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MINISTERIO DE CIENCIA, INNOVACIÓN Y UNIVERSIDADES



2024

JA NFP4Health

Learning by doing LABs: Cancer

Venue: Ernest Lluch Hall (Pavilion 13)

Avda. Monforte de Lemos 5, Madrid

Campus de Chamartín - ISCIII

1st October 2024



EU Funding Programmes supporting research on cancer

12.00
13.00

Horizon Europe - M. Marín (FECYT)

Mission Cancer - R. Perona (ISCIII)

Funding opportunities in cancer: a case of success - Prof. J. García Foncillas (IIS FJDiaz)

EU4Health Programme - M.J. González de Suso (ISCIII)



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EUROPEAN UNION

 **EU
MISSIONS**

CANCER

Concrete solutions for our greatest challenges

#EUmissions #HorizonEU #MissionCancer

Dr. Rosario Perona
Director Associated Unit Instituto de Salud Carlos III
Coordinator of the National Mirror Group for the Cancer Mission

- What are missions? : Missions are a coordinated instrument of the European Commission to address the challenges of the future, making available to researchers, companies, governments and civil society all the necessary resources to achieve the expected objectives.

- R&I missions must:

- Be bold and inspiring, with broad social relevance
- Signify a clear direction: with objectives, measurable and with deadlines
- Be ambitious but based on realistic research and innovation actions
- Drive innovation across all disciplines, sectors and actors
- Be based on a bottom-up approach with multiple solutions





Mission on Cancer

Challenges

- **2.7 million people** in the EU are **diagnosed** each year
- **1.3 million people die** from cancer each year (this no. will increase)
- **Total cost of cancer** in Europe in 2018: €199 billion

GOAL

Improve the lives of more than 3 million people by 2030, through prevention, cure and for those affected by cancer including their families, to live longer and better, jointly with the **Europe's Beating Cancer Plan**

Four Mission objectives

1. Understanding cancer
2. Prevention & early detection
3. Diagnosis and treatment
4. Quality of life patients and survivors

- **19 R&I priority areas**
- **4 transversal R&I priorities:** equity, innovation, childhood cancer and personalised medicine
- **Citizen engagement**
- **Project clusters**
- **Governance**



- ✓ **10 flagship initiatives**
- ✓ **42 actions**
- ✓ **€4,000 million**

Concrete actions

- Blueprint for UNCAN.eu platform (starting 2022)
- Blueprint for Cancer Patient Digital Centre (2023)
- Support Network of Comprehensive Cancer Infrastructures (2022 - 2023)
- R&I actions under each of the four mission objectives (2022 - 2023)
- Synergies (= cooperation between cancer mission and other initiatives at EU, national, regional, local level)

A mission is a portfolio of actions across disciplines intended to achieve a **bold, inspirational and measurable goal** within a set timeframe, with **impact** for society and policy making as well as relevance for a significant part of the European population and wide range of European citizens.



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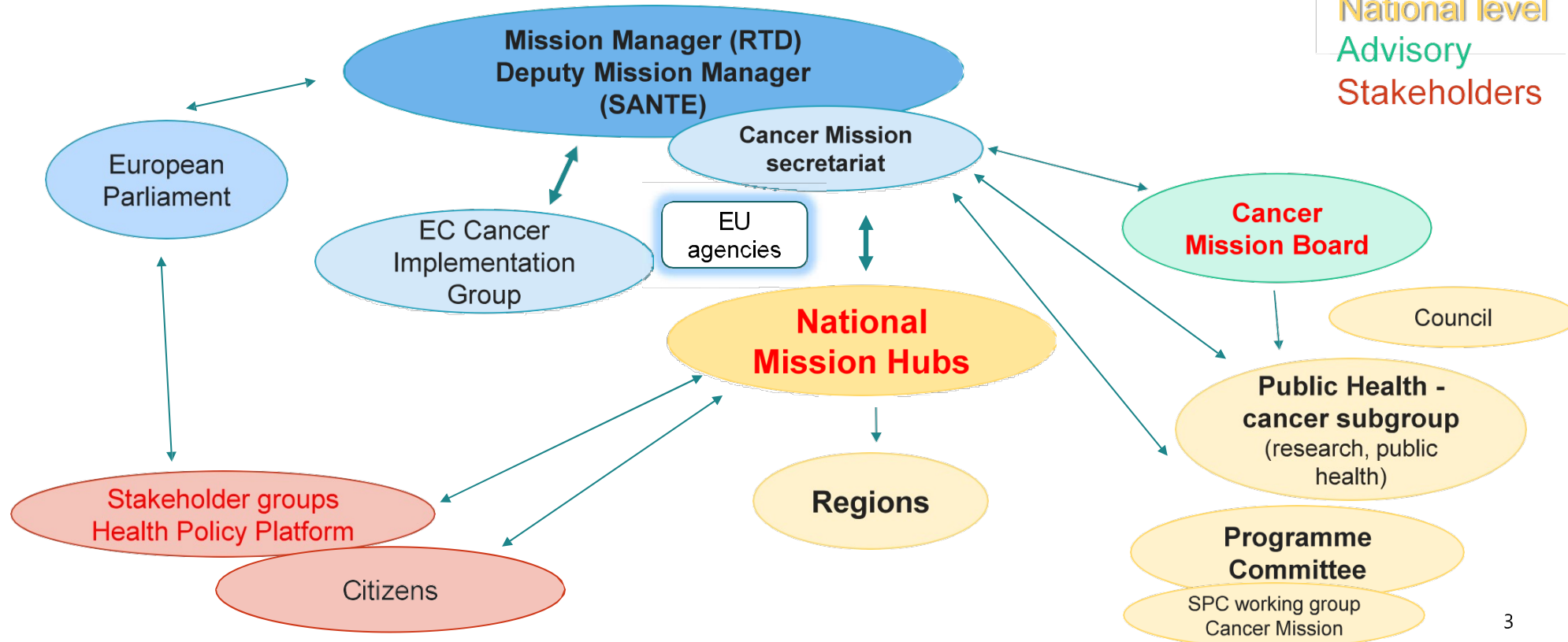


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Mission on Cancer – governance

EU level
 National level
 Advisory
 Stakeholders





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SPANISH CORE MIRROR GROUP CANCER MISSION



Cancer

| NAME | AFFILIATION | ROLE |
|-----------------------------|------------------------------|--|
| Dr Rosario PERONA | ISCIII | Administrative responsible of the Mission Strategy Representative in Subgroup Cancer SGPP |
| Dr Yolanda AGRA | Ministry of Health | Representative in Subgroup Cancer SGPP |
| Dr Josep Maria BORRAS | Ministry of Health | Coordinator National Cancer Strategy |
| Dr Anna BIGAS | CIBERONC | Scientific Director |
| Dr Alejandro PIRIS | VHIO and CIBERONC | Scientific Director |
| Dr Josep TABERNEO | VHIO & President ESMO (2020) | Member of the Mission Assembly (Until dec 2021) |
| Dr Marta GÓMEZ QUINTANILLA | CDTI | HE Health Cluster PC Representative Member Subgroup Cancer SGPP |
| Ms Marta BARRIONUEVO HAFNER | ISCIII | Health Cluster PC Expert and NCP |
| Dr Juan RIESE | ISCIII | Health Cluster PC Expert and NCP |
| Dr Carolina CARRASCO | CDTI | Health Cluster PC Expert and NCP |



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Cancer

SPANISH EXTENDED MIRROR GROUP CANCER MISSION

ISCI – Spanish Institute of Health Carlos III

IMIM – Hospital del Mar Medical Research Institute- Scientific Coordinator CIBERONC

VHIO - Vall d’Hebron Institute of Oncology

Biomedical Research Institute of Murcia (IMIB-Arrixaca)

Spanish Ministry of Health

CDTI - Centre for the Development of Industrial Technology

National Strategy against Cancer of the Spanish NHS - Scientific Coordinator

CRG - Centre for Genomic Regulation

IBEC - Institute for Bioengineering of Catalonia

CNIO – Spanish National Cancer Research Centre

Fundación Jiménez Díaz University Hospital

HM Sanchinarro University Hospital, Comprehensive Cancer Centre Clara Campal, (HM CIOCC)

INCLIVA - Biomedical Research Institute

FSJD - Research Foundation Saint Joan de Deu

IdiPAZ - Hospital La Paz Institute for Health Research

FEP - Spanish Patients’ Forum. Member of the European Patients’ Forum

FCAECC - Scientific Foundation Spanish Association Against Cancer

CRIS Cancer Foundation

SEHOP - Spanish Society of Paediatric Hematology and Oncology

PharmaMaR S.A.

FARMAINDUSTRIA

ERN TransplantChild

GEPAC - Spanish Group of Patients with Cancer

SEOM - Spanish Society of Medical Oncology

FENIN – Spanish Federation of Healthcare Technology Companies

ICO – Catalan Institute of Oncology



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Mission on Cancer: Implementation Plan



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Mission on Cancer: Implementation Plan

Key elements for success:

- Identify and exploit R&D&I results in cancer,
- EU funded projects (H2020) and countries → Accelerate
- their transfer to public health and clinical practice.
- Establish a common strategic R&D&I agenda.
- Create a link between R&D&I and policy development.
- Increase intersectoral collaboration.



Budget to implement Mission

R&D&I, including facilitation and coordination of research activities → Horizon Europe and its partnerships. It will be complemented by funding from philanthropic and charitable organisations, as well as industry contributions through research funding and (potential) data usage fees.

Infrastructure (physical or digital) → The Mission will be based mainly on EU4Health 2021-2027 and Digital Europe 2021-2027. Cohesion Policy Funds are also expected to contribute in this regard, as well as the JRC Cancer Knowledge Hub.



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Actions of the Implementation Plan (i)

| | |
|-------------------------------------|---|
| Improve the understanding of cancer | 1. Establish the 'UNCAN.eu' platform by 2023 (2021-2023) |
| | 2. Better understand healthy versus cancer cells at individual and population level (2021-2028) |
| | 3. Better understand cancer-patient molecular, cell, organ, organismal interactions (2023-2029) |
| | 4. Determine the role of genetics in cancer (2024-2030) |

| | |
|--|---|
| Prevention including screening and early detection | 2.2.1 Prevention |
| | 1. Develop a one-stop cancer information centre on prevention (2022-2025) |
| | . Boost research and innovation into risk assessment (2024-2027) |
| | 3. Conduct implementation research on cancer prevention (2022-2030) |
| | 4. Establish synergies on prevention with other missions (2023-2026) |
| | 2.2.2 Screening and early detection |
| | 1. Optimise and improve access to existing screening programmes (2024-2029) |
| | 2. Develop new methods and technologies for screening and early detection (2021-2026) |
| 3. Develop early predictors/tests (2025-2030) | |



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Actions of the Implementation Plan (ii)

Optimise diagnostics and treatment

1. Support the creation of a Network of Comprehensive Cancer Infrastructures (CCIs) by 2025 (2021-2025)
2. Develop twinning programmes (2024-2028)
3. Develop a clinical trial programme on diagnostics (2023-2027)
4. Develop a clinical trial programme on treatments (2022-2023)

Support quality of life

1. Collect and analyse data on today's unmet needs of cancer patients and survivors (2021-2025)
2. Set up of the European Cancer Patient Digital Centre (2021-2023)
3. Develop early predictors for quality of life (2024-2030)
4. Design monitoring programmes for survivors of childhood cancer (2021-2027)

4 transversal R&I priorities

Equity, Innovation, Childhood cancer and Personalised medicine



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Calls for applications for the Cancer Mission

Work Program 2021-2022 – 254,7 M€

- HORIZON-MISS-2021-UNCAN-01: 3M€ - 1 CSA
- HORIZON-MISS-2021-CANCER-02: 125,65 M - 3 RIAs
- HORIZON-MISS-2022-CANCER-01: 126 M€ - 2 RIAs + 3 CSAs

Work Program 2023-2024 – 110,7 M€ + X

- HORIZON-MISS-2023-CANCER-01: 110,7 M€ - 3 RIAs + 1 IA.
- HORIZON-MISS-2024-CANCER-01: To define

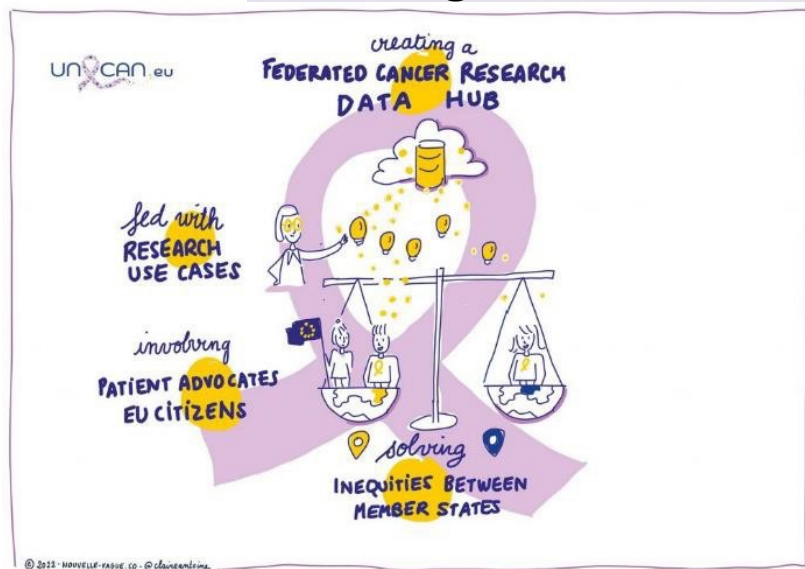


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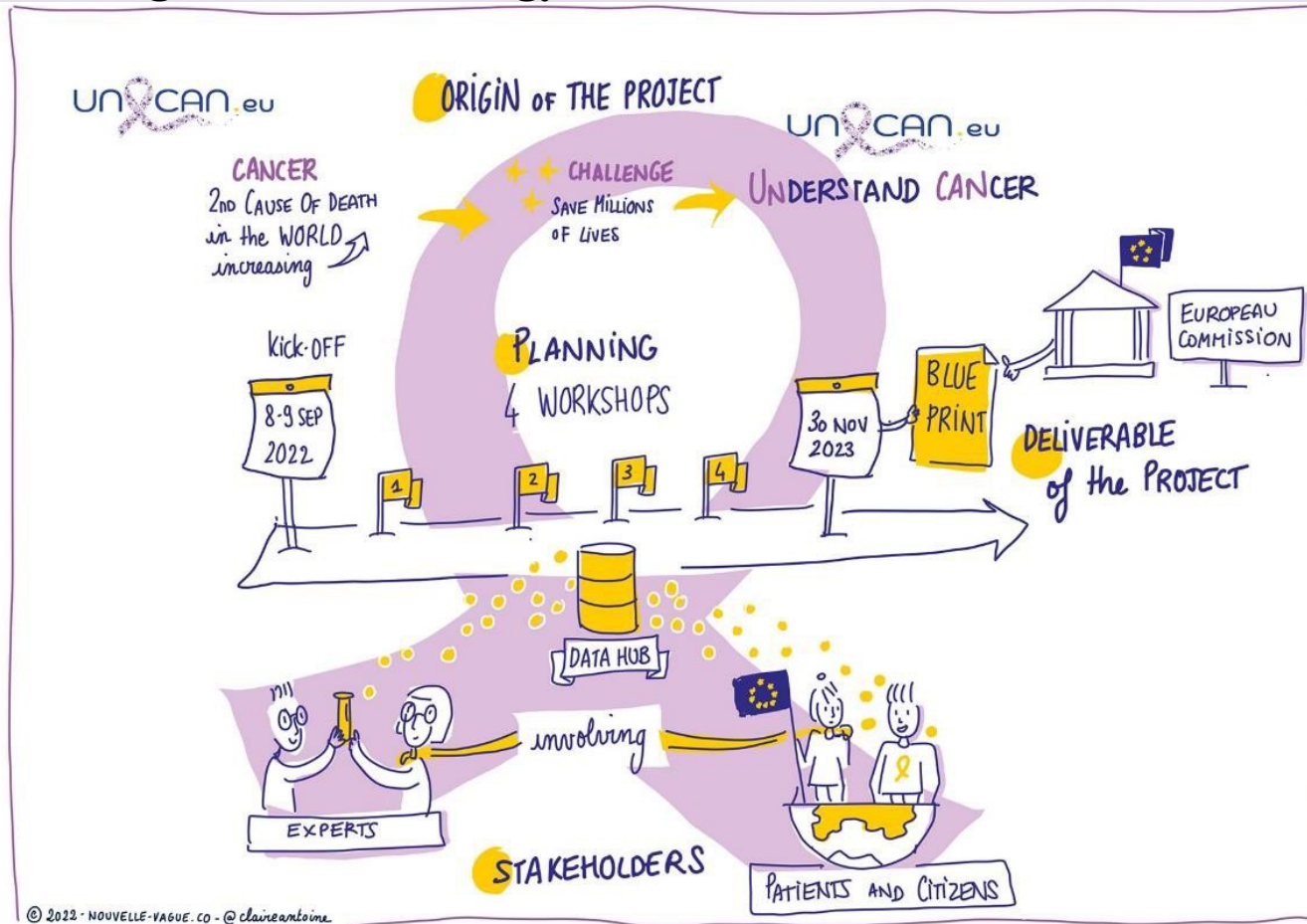
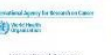
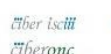
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The UNCAN.eu Project. Will propose the creation of a federated European data centre on cancer research and the generation of a series of use cases, addressing the main challenges of oncology research.



Core Partners





Network of National Cancer Mission Hubs - ECHoS

Main activities:

- Awareness raising and coordination of Mission's activities among relevant actors in national, regional or local R&I and health systems;
- Facilitate integration of Mission activities at national, regional, and local levels;
- Facilitate engagement of actors and stakeholders beyond R&I and health systems to cover all areas relevant for cancer control, e.g. cross-policy dialogues and citizen engagement activities;



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CLUSTERS of Cancer Mission



Overall approach

- Apply mission-guiding principles
- Apply mission clusters
- Synergies with Europe's Beating Cancer Plan
- Total budget 2021-2023: € 365 M*
*reduction Commissioners PG 10%



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

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

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:

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

Creation of national cancer mission hubs to support the implementation of the Mission on Cancer - HORIZON-MISS-2022-CANCER-01-05