# **LEADERSHIP**



Prof. Dimitrios Fotiadis
University of Ioannina,

Greece (UOI)

**Project Coordinator** 



Prof. Giuseppe Curigliano

European Institute of Oncology, Italy (IEO) Scientific Manager



Prof. Kostas Marias

Foundation for Research and Technology, Greece (FORTH) Technical Manager



Prof. Gabriella Pravettoni

European Institute of Oncology, Italy (IEO) Clinical Study Manager

# CONSORTIUM

To execute the project, a high quality consortium has been assembled consisting of a multidisciplinary group of scientists including clinical cardiologists, oncologists, psychologists, geriatricians, pharmacologists, molecular biologists, bioinformaticians, and IT experts.



- (1) /CardiOCare.eu
- CardiOCare\_eu
- /cardiocare-eu
- cardiocare-project.eu
- info@cardiocare-project.eu

# CARDIO TOXICITY



...be informed!

Although breast cancer mortality rates have been declining each year in Europe for two decades, the number one cause of death for women with breast cancer is cardiotoxicity. Adding further complexity to the management and care of this population, 50%-60% of the newly diagnosed breast cancer patients are older than 65 years of age. This elderly group of patients is particularly susceptible to co-morbid cardiotoxicity induced by cancer treatment due to age-related risk factors, pre-existing heart disease and a high prevalence of multiple co-morbidities.



**OLDER THAN 65 Y/O** 

CARDIOCARE will exploit its unique registries of elderly breast cancer patients and perform a new multi-centre clinical trial to implement an interdisciplinary and patient-oriented eHealth approach for assessing the efficacy of behavioral and psychological interventions on cardiotoxicity, intrinsic capacity and QoL.

Large data sets of high quality retrospective and prospective data will be collected including clinical, imaging, -omics, biomarker, psycho-marker, intrinsic capacity, wearable sensor, and eHealth application data and by employing machine learning approaches.

# VISION



## **DATA INPUT**

#### **IMAGING**





#### **BIOMARKERS**



Troponin I, BNPs Liquid biopsies/miRNAs, SNPs, Psycho-markers Metagenomics (gut microbiome)

#### CLINICAL







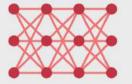
### INTRINSIC CAPACITY & QOL MONITORING





PROMs & PREMs Wearables & sensors

# **RISK PREDICTION** MODELS



# CARDIOCARE SOLUTION



Diagnostic Support Patient stratification Therapeutic Support Treatment planning and optimisation Prognostic Support Risk prediction and treatment outcome

CARDIOCARE will develop a novel cost-effective risk-stratification strategy and healthcare model based on new sets of quality key performance indicators and provide evidence-based best practices and care pathways to improve the management of the elderly multimorbid breast cancer patient at risk for cardiac toxicity.