

Mejorando la calidad oncológica a través de la acreditación:

Modelo OECI

24 / abril / 2023



A new vision for cancer in Europe

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Disclosure Information

- Employment: Director of VHIO, Head of Medical Oncology Service, Vall d'Hebron Hospital
- Consultant or Advisory Role: scientific consultancy role for Array Biopharma, AstraZeneca, Bayer, Boehringer Ingelheim, Chugai, Daiichi Sankyo, F. Hoffmann-La Roche Ltd, Genentech Inc, HalioDX SAS, Hutchison MediPharma International, Ikena Oncology, Inspirna Inc, IQVIA, Lilly, Menarini, Merck Serono, Merus, MSD, Mirati, Neophore, Novartis, Ona Therapeutics, Orion Biotechnology, Peptomyc, Pfizer, Pierre Fabre, Samsung Bioepis, Sanofi, Scandion Oncology, Scorpion Therapeutics, Seattle Genetics, Servier, Sotio Biotech, Taiho, Tessa Therapeutics and TheraMyc
- □ Stock Ownership: Oniria Therapeutics
- Research Funding: Yes (H2020, ISCIII, Grand Challenge, etc.)
- Speaking: N/A
- ☐ Grant support: Competitive grants (VHIO)
- Other: Educational collaboration with Imedex/HMP, Medscape Education, MJH Life Sciences, PeerView Institute for Medical Education and Physicians Education Resource (PER).

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- The Mission on cancer (the European Moonshot)
- The Europe's Cancer Beating Plan
- Funding instruments for Research and Innovation: Horizon Europe
- Prioritizing areas of Research: UNCAN.eu
- Building Cancer Research Infrastructures: CCI4EU and OECI's CCCs

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The Mission on Cancer – The European *Moon shot*

- The Mission on Cancer aims to improve the lives of more than 3 million people through prevention and cure, as well as support individuals and their families affected by cancer to have longer and better lives by supporting the EU's Beating Cancer Plan.
- Several initiatives are being established as part of the Mission, including the creation
 of the EU Platform UNCAN.eu in 2022, to lead to more rapid breakthroughs in
 understanding cancer, and the European Cancer Patient Digital Centre by 2023, to
 empower patients in their care.
- In 2023 a network of Comprehensive Cancer Infrastructures has been created, enhancing the quality of care and decreasing barriers to access of care.

The Mission on Cancer – The European *Moon shot*

Horizon Europe has incorporated, as a new element, research and innovation missions. One of the five missions is the **Mission on Cancer**.

- Each mission has a **Board of 15 experts**, including a Chair, and is supported by a secretariat.
- In the first term, each mission had a **General Assembly** of up to 20 members.
- In <u>June 2020</u> the interim report on the cancer mission was published. The report served as the basis for further discussion and engagement to ensure that the proposed mission is relevant and will make a real difference.
- At the European Research and Innovation Days in <u>September 2020</u>, the board of experts presented its **recommendations to the Commission**.
- Further to this, the Mission was launched in <u>September 2021</u> with the publication of its implementation plan and factsheet.

Mission Report Structure

Published in September 2020

OVERALL GOAL:

'By 2030, more than three million lives saved, living longer and better!'

INTERVENTION AREAS FOR ACTION:

Pillars as effective interventions to improve:

P-1: Understanding

P-2: Prevention (screening and early detection)

P-3: Diagnostics and Treatment of Cancer

P-4: Quality of Life of Patients, Families and

careers

P-5: Ensure equitable access



13 RECOMMENDATIONS FOR BOLD ACTIONS: 2 per area and 3 cross-cutting



MISSION ON CANCER

13 Core Recommendations

Understanding of cancer

Launch **UNCAN.eu** – a European Initiative to Understand Cancer (2021-2023)



Develop an EU-wide research programme to identify (poly-) genic risk scores

Prevention (screening & early detection)

Support the development and implementation of effective **cancer prevention** strategies and policies within Member States and the EU

Optimise existing **screening programmes** and develop novel approaches for **screening and early detection**

Diagnostics & treatment of cancer

Advance and implement **personalized medicine** approaches for all cancer patients in Europe

Develop an EU-wide research programme on **early diagnostic** and **minimally invasive** treatment/technologies (2021-2026)



MISSION ON CANCER

13 Core Recommendations

Quality of life

Develop an EU-wide **research programme and policies** to improve the quality of life of cancer patients and survivors, family members and carers, and all persons with an increased risk of cancer (2021-2025)

Create a **European Cancer Patient Digital Centre** where cancer patients and survivors can deposit and share their data for personalized care (2021-2023)

Equitable access

Achieve Cancer Health Equity in the EU across the continuum of the disease

Set up a network of **Comprehensive Cancer Infrastructures** within and across all EU Member States to increase quality of research and care (2021-2025)

Transversal recommendations

Cancers in children, adolescents and young adults: cure more and better

Accelerate innovation and implementation of new technologies and create

Oncology-focused Living Labs to conquer cancer

Transform cancer culture, communication and capacity building



MISSION ON CANCER



Implementation Plan – Actions by Specific Objectives

SO 1. Improve the understanding of cancer

- (1) Establish the UNCAN.eu platform (2021-2023) Topic Closed
- (2) Better **understand healthy versus cancer cells** at individual population level (2021-2028) (Stage: pre-clinical / early clinical research)

SO 2. Prevention including screening and early detection (prevent what is preventable)

- (1) Develop **new methods and technologies for screening and early detection** (2021-2026) (Stage: Technological Readiness Level 4 and above) Topic Closed
- (2) Better understanding of the impact of risk factors and health determinants on the development and progression of cancer

SO 3. Optimise diagnostics and treatment

(1) Support the creation of a Network of Comprehensive Cancer Infrastructures (CCIs) by 2025 (2021-2025):

SO 4. Support Quality of Life

(1) Collect and analyse data on today's unmet needs of cancer patients and survivors (2021-2025)

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Disparities in Cancer control in Europe

407.4+

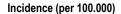
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379.2-407.3

345.5-379.1

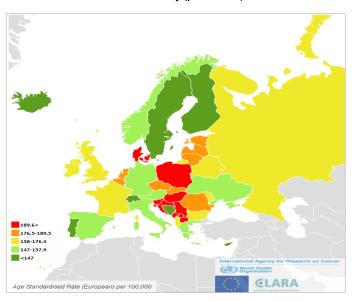
297.6-345.4

Age Standardised Rate (European) per 100,000





Mortality (per 100.000)



Despite higher incidence rates in Western Europe, the mortality rates are higher in Central Eastern Europe

CLARA

Europe's Beating Cancer Plan

- The Cancer Plan will help Member States turn the tide against cancer.
 - It will enable **expertise and resources to be shared** across the EU supporting countries, regions and cities with less knowledge and capacity.
 - It will help researchers to exchange findings between small and large Member States and to have access to crucial health data on the potential causes of cancer and promising treatments for it.
 - Medical staff and hospitals will be able to tap into a wealth of shared information.
- Ultimately it will ensure that patients across the EU can benefit from better care and treatment.
- EU4Health programme and other EU instruments will provide substantial financial support with €4 billion to Member States in their efforts to make their health systems more robust and more able to address cancer.

Europe's Beating Cancer Plan

The aim of Europe's Beating Cancer Plan is to <u>tackle the entire disease pathway</u>. It is structured around **four key action areas** where the EU can add the most value:

- (1) Prevention
- (2) Early detection
- (3) Diagnosis and treatment
- (4) Quality of life of cancer patients and survivors

EUROPE'S BEATING CANCER PLAN
LET'S STRIVE FOR MORE
#EUCancerPlan

Over the coming years, it will focus on **research and innovation**, tap into the potential that **digitalisation** and new technologies offer, and mobilise financial instruments to support Member States

Europe's Beating Cancer Plan

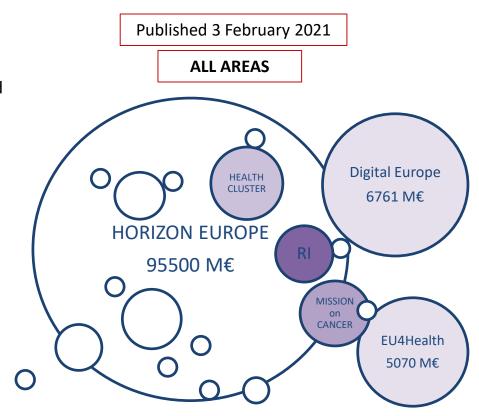
- 10 FLAGSHIP initiatives and 32 actions in diverse policies: employment, education, social policy and equality, agriculture, energy, environment and climate, transport, cohesion policy and taxation
- TOTAL BUDGET ACTIONS IN CANCER 2021-2027: ~4.000 M€
- **EU4Health**: ~1.250 M€
- **Horizon Europe**: ~2.000 M€

Pilar II – Health Cluster

- Cancer Mission (: €378.2 million 2021-23)
- Associations (PARC, IHI and Health Care Systems Transformation)

Pilar I (MSCA and INFRAS) and Pilar III (EIC)

Digital Europe Programme: up to 250M€



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Horizon Europe – three pillars for implementation

PILLAR 1
EXCELLENT SCIENCE

EUROPEAN RESEARCH COUNCIL

MARIE SKLODOWSKA-CURIE ACTIONS

RESEARCH INFRASTRUCTURES

PILLAR 2

GLOBAL CHALLENGES AND EUROPEAN INDUSTRIAL COMPETITIVENESS

- HEALTH
- CULTURE, CREATIVITY
 AND INCLUSIVE SOCIETY
- CIVIL SECURITY FOR SOCIETY
- DIGITAL, INDUSTRY AND SPACE
- CLIMATE, ENERGY AND MOBILITY
- FOOD, BIOECONOMY, NATURAL RESOURCES, AGRICULTURE AND ENVIRONMENT

PILLAR 3
INNOVATIVE EUROPE

EUROPEAN INNOVATION COUNCIL

EUROPEAN INNOVATION ECOSYSTEMS

OF INNOVATION AND TECHNOLOGY

JQ'NT DECEMBER OF ITRE

CANCER MISSION

THE EUROPEAN RESEARCH AREA

WIDENING PARTICIPATION AND

WIDENING PARTICIPATION AND SPREADING EXCELLENCE

REFORMING AND ENHANCING THE EUROPEAN R&I SYSTEM



Horizon Europe – Pillar II (RESEARCH)

PILLAR 2 GLOBAL CHALLENGES & INDUSTRIAL COMPETITIVENESS

CLUSTERS

- HEALTH
- CULTURE, CREATIVITIY AND INCLUSIVE SOCIETY
- CIVIL SECURITY FOR SOCIETY
- DIGITAL INDUSTRY & SPACE
- CLIMATE, ENERGY & MOBILITY
- FOOD BIOECONOMY, NATURAL RESOURCES, AGRICULTURE & ENVIRONTMENT

MISSION AREAS:

- CANCER
- SOIL HEALTH AND FOOD
- ADAPTATION TO CLIMATE CHANGE, INCLUDING SOCIETAL TRANSFORMATION
- CLIMATE-NEUTRAL AND SMART CITIES
- HEALTHY OCEANS, SEAS, COASTAL AND INLAND WATERS

JOINT RESEARCH CENTRE (JRC)

EUROPEAN PARTNERSHIPS & JOINT UNDERTAKINGS

Horizon Europe – Pillar III (INNOVATION)

PILLAR 3 INNOVATIVE EUROPE

EUROPEAN INNOVATION COUNCIL (EIC)

- PATHFINDER (IDENTIFY) Support to research teams to develop an emergind breakthrough Technology
- TRANSITION (DEVELOP) Building on promising research result to develop business plans for specific applications
- EIC ACCELERATOR (SCALE UP) Funding and investments through the EIC Fund for individual start-ups

EUROPEAN INSTITUTE OF INNOVATION AND TECHNOLOGY (EIT)

- EIT HEALTH
- EIT DIGITAL
- EIT CLIMATE
- EIT CULTURE & CREATIVITY
- EIT FOOD
- EIT INNOENERGY
- EIT MANUFACTURING
- EIT RAW MATERIALS
- EIT INNOVATIONS COMMUNITIES

EUROPEAN INNOVATION ECOSYSTEMS

• IHI

Horizon Europe – INNOVATION: European Innovation Council

The European Innovation Council (EIC) has been established under the EU <u>Horizon Europe</u> programme. It has a budget of €10.1 billion to support game changing innovations throughout the lifecycle from early stage research, to proof of concept, technology transfer, and the financing and scale up of start-ups and SMEs.



About the European Innovation Council The EIC is Europe's flagship innovation programme to identify, develop and scale up breakthrough technologies and game changing innovations

Get funding & investment



Support to research teams to research or develop an emerging breakthrough technology



EIC Transition

Building on promising research results to demonstrate and mature the technology and develop business plans for specific applications



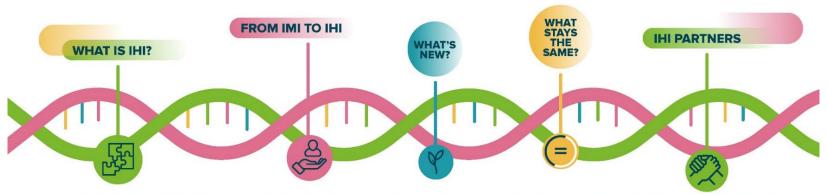
EIC Accelerator

Funding and investments through the EIC Fund for individual start-ups and small companies to develop and scale up game changing innovations

Horizon Europe - INNOVATION: IHI (Innovative Health Initiative)



THE DNA OF THE INNOVATIVE HEALTH INITIATIVE



IHI IS **EUROPE'S NEW PARTNERSHIP**

IHI is a collaboration between the EU and the biopharmaceutical, biotechnology, digital health FOR HEALTH and medical technology sectors, as well as academics, patients, regulators and other healthcare professionals.

IHI will build on the extensive experience of IMI's 14 years and almost 200 projects

to build an interdisciplinary. sustainable, patient-centric health research partnership to help transform patients' lives.

- The way we're governed will change.
- The scope of the partnership is broader than IMI as it will cover the entire continuum of care.
- There will be new, specific objectives that align with the EU's latest health policy strategies.
- Funding comes equally from the public and industry partners.
- Calls for proposals will be open and competitive.
- Projects started under IMI will be managed by IHI.

The industry members that will make up the new partnership are:

COCIR EFPIA

EuropaBio

MedTech Europe Vaccines Europe

The public member in the partnership is the European Union,

represented by the European Commission.













Horizon Europe – INNOVATION: IHI (innovative Health initiative)

IHI call 1 & 2: first results



IHI call 1

18 proposals

Topic 1 (neurodegenerative diseases): 5

Topic 2 (imaging & cancer): 5

Topic 3 (multi-modal cancer therapies): 5

Topic 4 (health data): 3

Submission: Sept 2022

IHI call 2

15 proposals

Topic 1 (cardiovascular diseases): 11

Topic 2 (early feasibility studies): 4















Horizon Europe – INNOVATION: IHI (Innovative Health Initiative)

IHI draft call topics



- Screening platform & biomarkers for disease prediction & prevention
- Patient-generated evidence for better outcomes
- Improving outcomes in hospitals
- Advanced therapies for rare diseases
- Digital technologies and mental health
- Non-clinical drug safety assessments
- Patient-centric blood sample collection













IHI Call 3

☐ Single stage

■ Launch: Dec 2022

IHI Call 4

■ Two stage

☐ Launch: early 2023

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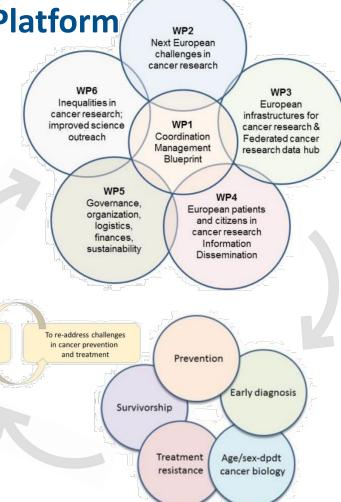
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UNCAN.eu is a European initiative to <u>un</u>derstand <u>can</u>cer proposed by the Cancer Mission and a strategic axis of Europe's Beating Cancer plan"

UNCAN.eu aims to: "enable the next breakthroughs that are urgently needed to advance the understanding of cancer mechanisms in order to improve cancer prevention, early diagnosis and treatment"

4.UNCAN.eu: a Coordination and Support Action (CSA) to prepare the UNCAN.eu platform

- A European-wide project of 15-month duration, starting in September 2022
- Define challenges in cancer research that need to be addressed at the supranational level in the coming years
- Identify existing infrastructures and networks to build a European
 Research Data Hub
- Ensure support from stakeholders (national agencies, charities, patients, private, etc...)
- Organize a European Citizen community
- Provide recommendations on governance and dissemination of UNCAN objectives

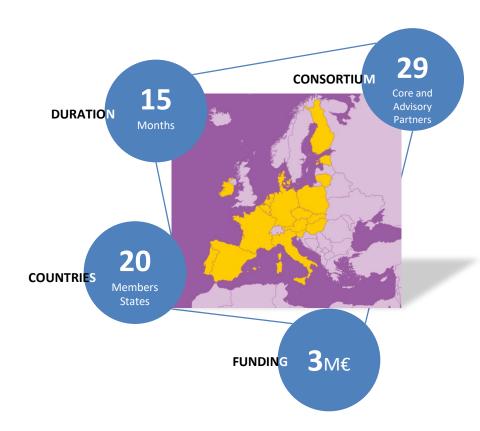


INCAN.eu

A federated

cancer research

data hub



WP2 – Define priorities in cancer research in pre-defined areas

- Aligned with strategic priorities of member states
- Consistent with available infrastructures
- Leverage data use cases

WP3 – Build a European Cancer Research Data Hub

- Aligned with strategic priorities of member states
- Consistent with available infrastructures
- Leverage data use cases

Additional working modules

- Defining a governance and sustainability model
- Address geographical disparities in research capacity
- Map existing research infrastructures
- Integrate patients and citizens

4.UNCAN.eu: composition

Core consortium

- Workpackage leaders,
- Will receive funding through CSA
- CCI-E
- Hungary
- ECPC
 - Italy Netherlands France
- Germany
- Spain

Associated partners

- Will be involved in WP workshops
- Could join final strategic roadmap
- Will not receive funding through the CSA

- Austria,
- Belgium
- Czech republic
- Estonia
- Finland
- Ireland

- Malta
- Poland
- Portugal
- Slovakia
- Sweden
- UK

- **Consultation partners & stakeholders**
- Provide expertise and advices
- Influence future EU work programmes
- Connect to other initiatives
- Could join final strategic roadmap

- Cancer Core Europe •
- CRUK
- **CCEO**
- EOSC / ELIXIR
- EORTC / SPECTA

- **EUHA**
- IARC
- **INFRA-SERV**
- **OECI**
- Ntl organisations

4.UNCAN.eu: Spanish node

Team:

- > CIBERONC (Institute of Health Carlos III (ISCIII)), VHIO
- ➤ Anna Bigas: Task leader CIBERONC Director
- Josep Tabernero: WP2 leader and CIBERONC PI
- > Alejandro Piris: Coordination and VHIO PI
- Management team: Javier Carmona (VHIO), Neus Bayó (VHIO), Izaskun Miguel (CIBERONC)

Objective:

- ➤ Define challenges in cancer research that need to be addressed at the supranational level in 6 areas:
 - Cancer Prevention
 - Early Diagnosis
 - Sensitivity & Resistance to therapy
 - o Pediatric Cancer
 - Cancer and Ageing
 - Survivorship













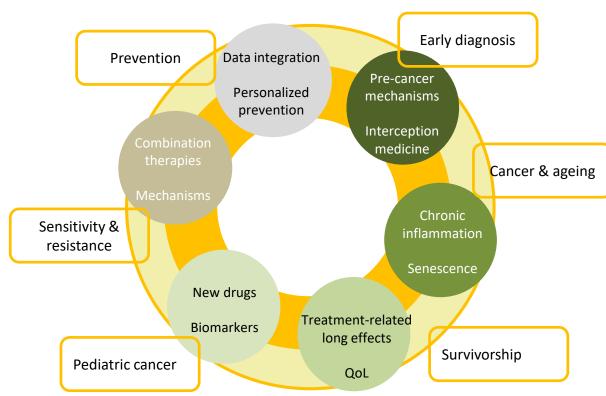




WP2 Research priorities

Future questions in cancer research to reduce disease burden

- Focus on translational research, not clinical trials
- Identified through a consensus process involving cancer experts and citizens
- Prioritization of supranational and multidisciplinary research
- Supported through specific funding mechanisms
 & policies

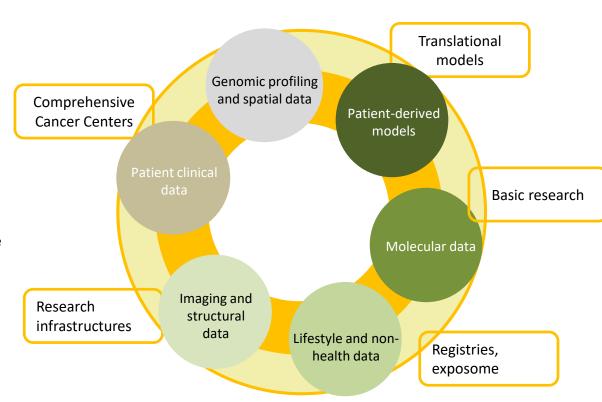


WP3

Data hub

A unique collection of cancer research data for global access

- Federation of National Data hubs and existing initiatives in Europe
- Collection of data on patients, models, exposome
- Staring with research use cases (WP2) and progressively expand
- Connect with European initiatives: EOSC, CanServ, ESFRIs



4.UNCAN.eu: Work package WP2 roadmap

Jul - Sept 2022

Oct 22 – Feb 23

Mar – Aug 2023

Nov 2023

Call for European experts to participate

questionnaires

Design of Delphi

Delphi Consensus Process Face to Face Workshops

Conclusions of Delphi process

Final Report to the EC

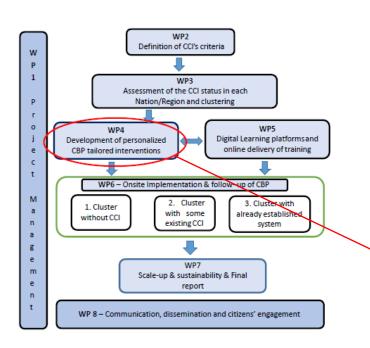
- Assembly of European Expert Working Groups
- Design of a participative consensus process
- Prioritization of cancer research challenges by European cancer experts
- Identification of use-cases for European Research Data Hub
- Identify recommendations for competitive calls & research programs
- Delivery of recommendations to the European Commission

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Comprehensive Cancer Infraestructures

COMPREHENSIVE CANCER INFRASTRUCTURES 4 EUROPE



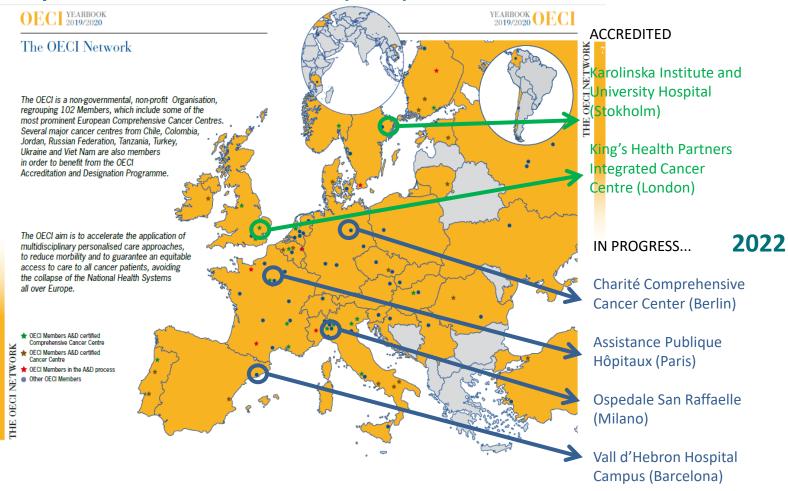
cci4EU will map and evaluate the existent infraestructures in Europe and will design adapted interventions that will allow increasing the level of development of centers' capabilities and overcome the existent inequalities in formation, research and clinical care.

WP 4: Development of personalized CBP tailored interventions

CI EU

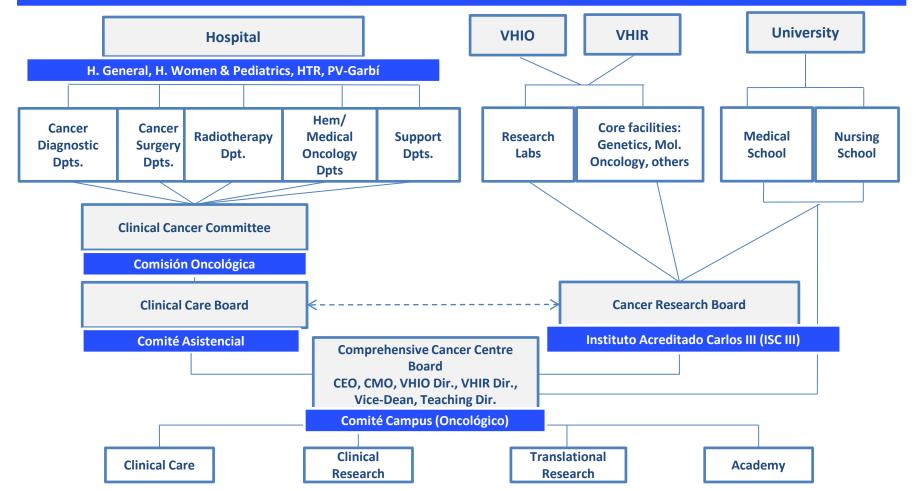
VHIO & OUH

Comprehensive Cancer Centers (OECI)





Cancer Vall d'Hebron Hospital Campus Governance



TAKE HOME MESSAGES

- The <u>Mission on Cancer</u> and the <u>Europe's Cancer Beating Plan</u> are great opportunities to align cancer policies on cancer prevention, research and innovation. It's an excellent moment to align the way to fight cancer
- We count with new Funding instruments for cancer to make excellent research in cooperation and to enable cancer treatments equitable
- The European Commission has delegated to <u>national nodes</u> the way to prioritise research in cancer, via competitive calls; let's take advantage of it
- ➤ EU wants that some cancer research and treatment tasks are leaded or coordinated by Comprehensive Cancer Centers. However, we must establish robust National nodes or hubs to involve all researchers, carers and stakeholders

ACKNOWLEDGMENTS – VHIO – H. VALL D'HEBRON

Our amazing scientist, leadership & staff





Our patients & their families





National & International funding bodies











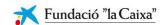




Private Foundations & Donors













VHIO SCIENTIFIC MANAGEMENT AREA



- Support director in design of scientific strategies
- Implementation of new research lines/ groups
- Active search of funding opportunities
- Assessment, management and follow up of institutional programs
- Preparation and writing of competitive proposals
- Monitoring and execution of awarded research projects
- Implementation of institutional needs in education, ethics & regulatory issues, scientific dissemination, tasks related to consortia and coordinated research, patients & science, etc.

ACKNOWLEDGMENTS – VHIO – H. VALL D'HEBRON

Our amazing scientist, leadership & staff





Our patients & their families





National & International funding bodies











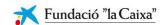




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Thank you

Back up slides

HORIZON 2020

SOCIETAL

CHALLENGES

EXCELLENT SCIENCE

INDUSTRIAL LEADERSHIP

EUROPEAN RESEARCH COUNCIL

MARIE CURIE ACTIONS

RESEARCH INFRASTRUCTURES

FUTURE AND EMERGING TECHNOLOGIES

HEALTH

INCLUSIVE AND SECURE SOCIETY

DIGITAL INDUSTRY AND SPACE

CLIMATE ENERGY AND MOBILITY

FOOD AND NATURAL RESOURCES

LEADERSHIP IN ENABLING
AND INDUSTRIAL TECHNOLOGY

ACCESS TO RISK FINANCE

INNOVATION IN SMEs

HORIZON EUROPE

OPEN SCIENCE

EUROPEAN RESEARCH COUNCIL

MARIE CURIE ACTIONS

RESEARCH INFRASTRUCTURES

GLOBAL CHALLENGES AND INDUSTRIAL COMPETITIVENESS

HEALTH

INCLUSIVE AND SECURE SOCIETY

CIVIL SECURITY FOR SOCIETY

DIGITAL INDUSTRY AND SPACE

CLIMATE ENERGY AND MOBILITY

FOOD AND NATURAL RESOURCES

MISSION

OPEN INNOVATION

EUROPEAN INNOVATION COUNCIL

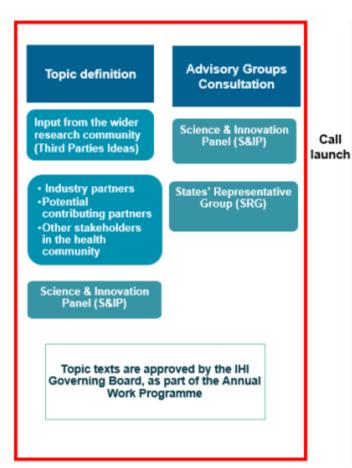
EUROPEAN INNOVATION ECOSYSTEMS

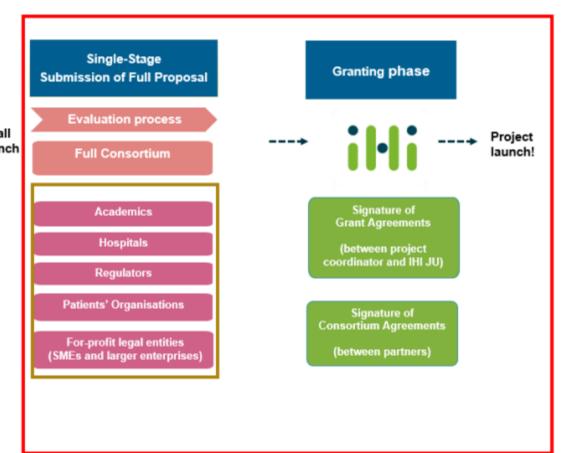
EUROPEAN INSTITUTE OF INNOVATION AND TECHNOLOGY

WIDENING PARTICIPATION
AND SCIENCE WITH AND FOR SOCIETY

SHARING EXCELLENCE AND REFORMING AND ENHANCING
THE EUROPEAN R&I SYSTEM

Single-stage procedure





Two-stage procedure

