

The **CHAIMELEON** Project

Accelerating the lab
to market transition of AI tools
for cancer management



Project Objectives

The CHAIMELEON project aims to develop a structured repository of health images and related clinical data on the most prevalent cancers in Europe: lung, breast, prostate and colorectal.

This EU-wide interoperable repository will greatly facilitate and contribute to the development and validation of AI tools for improved cancer management.

Access to large, structured data repository	EU-wide resource
Distributed infrastructure	Online processing pipelines
Facilitate AI development	Validate AI solutions
Secure data sharing	Ensure sustainability

The **CHAIMELEON** Repository: A Powerful Resource for AI-based Cancer Management Solutions

- distributed infrastructure which is interoperable with existing repositories and biobanks
- imaging data in DICOM format linked to data including the patient profile, tumor, treatment and outcome.
- approximately 13,000 cases from the four most predominant cancers in Europe
- secure, free resource for AI experimentation in cancer management
- data analytics models
- in line with ethical and legal requirements



First results

- Cloud-based architecture and functionalities defined and implemented
 - Privacy and security issues addressed
 - Local nodes implemented at hospitals and start of data collection
 - Over 8,500 included patients
 - Imaging and clinical data collected for about 2500 patients
- More than 30 open access scientific publications

Expected Impact of Chameleon

Improve technical,
organisational & ethical
AI health imaging
standards

Assist clinicians
in daily
decision making

AI-based solutions
to improve diagnosis,
treatment & follow up

Increase trust
in AI solutions

Expand potential
to other types of cancer

Reduce social
& economic
burdens
through
personalised
cancer
management

Improve management
of the four most
prevalent cancer types
worldwide

Increased
collaboration and
sharing of resources
across the EU for
improved cancer
management and
research

Project Facts

Coordinator: Prof. Luis Marti-Bonmati, HULAFE

Duration: 48 months

Runtime: September 1, 2020 – August 31, 2024

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Consortium

Fundacion para la Investigacion del Hospital Universitario la Fe de la Comunidad Valenciana (ES), Universita di Pisa (IT), Universita Degli Studi di Roma la Sapienza (IT), Centro Hospitalar Universitario do Porto Epe (PT), Policlinico San Donato (IT), College des Enseignants de Radiologie (FR), Universiteit Masstricht (NL), Charité Universitätsmedizin Berlin (DE), Imperial College London (UK), Ben-Gurion University of the Negev (IL), Universitat Politecnica de Valencia (ES), GE Healthcare (DE), Quibim (ES), Medexprim (FR), Bahia (ES), Matical Innovation (ES), European Institute of Biomedical Imaging Research (AT), Universitat de Valencia (ES)

For more information visit
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