huge volumes of data from clinical, administrative, imaging and omics sources
- 5** Incoming flood of electronic patient reported outcome and experience measures (ePRO), patient Internet activities, sensors and monitoring data and
- 6** Rapid advances in Artificial Intelligence (AI) and Big Data analytics. Thus a huge unprecedented opportunity is formed to create intelligent healthcare- patient services and tools to manage the health status and wellbeing of cancer patients at all levels. ONCORELIEF focuses on **two different types of cancer, Myeloid Leukaemia (AML) and Colorectal cancer (CRC)**, and envisions a personalized and dynamic **well-being and QoL Index**, from 1 (low) to 1,000 (high), depending on how the patient's body, symptoms, feelings and lifestyle change through time.

## | OBJECTIVES

**Obj. 1:** Analyze clinical settings, treatment parameters and environment dynamics and drive forces of cancer patient wellbeing

**Obj. 2:** Exploit Big Data and AI capabilities for holistic post-treatment insights generation

**Obj. 3:** Develop innovative technological elements for providing personalized wellbeing

**Obj. 4:** Validate in different cancer types and patient-environment settings

**Obj. 5:** Actively engage stakeholders resulting to measurable impacts

