

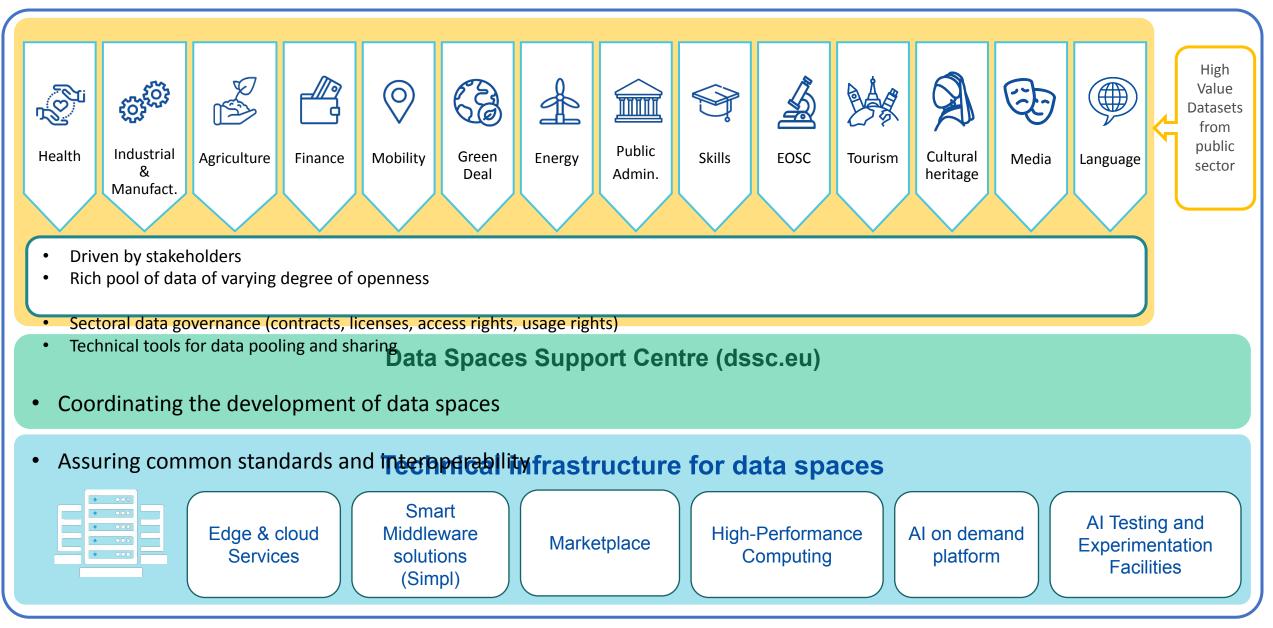
## Digital and data initiatives

HealthyCloud final dissemination event

6 October 2023

Saila Rinne Head of Sector for policy European Commission / DG CNECT Unit "eHealth, wellbeing and ageing"

#### Common European data spaces



### A robust regulatory framework for health data



SECURITY

EU cybersecurity legislative framework



**General Data Protection Regulation (GDPR)** 





**ETHICS** Artificial Intelligence Act



#### LEVEL PLAYING FIELD

Data Governance Act, Data Act





### Digital infrastructures for health data

Unlocking health data and fostering innovation in full compliance with EU rules and values

#### **Cancer Imaging Initiative**



Links resources and databases to establish an open infrastructure of cancer images

Fosters innovation and deployment of digital technologies for improved clinical decision-making, diagnostics, treatment and prediction

#### **1+ Million Genomes**



Enables secure access to genomic data and the corresponding clinical data

Facilitates research, personalised healthcare and public health

#### **Virtual Human Twins**



Ecosystem and platform for computational models of organs and organ systems

Supports prevention, diagnosis and treatment



### EUROPEAN CANCER IMAGING INITIATIVE

EUCAIM

CANCER IMAGE EUROPE

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

Public catalogue of 36 datasets From the "AI4HI" network of EU-funded projects

Approx. 20 000 subjects > 200 000 image series\*

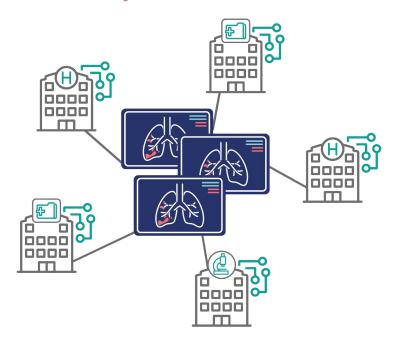
9 cancer types breast, colon, lung, prostate, rectum, liver, glioma, neuroblastoma, glioblastoma

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

#### **First platform release**

**Cancer Image Europe Infrastructure** 

**Milestone – September 2023** 





Participation rules for data providers and users first version 19

#### **Federated search**

ORECT-CANCER-IMAGING-INITIATIVE@ec.europa.eu



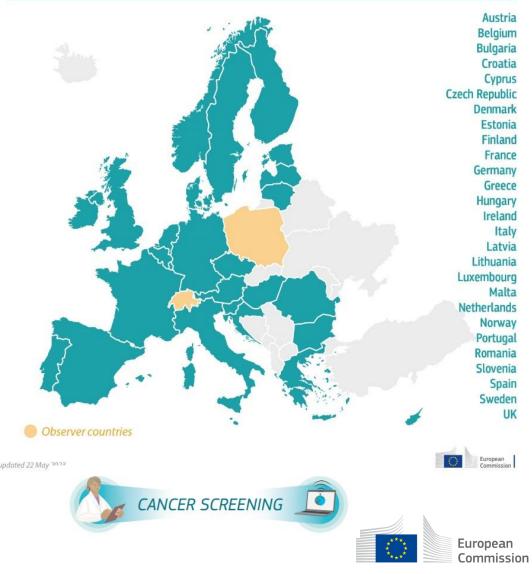
### 1+ Million Genomes initiative

## Countries that have signed the 1+MG Declaration since 2018

- 25 countries have signed the declaration for delivering cross border access to genomic data
- 1+MG Group (EC special group)
- 12 Working Groups
- Genomic Data Infrastructure project
- Genome of Europe
- CSA Beyond 1 Million Genomes
- Healthcare, research and public health



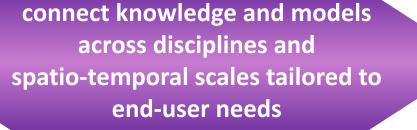
EUROPEAN PLATFORM ON RARE DISEASES REGISTRATION



### **Towards Virtual Twin(s) of the human**

2030+

Comprehensive Virtual Human Twin

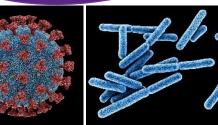




Integration across time & length scales & environment



Integration across disciplines e.g. comorbidities



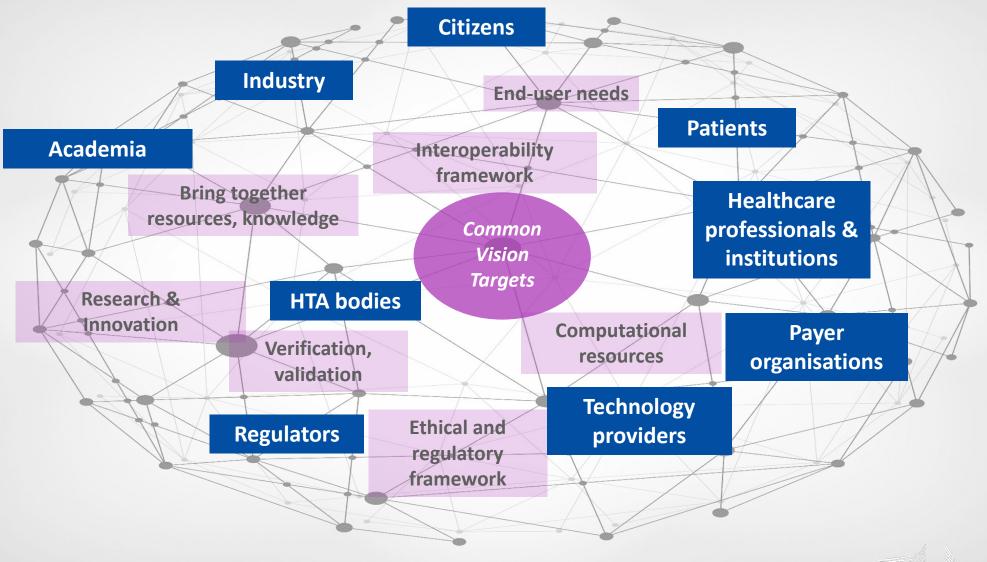




Selected organs 2022 and organ systems



### An inclusive ecosystem for Virtual Human Twin





# Thank you



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