



This project is co-financed by the
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Bu proje Avrupa Birliđi ve Türkiye Cumhuriyeti tarafından
finanse edilmektedir

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MEDICAL ONCOLOGY DEPARTMENT







- a multidisciplinary group of clinical and basic researchers with extensive experience in the field of translational oncology
- Infrastructure:
 - Liquid Biopsy Lab: National reference lab for non-invasive biomarker testing and clinical trials.
 - Biobank: with all lung cancer resections performed in the hospital
 - Clinical Trials Unit
 - Phase I Studies Unit: to develop first-dose clinical trials in humans.
- with over 40 healthcare professionals and 1.340 pat/year
- Expertise in:
 - Big Data and AI research projects (as partners and coordinators): Data providers. Data sources: EHR and hospital-owned databases
 - Efficacy of immuno-chemotherapy in neoadjuvant treatment
 - Clinical utility of ctDNA for the management of lung cancer patients
- Medical field of expertise and interest: lung cancer, breast cancer, lymphomas, cardio-oncology.

• One of the most developed hospitals in Spain in the use of IT technologies

• Among the 40 top hospitals in the EU



BACKGROUND IN R&I PROJECTS

-  **iASiS** Big Data for Precision Medicine Integration and analysis of heterogeneous big data for precision medicine and suggested treatments for different type of patients (H2020)
-  **BIGMedilOtics** Big Data PPP project for the development of Big data-driven approaches for the improvement of healthcare systems and precision medicine (H2020)
-  **CLARIFY** **Cancer Long Survivor Artificial Intelligence Follow-up.** (H2020). **Coordinators.**
-  **P4-LUCAT** Personalized medicine for lung cancer treatment: using Big Data-driven approaches for decision support (ERA PerMED)
- INmunoSIGH: immunological and molecular characterization in liquid biopsy of lung cancer patients for immunotherapy
- Development of molecular markers in liquid biopsy for long survival in onco-immunotherapy
- Personalized Medicine in Oncology: researching a model capable of improving and predicting the result treatment based in molecular mechanisms, tumor biology, images, IT, and murine model
- Tumor immune microenvironment and identification of biomarkers of response to neoadjuvant chemotherapy or chemoimmunotherapy in patients with non-small cell lung cancer

Project Idea

HORIZON-MISS-2021-CANCER-02-03: Better understanding of the impact of risk factors and health determinants on the development and progression of cancer

Relevant project ideas

- Risk stratification in cancer patients for improving treatment choice and personalized follow-up
- AI to support decision-making in the daily clinical practice: patients and clinician's platform
- Ambulatory patients monitoring for QoL improvement
- Patient and carers engagement in their health: PREMs and PROMs

Expected results

- Identification of prognostic factors that impact survival and QoL
- Development of follow-up guidelines for cancer long survivors
- Personalized patient management and decision-making AI-assisted

Consortium - profile of known partners

No	Partner Name	Type	Country	Role in the Project
01	Universidad Politécnica de Madrid	Academic	Spain	Clinical Data Ecosystem
02	Technische Informationsbibliothek	Academic	Germany	Scholarly and Scientific Data Ecosystems & Semantic integration
03	Holos-Soluções Avançadas em Tecnologias de Informação SA	SME	Portugal	Technology developer
04	Kronohealth SL	SME	Spain	Technology
05	Centro Hospitalar Universitário do Porto	Hospital	Portugal	Clinical data provider

Consortium - profile of known partners

No	Partner Name	Type	Country	Role in the Project
06	Consejo Superior de Investigaciones Científicas	Public research center	Spain	Stratification models
07	Grupo Español de Pacientes con Cáncer	CSO	Spain	Patient engagement
08	Champalimaud Foundation	Hospital	Portugal	
09	Uninova	Academic Center	Portugal	Stratification models

Consortium - required partners

No	Expertise	Type	Country	Role in the project
10	Clinical			Clinicians; data providers; end-user validation
11	Patient's association	CSO		Patient engagement
12	Molecular biology			Molecular data analysis
13	Bioinformatics		UK	Clinical data analysis



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