

## [European Cancer Imaging Initiative](https://digital-strategy.ec.europa.eu/en/policies/cancer-ima-<br/>ging) ([https://digital-strategy.ec.europa.eu/en/policies/cancer-ima- ging](https://digital-strategy.ec.europa.eu/en/policies/cancer-ima-<br/>ging))

The European Cancer Imaging Initiative will unlock the power of imaging and Artificial Intelligence for the benefit of cancer patients, clinicians and researchers.



@EuropeanCommission

The **European Cancer Imaging Initiative** is one of the flagships of the Europe's Beating Cancer Plan (EBCP). One of the objectives of the Plan is to make the most of the potential of data and digital technologies such as Artificial Intelligence (AI) or High-Performance Computing (HPC) to combat cancer.

European Commission

European Cancer Imaging Initiative

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The aim of the European Cancer Imaging Initiative is to **foster innovation and deployment of digital technologies in cancer treatment and care**, to achieve **more precise and faster clinical decision-making, diagnostics, treatments and predictive medicine for cancer patients**.

The Initiative will showcase how medical images can be accessed, used and pooled, while ensuring a

high level of ethics, trust, security and personal data protection in full compliance with EU values and rules. It will make large amounts of cancer images and linked clinical data easily accessible to European clinicians, researchers and innovators in line with the European data strategy and supporting the goals of the European Health Data Space.

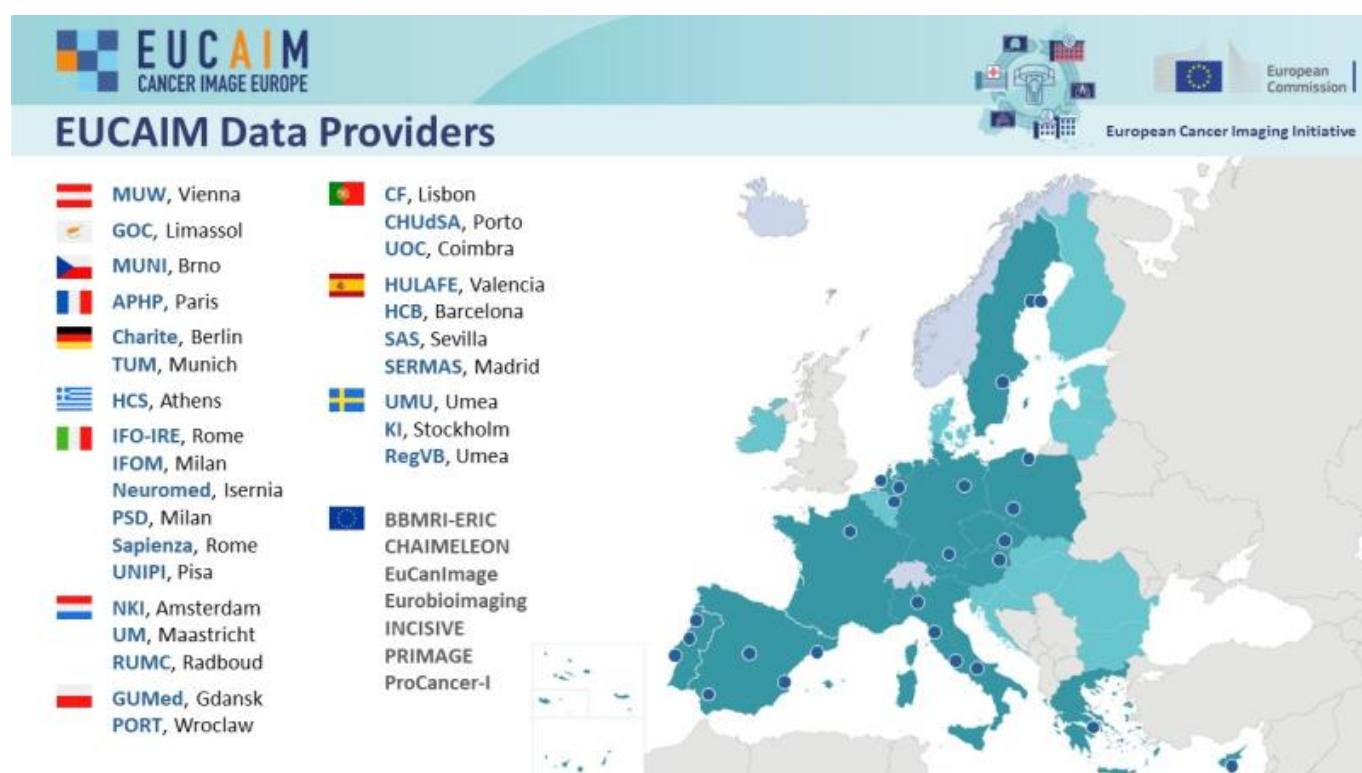
## What is the European Cancer Imaging Initiative trying to achieve?

Cancer imaging datasets exist for different cancer types, but they are scattered among many repositories and clinical centres in Europe, and they are not easily accessible to clinicians, researchers and innovators.

The European Cancer Imaging Initiative will work towards linking up resources and databases to an **open, available and user-friendly infrastructure of cancer images for all stakeholders**. This will be achieved through an integrated approach designed with major European research organisations, institutions, and companies. The infrastructure will support the development and **benchmarking, testing and piloting of tools for personalised medicine**, essentially offering a **backbone for next generation of cancer diagnostics and treatments**.

## How are we going to do this?

The cornerstone of the initiative will be a **federated European infrastructure for cancer images data**, developed by the European Federation for Cancer IMages ([EUCAIM \(https://cancerimage.eu/\)](https://cancerimage.eu/)) project funded under the DIGITAL programme (18 MIO EU co-funding). The project starts with 21 clinical sites from 12 countries and aims to have at least 30 distributed data providers from 15 countries by the end of the project.



The project will provide a **central hub** that will link EU-level and national initiatives, hospital networks as well as research repositories with cancer images data. Clinicians, researchers and innovators will have cross-border access to an interoperable, privacy-preserving and secure

infrastructure for **federated, distributed analysis of cancer imaging data**.

Both common and rare cancers will be included with anonymized images and annotations through this pan-European Cancer Images infrastructure and more than 100,000 cases are expected to be available. At least 50 Artificial Intelligence algorithms, Artificial Intelligence tools and clinical prediction models for researchers within the infrastructure are planned to be deployed by the end of the project.

EUCAIM **builds upon the results of the work of the “AI for Health Imaging” (AI4HI) Network** which consists of 86 affiliated institutions from 20 countries involved in 5 large EU-funded projects on big data and Artificial Intelligence in cancer imaging: [Chameleon \(https://chameleon.eu/\)](https://chameleon.eu/), [EuCanImage \(https://eucanimage.eu/\)](https://eucanimage.eu/), [ProCancer-I \(https://www.procancer-i.eu/\)](https://www.procancer-i.eu/), [Incisive \(https://incisive-project.eu/\)](https://incisive-project.eu/) and [Primage \(https://www.primageproject.eu/\)](https://www.primageproject.eu/). These projects are developing Artificial Intelligence algorithms to detect the cancer from imaging and are establishing federated repositories for cancer images.

EUCAIM plans to make cancer images data available to the [AI Testing and Experimentation Facility \(https://digital-strategy.ec.europa.eu/en/activities/testing-and-experimentation-facilities\)](https://digital-strategy.ec.europa.eu/en/activities/testing-and-experimentation-facilities) for Health established under the DIGITAL programme. The [TEF-Health \(https://www.tefhealth.eu/\)](https://www.tefhealth.eu/) project started in January 2023. This will allow small and medium-sized enterprises who have developed Artificial Intelligence solutions for cancer care to test them in real-life environments. Other testing facilities will also be considered.

The [European Digital Innovation Hubs \(https://digital-strategy.ec.europa.eu/en/activities/edihs\)](https://digital-strategy.ec.europa.eu/en/activities/edihs) under the DIGITAL Programme will support the roll-out of the technologies relevant for the European Cancer Imaging Initiative, for example by informing the innovators about the legal requirements and testing facilities available to them. They will provide a range of services to digital solutions users and providers, such as test-before-invest services, training and networking opportunities as well as access to finances.

## **Launch of the European Cancer Imaging Initiative**

A [hybrid event \(https://digital-strategy.ec.europa.eu/en/library/event-report-cancer-imaging-initiative\)](https://digital-strategy.ec.europa.eu/en/library/event-report-cancer-imaging-initiative) was organised in Brussels on 23 January 2023 to mark the launch of the Cancer Imaging Initiative. The recording of the event as well as the presentations from the event are available on the [event webpage \(https://digital-strategy.ec.europa.eu/en/library/event-report-cancer-imaging-initiative\)](https://digital-strategy.ec.europa.eu/en/library/event-report-cancer-imaging-initiative).

The [EC press release \(https://ec.europa.eu/commission/presscorner/detail/en/IP\\_23\\_286\)](https://ec.europa.eu/commission/presscorner/detail/en/IP_23_286), including video messages from the Commissioner for Internal Market, Thierry Breton and the Commissioner for Health and Food Safety, Stella Kyriakides are available.

## **First prototype of the Cancer Image Europe platform goes live**

The [first version of the digital infrastructure \(https://cancerimage.eu/\)](https://cancerimage.eu/) was delivered by the EUCAIM project on 29 September 2023. It features a public catalogue of cancer imaging datasets from the repositories of EU-funded projects related to of Artificial Intelligence for Health Imaging, as well as a search tool to understand the information available at the data providers' sites across the EU. Access to data can be requested from data providers in line with applicable ethics and data protection rules.

A first version of the rules for data providers and users and the operational procedures for the Cancer Image Europe platform have been also published on the EUCAIM project website.

More details are available [in the press release](#)

(<https://digital-strategy.ec.europa.eu/en/news/europes-beating-cancer-plan-first-prototype-cancer-image-europe-platform-goes-live>).

**EUROPEAN CANCER IMAGING INITIATIVE**

*Accelerating the development of AI-based cancer management solutions and other data-driven cancer research activities, enabling and empowering scientific breakthroughs that will shape the future of cancer diagnosis and treatment*

**EUCAIM**  
CANCER IMAGE EUROPE

**Cancer Image Europe Infrastructure**  
Milestone – September 2023

**First platform release**

- Public catalogue of 36 datasets  
From the "AI4HI" network of EU-funded projects
- Approx. 20 000 subjects  
> 200 000 image series\*
- 9 cancer types  
breast, colon, lung, prostate, rectum, liver, glioma, neuroblastoma, glioblastoma

\* the first platform prototype allows for data discovery and links to data providers, where access to data can be requested

Participation rules for data providers and users first version

Federated search

@CNECT-CANCER-IMAGING-INITIATIVE@ec.europa.eu  
digital-strategy.ec.europa.eu/en/policies/cancer-imaging

Available at [www.cancerimage.eu](http://www.cancerimage.eu)

European Commission

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## Milestones

1. December 2022:  
Launch of the Initiative
2. January 2023:  
Start of the [EUCAIM project \(https://www.eibir.org/projects/eucaim/\)](https://www.eibir.org/projects/eucaim/)
3. September 2023:  
Early release of the EUCAIM Data Federation Framework with preliminary proof-of-concepts on data federation and harmonisation in at least one cancer type and few selected use cases;
4. December 2023:  
Requirements analysis and design of the EUCAIM infrastructure completed, collaboration mechanisms established;

5.  
December 2024:  
EUCAIM platform validated and fully populated with data; prototype of federated learning and benchmarking platform available
6.  
2025:  
Federation of new cancer images databases through open calls; implementation of clinical use cases
7.  
December 2025:  
Final release of the EUCAIM platform, including final version of tools and services for data providers and platform users
8.  
2026:  
Full operation of the federated European repository of cancer images data
9.  
2027:  
Expansion

## **Relevant links**

[Europe's Beating Cancer Plan](#)

[https://ec.europa.eu/info/strategy/priorities-2019-2024/promoting-our-european-way-life/european-health-union/cancer-plan-europe\\_en](https://ec.europa.eu/info/strategy/priorities-2019-2024/promoting-our-european-way-life/european-health-union/cancer-plan-europe_en)  
[European Health Data Space](#)

[https://health.ec.europa.eu/ehealth-digital-health-and-care/european-health-data-space\\_en](https://health.ec.europa.eu/ehealth-digital-health-and-care/european-health-data-space_en)  
European Data Strategy

[https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/european-data-strategy\\_en](https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/european-data-strategy_en)  
[Coordinated Plan on Artificial Intelligence](#)



<https://digital-strategy.ec.europa.eu/en/policies/plan-ai>  
[European Cancer Imaging Factsheet \(pdf.\)](#)

<https://ec.europa.eu/newsroom/dae/redirection/document/92245>  
Questions and Answers

<https://digital-strategy.ec.europa.eu/en/faqs/european-cancer-imaging-initiative-questions-answers>

Follow the latest progress and learn more about getting involved.

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[Follow the latest progress and learn more about getting involved \(https://twitter.com/ehealth\\_eu?lang=en\)](https://twitter.com/ehealth_eu?lang=en)

## Latest News

EVENT | 14 March 2024

[Live demo of the Cancer Image Europe platform](https://digital-strategy.ec.europa.eu/en/events/live-demo-cancer-image-europe-platform)

<https://digital-strategy.ec.europa.eu/en/events/live-demo-cancer-image-europe-platform>

The EUCAIM project is organising a webinar on March 14, 2024 from 10:00 to 11:30 CET to demonstrate the first version of the Cancer Image Europe platform.

PRESS RELEASE | 01 March 2024

[Commission opens calls to invest over €176 million in digital capacities and tech](https://digital-strategy.ec.europa.eu/en/news/commission-opens-calls-invest-over-eu176-million-digit)

<https://digital-strategy.ec.europa.eu/en/news/commission-opens-calls-invest-over-eu176-million-digit>

[al-capacities-and-tech\)](#)

The European Commission opened a new set of calls for proposals under the 2023-2024 Work Programmes of the Digital Europe Programme to strengthen digital capacities across EU. These calls are open to businesses, public administrations, and other entities from the EU Member States, EFTA/EEA countries, and associated countries. The budget for this set of calls is over €176 million.

EVENT | 11 March 2024

[Webinar on the 2024 Digital Health topics under the DIGITAL Europe Programme](#)

[\(https://digital-strategy.ec.europa.eu/en/events/webinar-2024-digital-health-topics-under-digital-europe-programme\)](https://digital-strategy.ec.europa.eu/en/events/webinar-2024-digital-health-topics-under-digital-europe-programme)

The European Commission invites any interested stakeholders to an online information webinar on 3 digital health-related calls for proposals published under the amended Digital Europe Work Programme 2023-24.

PRESS RELEASE | 14 December 2023

[Commission awards €41 million contract to develop infrastructure for Common European Data Spaces](#)

[\(https://digital-strategy.ec.europa.eu/en/news/commission-awards-eu41-million-contract-develop-infrastructure-common-european-data-spaces\)](https://digital-strategy.ec.europa.eu/en/news/commission-awards-eu41-million-contract-develop-infrastructure-common-european-data-spaces)

The Commission has selected a consortium that will develop 'Simpl' - a secure middleware platform that will support data access and interoperability among European data spaces, unleashing the power of data-driven innovation.

[Browse eHealth](#)

<https://digital-strategy.ec.europa.eu/en/related-content?topic=96>

## **Related Content**

### **Big Picture**

[eHealth \(https://digital-strategy.ec.europa.eu/en/policies/ehealth\)](https://digital-strategy.ec.europa.eu/en/policies/ehealth)

The European Commission is working to provide citizens with access to safe and top quality digital services in health and care.

### **See Also**

[European Virtual Human Twins Initiative](#)

<https://digital-strategy.ec.europa.eu/en/policies/virtual-human-twins>

The European Virtual Human Twins Initiative is an EU framework supporting the emergence and adoption of the next generation of virtual human twins solutions in health and care.

[The European Innovation Partnership on Active and Healthy Ageing \(EIP on AHA\)](#)

<https://digital-strategy.ec.europa.eu/en/policies/eip-aha>

The European Innovation Partnership in Active and Healthy Ageing is an initiative that aims to foster innovation use of digital for active and healthy ageing.

[Privacy code of conduct on mobile health apps](#)

<https://digital-strategy.ec.europa.eu/en/policies/privacy-mobile-health-apps>

The privacy code of conduct on mobile health apps aims to promote trust among users and provide a competitive advantage for those who sign up to it.

[European '1+ Million Genomes' Initiative](#)

<https://digital-strategy.ec.europa.eu/en/policies/1-million-genomes>

The 1+ Million Genomes initiative has the potential to improve disease prevention, allow for more personalised treatments and support groundbreaking research.

[Managing health data](#) (<https://digital-strategy.ec.europa.eu/en/policies/health-data>)

The European Commission adopted a Communication and a Staff Working Document on Digital transformation of health and care to boost European Union action.

[Exchange of electronic health records across the EU](#)

<https://digital-strategy.ec.europa.eu/en/policies/electronic-health-records>

The European Commission has adopted a Recommendation on a European electronic health record exchange format to unlock the flow of health data across borders.

[eHealth experts](#) (<https://digital-strategy.ec.europa.eu/en/policies/ehealth-experts>)

The European Commission created two expert groups working on eHealth: the eHealth Stakeholder Group and a temporary eHealth Task Force.

## Other

**[EU support for the digital public sector](https://digital-strategy.ec.europa.eu/en/activities/support-public-sector)**  
**(<https://digital-strategy.ec.europa.eu/en/activities/support-public-sector>)**

The Commission wants to ensure the public sector is able to keep pace with new technologies and...

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