



CANCER

Concrete solutions for our greatest challenges





Agenda



09:30	Welcome & Introduction - Barbara Kerstiëns, Head of Unit Combatting Diseases, DG RTD and Silvia Hrubanova, Unit Cancer, Health in all policies, DG SANTE
09:40	Cancer Mission: Introduction & Background - Annika Nowak, DG RTD
09:48 09:56	Cancer Mission: Project Clusters - Kay Duggan-Walls, DG RTD HaDEA and Cancer Mission implementation - Ioannis Vouldis, HaDEA
10:01	EIT Health – CEO Jean-Marc Bourez
10:11	Short Q&A Session
10:21	Launch of Slido polls 1 & 2
10:25	Presentation of Work Programme 2024 - Jan van de Loo, Angelo Solimini, DG RTD
10:56	Q&A on Work Programme 2024 - Jan van de Loo, Angelo Solimini
11:30	Closing remarks - Barbara Kerstiëns
11:35	End

Please identify your organisation when asking questions





EU Cancer Mission

Overall goal

To improve the lives of more than 3 million people by 2030, through prevention, cures, and for those affected by cancer and their families to live longer and better

Specific objectives

Understand cancer and its risk factors

Prevent what is preventable

Optimise diagnostics and treatment

Support quality of life of people living with and after cancer

Transversal priorities:

Equitable access for all, personalised medicine, innovation, childhood cancer

Concrete actions:

- Four flagship initiatives
- R&I actions under each specific objective & project clusters
- Synergies with other initiatives at EU, national, and regional levels
- Citizen engagement





Governance – linking EU and Member States' initiatives



Public Health Expert Group Cancer Subgroup (set up by EC)
Representatives from health and research ministries



SPC Cancer Mission Working Group (set up by EC)
Representatives from research ministries





National Cancer Mission Hubs (to be set up by MS – ECHoS project)

National entities to be set up in every MS to support Mission's implementation



'Mirror Groups' (set up by MS)
Stakeholders at national/regional level



EU Mission NCPs (set up by MS – EU funded)

National Contact Points in every MS and AC



Horizon Europe Missions Brokerage Event 2024 21-22 May 2024



The event focuses on following Horizon Europe – Missions calls:

- Adaptation to Climate Change
- Cancer
- Restore our Ocean and Waters by 2030
- > 100 Climate-Neutral and Smart Cities by 2030
- > A Soil Deal for Europe
- Cross-cutting activities
- Agenda
- > Plenary session
- > Bilateral meeting



Register till 17th of May







Collaboration in mission project clusters

- Clusters are developed to build a portfolio of projects that address Cancer Mission objectives.
- Clusters are linked to the Mission's objectives: (1) Understanding, (2) Prevention and early detection, (3)
 Diagnosis and treatment, and (4) Quality of life

Clusters – rationale and aims

- Support Mission objectives
- Create added value
- Increase impact of EU funding
- Establish policy feedback loop
- Identify what to work on together

Footnote in Mission WP2024: In order to address the objectives of the Mission on Cancer, participants will collaborate in project clusters to leverage EU-funding, increase networking across sectors and disciplines, and establish a portfolio of Cancer Mission R&I and policy actions.

- Clusters EU-funded consortia and EC agree on areas of added value, such as:
 - Data Management
 - Research & Innovation
 - Communication & Dissemination
 - Citizen Engagement
 - Addressing inequalities
 - Research Capacity Building
 - Cancer Mission Hubs





Mission project clusters - areas

- Four Project Clusters have been established
 - Cluster 1 Understanding (risk factors & determinants) *launched Sep 2022*
 - Cluster 1 Understanding (tumour-host interactions) *launched Sep 2023*
 - Cluster 2 Prevention & early detection (screening) *launched Sep 2022*
 - Cluster 2 Prevention & early detection (implementation research) *launched Jan 2023*
 - Cluster 2 Prevention & early detection (behavioural change) *launched Sep 2023*
 - Cluster 3 Diagnosis and Treatment (refractory cancers) *lunched Jan 2023*
 - Cluster 3 Diagnosis & treatment (diagnostics) *launched Sep 2023*
 - Cluster 4 Quality of Life *launched Sep 2023*





Updates on Clusters

1st Policy Webinar (5 June 2024) registration

- Cluster 1 Understanding (risk factors & determinants) started Sep 2022
- Cluster 1 Understanding (tumour-host interactions) started Sep 2023

Annual Meetings

- Cluster 1 Understanding (risk factors & determinants) and Cluster 2 Prevention & early detection, (screening): 1st annual meeting, Sep 2023 in San Sabastian, Spain,
- Cluster 2 *Prevention and early detection (implementation research)*: 1st annual meeting on 23 Sep 2024, Vienna

Video and brochure links

"Understanding (risk factors & determinants)" cluster Video (elmumy.eu)

Cluster FLYER.pdf

Prevention Cluster - MammoScreen Project

20231215 Prevention-And-Early-Detection Cluster-Folder EN.indd (mammoscreenproject.eu)



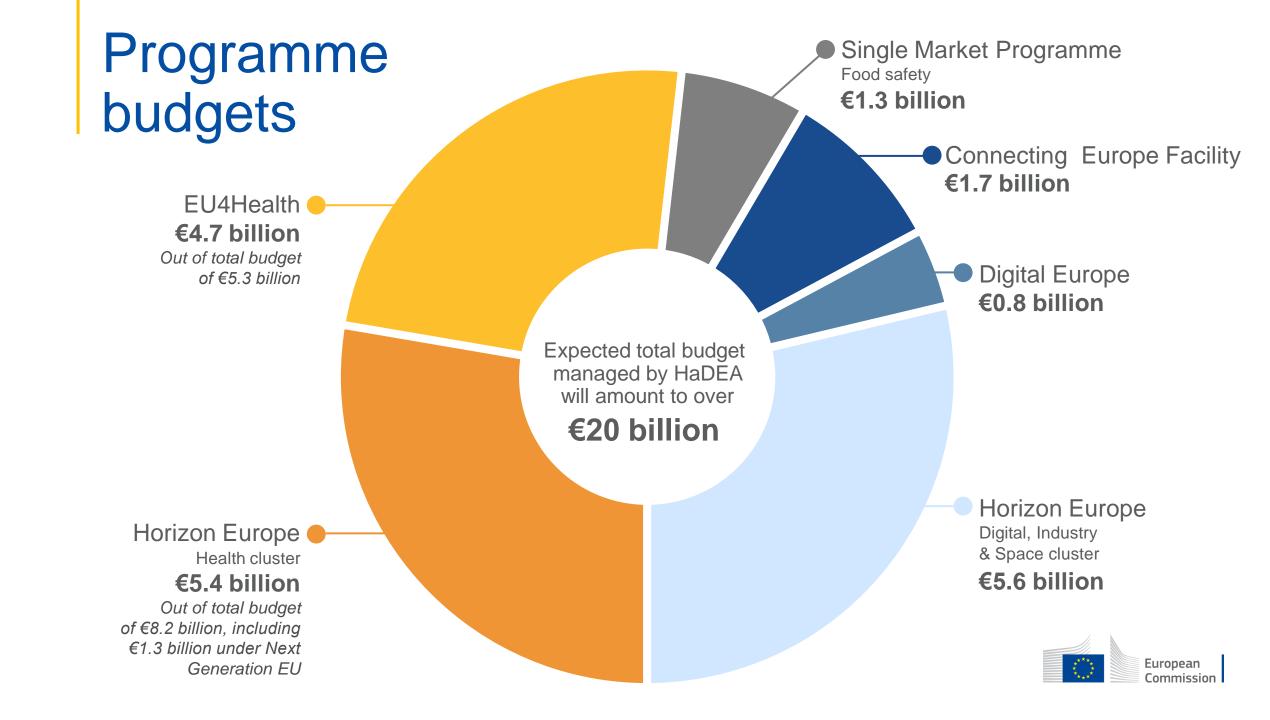
HaDEA — The European Health and Digital Executive Agency

Dr Ioannis VOULDIS

Programme Manager – HE Cancer Mission

Unit HADEA A.3- Health Research

Health and Digital Executive Agency



Roles and responsibilities

European Commission

Defines policy

- Defines strategy, objectives and priority areas/work programmes
- Makes programme decisions
- Selects projects for (co-)funding
- Evaluates the programme implementation and the Agency's performance



HaDEA

Turns policy into action

- Manages the project lifecycle:
 - Organises calls for proposals and external evaluations
 - Monitors the implementation of projects
- Supports communication activities (Info Days, publications, etc.)
- Provides feedback to policy making



Cancer Mission

WP2023 topics and results



Cancer Mission 2023 Call Topics

Call opening: 12.01.2023

Call closure: 12.04.2023



Ensure equitable access

of life Support quality

Understand

IA

RIAs

HORIZON-MISS-2023-CANCER-01-01 Addressing poorly-understood tumour-host

interactions to enhance immune systemcentred treatment and care interventions in childhood, adolescent, adult and elderly

cancer patients

HORIZON-MISS-2023-CANCER-01-02

Enhance primary cancer prevention sustainable behavioural through change

HORIZON-MISS-2023-CANCER-01-03 Pragmatic clinical trials on minimally invasive diagnostics

HORIZON-MISS-2023-CANCER-01-04

Establish best practices and tools to improve the quality of life for childhood cancer patients, survivors and their families in **European regions**



2023 call topics general statistics

Call opening: 12.01.2023

Call closure: 12.04.2023

	Action Type	Indicative Budget (M EUR)	Evaluated proposals	Number of proposals retained for funding
HORIZON-MISS-2023-CANCER-01-01	RIA	36.68	52	4
HORIZON-MISS-2023-CANCER-01-02	RIA	25.00	14	3
HORIZON-MISS-2023-CANCER-01-03	RIA	43.00	35	5
HORIZON-MISS-2023-CANCER-01-04	IA	6.00	3	1
TOTAL		110.68	104	13

HORIZON-MISS-2023-CANCER-01-01 Addressing poorly-understood tumour-host interactions to enhance immune systemcentred treatment and care interventions in childhood, adolescent, adult and elderly cancer patients HORIZON-MISS-2023-CANCER-01-02 Enhance primary cancer prevention through sustainable behavioural change HORIZON-MISS-2023-CANCER-01-03
Pragmatic clinical trials on minimally invasive diagnostics

HORIZON-MISS-2023-CANCER-01-04
Establish best practices and tools to improve the quality of life for childhood cancer patients, survivors and their families in European regions

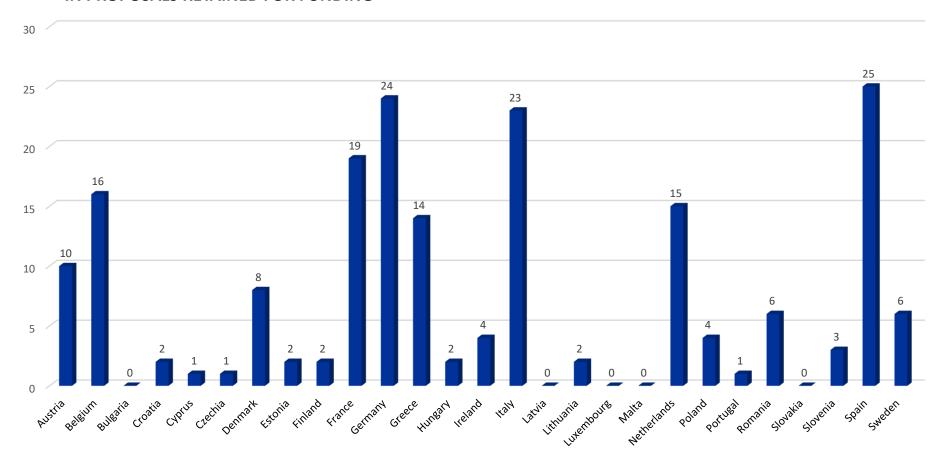
Funded proposals/projects started their implementation! 2 Proposals from the Reserve List are currently at Grant Agreement Preparation phase!



Further publicly available information can be found via **CORDIS** (EU Research Results platform)

2023 Mission Cancer Call – Data on Participation EU Member States

NR OF PARTICIPATIONS FROM EU MEMBER STATES - IN PROPOSALS RETAINED FOR FUNDING



Associated and Third Countries (Nr of participations in funded proposals)

- United Kingdom: 10
- Israel: 5
- Norway: 4
- · Bosnia and Herzegovina: 1
- -
- · Switzerland: 8
- Canada: 2
- Australia: 1

Horizon Europe - list of participating countries



Funded proposals/projects

HORIZON-MISS-2023-CANCER-01-01: Addressing poorly-understood tumour-host interactions to enhance immune system-centred treatment and care interventions in childhood, adolescent, adult and elderly cancer patients

HIT-GLIO	Targeting tumour-host interactions in paediatric malignant gliomas to reinvigorate immunity and improve radio- and immunotherapy efficacy	INSTYTUT BIOLOGII DOSWIADCZALNEJ IM. M. NENCKIEGO POLSKIEJ AKADEMII NAUK
THRIVE	TUMOUR-HOST INTERACTIONS IN LIVER CANCER OF CHILDHOOD AND ADULTS	FUNDACIO DE RECERCA CLINIC BARCELONA
GLIOMATCH	The malignant Glioma immuno-oncology matchmaker: towards data-driven precision medicine using spatially resolved radio-multiomics	KATHOLIEKE UNIVERSITEIT LEUVEN
MULTIR	MULti-Tumour based prediction and manipulation of Immune Response	INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE



HORIZON-MISS-2023-CANCER-01-02:

Enhance primary cancer prevention through sustainable behavioural change

SUNRISE	SUstaiNable inteRventions and healthy behavlours for adoleScent primary prEvention of cancer with digital tools	ETHNIKO KENTRO EREVNAS KAI TECHNOLOGIKIS ANAPTYXIS
MELIORA	Multimodal Engagement and sustainable Lifestyle Interventions Optimizing breast cancer Risk reduction supported by Artificial intelligence	CHAROKOPEIO PANEPISTIMIO
iBeCHANGE	ADDRESSING PSYCHOSOCIAL AND LIFESTYLE RISK FACTORS TO PROMOTE PRIMARY CANCER PREVENTION: AN INTEGRATED PLATFORM TO PROMOTE BEHAVIOURAL CHANGE	ISTITUTO EUROPEO DI ONCOLOGIA SRL

HORIZON-MISS-2023-CANCER-01-04:

Establish best practices and tools to improve the quality of life for childhood cancer patients, survivors and their families in European regions

e-QuoL	e-health tools to promote Equality in Quality of Life for childhood to young adulthood cancer patients, survivors and their families - a PanEuropean project supported by PanCare and Harmonic consortia	GCS HUGO
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HORIZON-MISS-2023-CANCER-01-03:

Pragmatic clinical trials on minimally invasive diagnostics

RESOLVE	Residual disease assessment in hematologic malignancies to improve patient-relevant outcomes across Europe (RESOLVE)	MEDIZINISCHE HOCHSCHULE HANNOVER
PREMIO COLLAB	Personalised response monitoring in oncology: co-creating clinical trials in advanced breast cancer	REGION SYDDANMARK
ENDEAVOR	Endoscopic brush cytology and single cell clinal dynamics of early easophageal adenocarcinoma for detecting cost effective surveillance strategies and prediction of cancer recurrence	UNIVERSITEIT ANTWERPEN
DEFINITIVE	Diagnostic HER2DX-guided treatment for patients with early-stage HER2- positive breast cancer	FUNDACIO DE RECERCA CLINIC BARCELONA
MONALISA	A SIOPEN pragmatic clinical trial to MOnitor NeuroblastomA relapse with LIquid biopsy Sensitive Analysis	SIOP EUROPE



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Health Emergency Preparedness and Response Authority (HERA)

② @EC_HERA



Thank you

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Our mission is to drive healthcare innovation and create positive societal impact in Europe

EIT Health is a **community of world-leading health innovators** and one of 9 **Knowledge and Innovation Communities** (KICs) of the **European Institute of Innovation and Technology** (EIT), an EU body.

EIT Health has been established in 2015 based on the principle that when experts from **business, research and education work together as one**, an optimal environment for innovation is created.

To achieve this, we facilitate innovative solutions to:



Contribute to a sustainable health economy in Europe

Strengthen healthcare systems

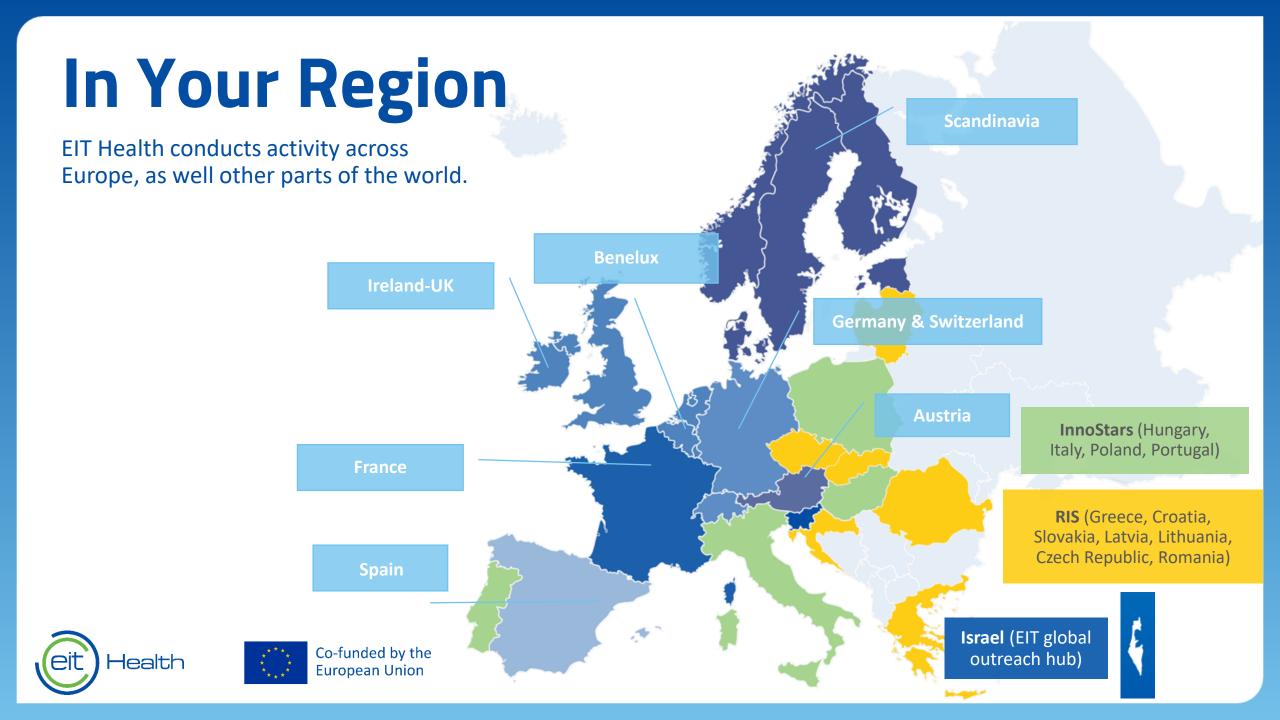


Promote better health of citizens



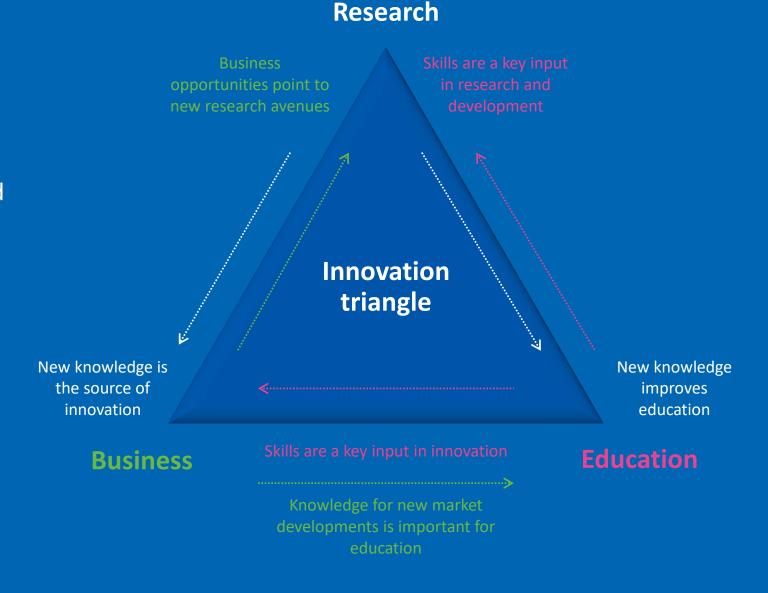






How do we make healthcare innovation happen together?

By integrating the three sides of the knowledge triangle – business, research and education – we create a more conducive environment, so that life-changing innovation can happen. Using our collective strengths and assets, we drive positive societal impact that none of us could achieve alone.







Our Innovation project Model

Our Education Model

Our Business Creation Model

Continuous Call

Once a year with 2-3 Cut-off Co-funded (1/3 principle) Reimbursement rate 75% up to 2025

Partner driven Innovation project, Start-up Driven Innovation Project

One time Call issue

On demand

(to create synergies with other EU or MS programmes)

EIT Label Framework Educartion Cluster: DTTI, Internship Scheme

Entrepreneurship Pathway

From students to innovators/entrepreneurs

- Inspire & Nurture
 Talent (iDays, summer schools, degree prgs;
 Students event)
- Intrepreneurship
 Journey & Venture
 Builder (Fellowship,
 master classes,
 pre-accelerator)

Innovation Adoption & Healthcare Transformation Pathway

Toward resilient HC systems, workforce & population

- High Value Care
 (Summer school, fellowship, lifelong learning modules)
- Digital & deep tech skills (Digital literacy, upskilling, reskilling, Fellowship, lifelong learning modules)

EIT Health Academy Platform

WorkInHealth Foundation & TalentForce

Entry Track

8 programmes (6 Bootcamps, Wild Card, European Health Catapult)

Scale-up Track

4 programmes (Startup Meets Pharma, Startup Meets Healthcare Provider, Bridgehead, Gold Track)

Investment services

2 Services (Investor Network, Venture Centre of Excellence)

Other horizontal programmes









EIT Health and the Cancer Mission

How EITH can align with WP 2024: Accessible and affordable tests to advance early detection of heritable cancers in **European regions**:

EIT Health could:

- Provide access to regions: through the EIT Health ecosystem and Co-Location Centres located across Europe
- **Provide access to innovators**: though their 130 partner network and extensive ecosystem
- Contribute to education, testing and upscaling: through EIT Health educational programmes (available for entrepreneurs, innovators, health professionals, investors, organisations, patients, research and industry).
- Provide access to investors/private investment

Excerpt call topic:

- Extensively pilot and upscale genetic, multi-omics or other biomarker-based testing or use in early detection programmes in at least three regions across at least three different Member States or Associated Countries. One of the three targeted regions should be within the following Member States: Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Greece, Hungary, Latvia, Lithuania, Malta, Poland, Portugal, Romania, Slovakia or Slovenia.
- Preferably work together with one of the **EIT-Health KIC networks** to establish appropriate contacts, and support relevant entrepreneurship, education, training, capacity building or innovation aspects for interested stakeholders in the targeted regions.



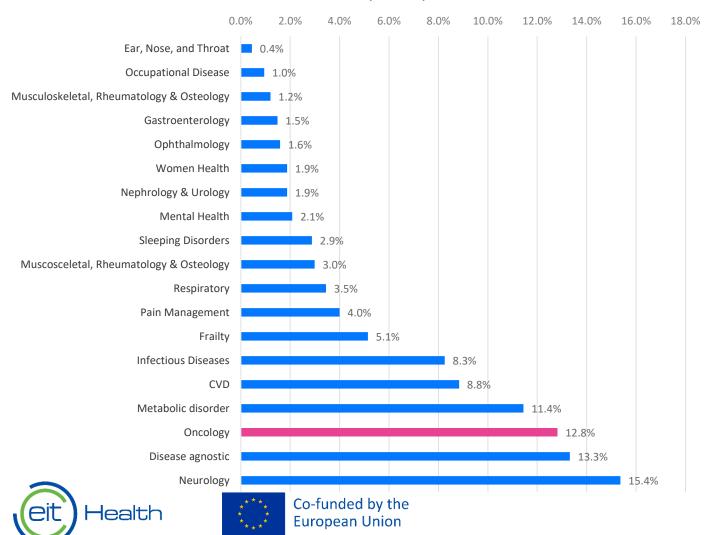




Innovation & Investment

Distribution of grant during the period 2016-2024 per therapeutic area





Total grant distributed: **182,5M€** on the period 2016-2024

Over 2/3 of the total grant distributed across the period is concentrated in 6 areas:

- Infectious disease
- CVD
- Metabolic disorder (mainly Diabetes)
- Oncology
- Disease agnostic (mainly CDSS)
- Neurology (mainly Stroke)

Infectious disease position is mainly due to Rapid Response on COVID 19. Without this call, the area would be around 6%.

In general calls are disease agnostic but solutions are most of the time defining a target user group.

EIT Health & Oncology

https://eithealth.eu/what-we-do/product-and-service-development/



BRIGHT

Genetics-based test for breast cancer risk

COLO-MET

Novel urine test for early detection of colorectal cancer metastases in the liver

PACMAN

Functional signaling pathway activity complementing DNA Mutation analysis for precision medicine



Selio Medical

Eliminating pneumothorax during lung biopsy

FiBrUS

Fighting breast cancer with workflow optimised ultrasound screening

Rare Cancer KIC

Promote innovative system-based solutions to benefit rare cancer patients



FLASHKNIFE

Ultrahigh dose-rate radiation therapy

I4PCM

IT, immunotherapy, and imaging for personalised medicine

Deep MR-only RT

Deep-Learning MR-only Radiation Therapy

STHLM3RS

Individual Prostate Cancer Risk Score



LUCINDA

Early lung cancer diagnosis using Artificial Intelligence

OncoWatch

Using data to improve prostate cancer diagnostics and treatment

SonoFIRST

Opening the brain blood barrier to treat brain tumours

Conclusions

- Considerable alignment exists between EIT Health and the Cancer Mission Work programme
- Various **EIT Health tools** and programmes could be leveraged to create mutual value for both programmes (eg: educational programmes, access to our regional footprint and ecosystems).
- EIT Health has the knowledge and expertise to leverage **additional public and private funding**, as well as increase the sustainability of research delivered under the Cancer Mission programme.
- **EIT Health is keen to explore synergies** and is open to discuss collaboration—including joining the Cancer Mission work programme.













CONTACT

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Q&A Session 1

10 mins





Launch Slido polls 1&2

Which other areas do you think should be funded under the Cancer Mission in the future?

Which call topics are you most interested in?



Cancer Mission - WP2021-2024

- Mission-guiding principles
- Mission clusters
- Synergy Europe's Beating Cancer Plan

Develop new methods and technologies for screening and early detection

HORIZON-MISS-2021-CANCER-02-01

Improving and upscaling primary prevention of cancer through implementation research HORIZON-MISS-2022-CANCER-01-01

Enhance cancer prevention through behaviour change

HORIZON-MISS-2023-CANCER-01-02

Early detection heritable cancers in European regions

HORIZON-MISS-2024-CANCER-01-03

Mission on Cancer: By 2030, more than 3 million lives saved, living longer and better Ensure equitable access Optimise diagnostics and treatment Prevent what preventable quality Support **Understand**

EU MISSIONS CANCER

Develop and validate a set of quality-of-life measures for cancer patients and survivors HORIZON-MISS-2021-CANCER-02-02

Towards the creation of a European Cancer Patient Digital Centre

HORIZON-MISS-2022-CANCER-01-04:

Improve quality of life for survivors of childhood cancer (Best practices and tools) HORIZON-MISS-2023-CANCER-01-04

Improving the understanding and management of late-effects in adolescents and young adults HORIZON-MISS-2024-CANCER-01-05

An information portal for the European Cancer Patient Digital Centre

HORIZON-MISS-2024-CANCER-01-06

Preparing UNCAN.eu, a European initiative to understand cancer

HORIZON-MISS-2021-UNCAN-01-01

Better understand healthy versus cancer cells at individual and population level

HORIZON-MISS-2021-CANCER-02-03

Better understand tumour-host interactions in cancer patients

HORIZON-MISS-2023-CANCER-01-01

Use cases for the UNCAN.eu research data platform

HORIZON-MISS-2024-CANCER-01-01

Pragmatic clinical trials to optimise treatment for cancer patients

HORIZON-MISS-2022-CANCER-01-03

Strengthen research capacities of comprehensive cancer infrastructures HORIZON-MISS-2022-CANCER-01-02

Pragmatic clinical trials minimally invasive diagnostics
HORIZON-MISS-2023-CANCER-01-03

Support a pragmatic clinical trial programme by cancer charities

HORIZON-MISS-2024-CANCER-01-04

 $\textbf{Creation of national cancer mission hubs -} \ \ \textbf{HORIZON-MISS-2022-CANCER-01-05}$

National cancer data nodes - HORIZON-MISS-2024-CANCER-01-02





Cancer Mission WP2024 – portfolio, citizen engagement, and end-user involvement

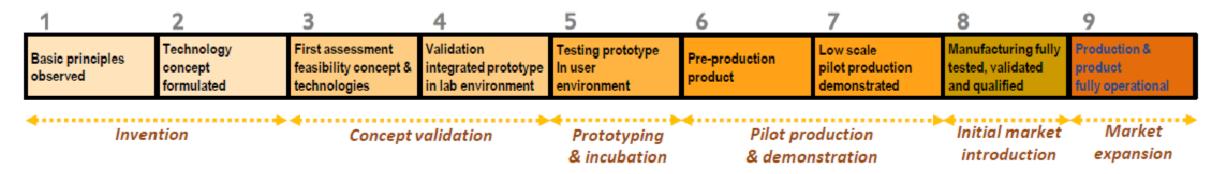
- Proposals will be evaluated on scientific merits see Horizon Europe evaluation criteria, portfolio approach, overall threshold 12:
- Mission topics consistently aim at involving other disciplines and sectors, beyond business-as-usual.
- Applicants should budget for networking activities whenever relevant; details to be added during grant preparation => project clusters.
- Citizen (including patients and caregivers) engagement: civil society, patient and caregiver organisations and communities should be consistently addressed. Avoid focus on a limited number of patient advocacy organisations.
- Mission topics will include **end-user** engagement. Examples of end-user research models and services in various MS:
 - Living lab services Kuopio University Hospital (FI): https://www.psshp.fi/web/en/organisation/living-lab
 - Living Labs at INCa (FR): https://gnius.esante.gouv.fr/en/players/player-profiles/living-lab-institut-national-du-cancer
 - Living Lab at IrsiCaixa AIDS Research Institute (ES): https://www.scishops.eu/case-study-living-lab-for-health-spain/
 - European Network of Living Labs (ENoLL): https://enoll.org/
- **End-users** could include also cancer centres, national and regional health authorities and services, local communities (e.g. schools, cities).





FAQs

- Will EC organise matchmaking events? Partner search tool at the <u>Funding & Tenders Portal</u>
- What are technology readiness levels (topic 03-early detection of heritable cancers)?



Ref: EARTO

Ref: UHSF: https://uhsf.nl/wp-content/uploads/2020/02/TRL_overview_UHSF_version20200206.pdf

- Participation of UK, CH, Associated and Third Countries?
 - > See slide with references, do contact your NCPs





HORIZON-MISS-2024-CANCER-01-01: Use cases for the UNCAN.eu research data platform

Submission: 18.09.2024; R&I action; EUR 30 M/proposal; 70 pages; networking & project cluster

Scope:

- **Develop the UNCAN.eu platform** by integrating and, where relevant, complementing existing (or planned) data nodes of European research infrastructures and/or other national infrastructures linking cancer data holders (e.g. hospitals, research centres, comprehensive cancer centres, etc.).
- Provide open-source tools, services and workflows to researchers across data nodes for access and efficiently use cancer datasets for research. Capitalise on EOSC4cancer's achievements, integrating and expanding as appropriate the available tools and solutions.
- Design and implement a **rich and diverse portfolio of use-cases** to inform, steer the development and demonstrate the validity of the UNCAN.eu platform. Use cases should focus on ambitious research questions that are in line with the Cancer Mission objectives.
- At the same time, use-cases should be functional to the design and implementation of UNCAN.eu to **increase the diversity of digital tools and services available for cancer researchers**. The mobilisation and integration of a large amount of different data and a balanced participation of clinicians, disease experts and data scientists will be essential to achieve the objectives. Emphasis to FAIR data (findable, accessible, interoperable, reuse) should be given.





(cont.)

- Develop innovative approaches, to integrate and analyse heterogeneous data from multiple sources and different research domains. In this regard, at least one use-case should integrate imaging, digital pathology and genomic data, using and/or contributing with new data sources to the Genomics Data Infrastructure (GDI) and Cancer Image Europe (EUCAIM).
- During the project lifetime, new data sources that might become available at a later stage can be accommodated as well as **allowing additional data holders to join** the UNCAN.eu platform.
- Establish **appropriate links with relevant EU-funded initiatives** (e.g. EHDS and others) and with the successful proposal resulting from the topic HORIZON-MISS-2024-CANCER-01-02

Expected outcome:

- The UNCAN.eu platform is developed by federating a network of cancer data nodes built on European and national computing infrastructures that link different cancer data holders across European countries.
- Use-cases focusing on the understanding of cancer initiation and progression are designed and implemented by multidisciplinary teams to develop tools and services for working with FAIR data.
- Researchers and clinicians use the electronic resources provided by the UNCAN.eu platform to access, manage and analyse data of heterogeneous types and belonging to different research domains at an unprecedented scale.





HORIZON-MISS-2023-CANCER-01-02: Support dialogue towards the development of national cancer data nodes

Submission: 18.09.2024; CSA; EUR 3 M/proposal; networking & project cluster

Scope:

- Foster the development of national cancer data nodes through policy dialogues at national level with relevant actors in the research and innovation community, digital health and public health policy.
- Identify and build synergies between European infrastructures related to health data access and health data sharing for primary and secondary data uses (e.g. MyData@eu, HealthData@eu, ELIXIR, BBMRI, and others)
- Identify **challenges and barriers** to the effective future implementation of the UNCAN.eu and the ECPDC platforms at national and European levels and propose operational solutions to overcome them.
- Identify **population subgroups with poor digital skills** and geographical areas with limited digital resources that might prevent the use of those platforms and propose solutions to reduce the digital divide.

Expected outcome:

- Advance the process of establishing National cancer data nodes
- Way forward to overcome potential barriers that may prevent the effective implementation of UNCAN.eu and ECPDC digital platforms





HORIZON-MISS-2024-CANCER-01-03: Accessible and affordable tests to advance early detection of heritable cancers in European regions

Submission: 18.09.2024; EUR 10-12 M/proposal; Innovation action (TRL 5-7); written commitment from regions; evaluation portfolio approach; synergies; networking & project cluster

Scope:

- Validate easy-to-use, affordable and accessible genetic, multi-omics or other biomarker-based cancer tests for early detection of cancers with an underlying heritable genetic risk for uptake in regional or national healthcare systems. Validation may include for example clinical studies, socio-economic or technological feasibility studies.
- Stratify the to-be-tested population by sex, gender, age or other determinants.
- Be compliant with GDPR and take into account socio-economic status, limited health literacy, limited awareness of disease symptoms and access for people in remote and rural areas.
- Tests can be based on, for example, polygenic cancer risk scores, algorithms, machine learning, biomarkers, cell lines, organoids, liquid biopsies, medical devices, or wearables and other digital applications.
- Co-create with **end-users** including citizens and health professionals, such as psychologists, living in the targeted regions aspects such as the innovation life cycle, priority definition, design, development, testing and piloting stages as well as risk assessment, counselling, health education, and acceptability.
- Extensively pilot and upscale genetic, multi-omics or other biomarker-based testing or use in early detection programmes in at least three regions across at least three different Member States or Associated Countries. One of the three targeted regions should be within the following Member States: Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Greece, Hungary, Latvia, Lithuania, Malta, Poland, Portugal, Romania, Slovakia or Slovenia.
- Preferably work together with one of the **EIT-Health KIC networks** to establish appropriate contacts, and support relevant entrepreneurship, 39 education, training, capacity building or innovation aspects for interested stakeholders in the targeted regions.





HORIZON-MISS-2024-CANCER-01-03: Accessible and affordable tests to advance early detection of heritable cancers in European regions (2)

Expected outcome:

- People and their families at **heritable genetic risk** of developing cancer, will benefit from the outcomes of evidence-based, tailored, affordable and accessible early detection, based on accessible and affordable tests;
- Civil society, foundations, and innovators will seize opportunities to respectively co-create, support or commercialise early detection programmes based on genetic, multi-omics or other biomarker-based tests.
- Regional and national policymakers and authorities in Member States and Associated Countries will engage in piloting, scaling up or implementing suitable early detection and treatment of people and their families with underlying heritable genetic risk in European regions based on genetic, multi-omics or other biomarker-based accessible and affordable tests, including legislative policies.





HORIZON-MISS-2024-CANCER-01-04: Support a pragmatic clinical trial programme by cancer charities

Submission: 18.09.2024; EUR 3 M/proposal; CSA; networking & project cluster

Scope:

- Together, registered cancer charities and foundations across Europe, organise, fund and implement at **least two transnational calls** for proposals, resulting in grants to **academic investigator-led** third parties to conduct randomised multi-centre **pragmatic clinical trials**.
- •Organise annual networking activities between charities, the successful academic investigators, citizen representatives and stakeholders across Member States and Associated Countries across Europe.
- The chosen intervention(s) should be adapted to the particular needs of the target population and to the specificities of the provision of care at local, regional, or national level, duly reflecting the diversity across Member States and Associated Countries.
- The chosen intervention(s) should take into account socio-economic and biological **stratification**. All data should be disaggregated by sex, gender, age and other relevant variables, such as by measures of socio-economic status.
- The successful grants to third parties will address interventions for patients with cancers with a **5-year overall survival of less than 50% from time of diagnosis or rare cancers**, at any stage of the disease, for any cancer subtype, in any age group or part of society.

Expected outcome:

- Together, a network of registered cancer charities and foundations support multi-centre, transnational pragmatic clinical trials on cancers with a 5-year overall survival less than 50% from time of diagnosis or rare cancers using their own resources.
- Cancer patients and their caregivers have access to more effective and patient-centred, treatment and care solutions.
- Researchers, innovators, and professionals from different disciplines and sectors ensure accessibility and re-usability of relevant trial data, to support the UNCAN.eu research data platform, which is currently in preparation.
- National healthcare providers, policymakers and authorities in European regions, Member States and Associated Countries have the evidence to implement affordable and accessible treatment and care solutions in their healthcare systems.





HORIZON-MISS-2024-CANCER-01-05: Improving the understanding and management of late-effects in adolescents and young adults (AYA) with cancer

Submission: 18.09.2024; EUR 4-6 M/proposal; R&I action; networking & project cluster

- **Scope:** AYA cancer patients (age range 15-39) too often experience <u>late-effects due to treatment</u> (e.g. chronic pain and fatigue, cardiovascular disease, organ and skin alterations, fertility problems, mental health issues etc). Proposals should focus on one or more cancer types and address one of the following interventions:
 - Building on data from existing or newly established AYA patient cohorts, obtain a thorough assessment by cancer type of the
 prevalence, specific effect(s), severity, time of onset, relative risk, and risk factors associated to late effects in AYA cancer
 patients.
 - Develop, test and scale-up evidence-based screening methods for early detection of late-effects in AYA cancer patients;
 - Develop, test and scale up in real-life settings, innovative, holistic approaches and tools (including digital tools), optimising
 cancer treatment and follow-up regimens to prevent, reduce and/or effectively manage late-effects, including psycho-social
 aspects.
- Expected outcome: Proposals under this topic should aim to deliver results that are directed and tailored towards and contribute to the following expected outcomes:
 - Increased awareness and understanding of the incidence, severity, and impact of late effects in AYA cancer survivors;
 - Development of effective interventions to support AYA patients and survivors in preventing, reducing and managing late-effects;
 - Improved quality of life and long-term outcomes for AYA cancer survivors.





HORIZON-MISS-2024-CANCER-01-06: An information portal for the European Cancer Patient Digital Centre

Submission: 18.09.2024; Innovation action; EUR 12 M/proposal

Scope:

- Design, develop and deploy, a pilot ECPDC information portal to complement the existing Knowledge Centre on Cancer (KCC).
- The knowledge base of the information portal will cover the cancer patient journey from diagnosis to life after cancer. It will **provide evidence-based information** on diagnosis, treatment options, rehabilitation, management of recurrence and palliative care.
- The selection of the information provided to the users should be based on **explicit and robust criteria and be transparent**.
- Provide a **validated workflow** for updating the knowledge base when new clinical information and scientific evidence arise. The development and implementation of human centric AI-based tools for this task is envisaged.
- Improve ECPDC portal user experience by implementing an **Al-based virtual assistant** to deliver information tailored to user cultural background, individual (clinical) circumstances, needs, preferences and/or expectations. This virtual assistant should be designed and tested in real-world patient populations for acceptability and value provided.





(cont.)

- All the developed **IT-solutions and workflows should be open source** and made available. The involvement of Alresearchers, clinicians, epidemiologists, guideline developers, service design specialists and patient organisation representatives are envisaged.
- The pilot ECPDC information portal should also **include other information** for cancer patients, survivors and their families (e.g. options to cross-border health care, participation to clinical research, psychosocial and legal support options, guidance and support for returning to study or to work, financial issues and survivors' rights etc.)
- Test and validate the pilot ECPDC information portal by an appropriate number of cancer patients and survivors of different cancer types and age groups.

Expected outcome:

- The ECPDC information portal is an entry point to quality information for cancer patients, survivors, their families and care givers, covering the cancer patient journey from diagnosis to treatment and post treatment care and life after cancer.
- The ECPDC information portal complements the Knowledge Centre on Cancer (KCC) by integrating additional trusted information on cancers beyond what is currently available in the KCC.
- The ECPDC information portal implements human-centric Al-based solutions to manage and systematically update the information provided to the users and to facilitate the user experience.





References

- EU Mission on Cancer
 - Cancer Mission implementation (europa.eu)
 - Horizon Europe rules apply (see information on participation of <u>UK</u>, <u>CH</u>, Associated and Third countries)
 - Please read the <u>Implementation Plan</u> before you apply:
 - Commission Communication with Implementation plan (29 September 2021)
 - Horizon Europe mission work programme 2024 (published on 17 April)
 - Mission calls for proposals and partner search tool are accessible via the <u>Funding & Tenders Portal</u>
 - First, contact your <u>national contact point</u>, then contact <u>RTD-SANTE-CANCER-MISSION@ec.europa.eu</u>
- Horizon Europe Health Partnerships and Innovative Health Initiative
- Europe's Beating Cancer Plan and EU4Health programme
- Digital Europe programme
- Euratom Research and Training Programme
- EIT-Health KIC
- Knowledge Centre on Cancer (KCC)
- HaDEA





Q&A Session 2

(until 11:30)