



HORIZON EUROPE

THE EU RESEARCH & INNOVATION PROGRAMME

2021 – 2027

Cluster 1 **Health**



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Horizonte Europa: Programa Marco de Investigación e Innovación de la UE (2021-2027)

Objetivos



Ciencia y Tecnología

Reforzar las bases científicas y tecnológicas de la UE y el Espacio Europeo de Investigación (ERA)



Sociedad

Dar respuesta a las prioridades, políticas y de los ciudadanos, y sostener los valores y el modelo socioeconómico europeos



Economía

Impulsar la capacidad de innovación, la competitividad y la creación de empleo de Europa

Lecciones aprendidas



Apoyar la innovación de vanguardia



Generar un mayor impacto a través de la orientación hacia las misiones y la participación ciudadana



Racionalizar el panorama de las asociaciones



Reforzar la apertura



Fortalecer la cooperación internacional



Fomentar la participación

IMPACTO

Synergies with other Union programmes

HORIZON EUROPE			
Other Union Programmes, including			
Common Agricultural Policy	InvestEU	ESF+	Innovation Fund
External Instrument	LIFE	Digital Europe	Internal Security Fund and Instrument for Border Management
Maritime & Fisheries Fund	EU4Health	Space Programme	Single Market Programme
Connecting Europe Facility	ERDF	ERASMUS+	Recovery and Resilience Facility
Just Transition Mechanism		Creative Europe	



Enhanced synergies

COMPATIBILITY
Harmonisation of funding rules; flexible co-funding schemes; pooling resources at EU level

COHERENCE & COMPLEMENTARITY
Alignment of strategic priorities in support of a common vision

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Strategic Planning and Intervention logic



2021

2022

2023

2024

2025

2026

2027

POLÍTICA EUROPEA Y GLOBAL RELEVANTE PARA I+D+I

Regulación Horizonte Europa (2021-2027)

Plan Estratégico (2021-2024)

Plan Estratégico (2025-2027)

Programa de Trabajo
2021-2022

Programa de
Trabajo
2023-2024

Programas(s) de Trabajo
2025-2027



EL PLAN ESTRATÉGICO 2021-2024

UN PLAN AMBICIOSO PARA UN PROGRAMA AMBICIOSO

4 Orientaciones Estratégicas Clave (KSOs) para un mayor impacto



Promover una autonomía estratégica abierta liderando el desarrollo de tecnologías digitales, habilitadoras y emergentes clave, sectores y cadenas de valor



Convertir a Europa en la primera economía circular, climáticamente neutra y sostenible habilitada digitalmente

Restaurar los ecosistemas y la biodiversidad de Europa y gestionar de forma sostenible recursos naturales



Crear una sociedad europea más resistente, inclusiva y democrática



Pathway to Impact



Resources

e.g. Human, Financial, Expertise, Know-how, Infrastructures

Results of R&I

e.g. Knowledge, Advice, Processes, Technologies, Data, Methodologies

Immediate use or uptake of R&I results

e.g. result of **‘Productive Interactions’** between ‘producers’ and ‘users’ of R&I
➤ short- to medium-term

Wider benefits for “society”

e.g. social, economic and environmental impact
➤ 5 Ps of SDGs: people, planet, prosperity, peace, partnerships
➤ medium- to long-term

Topics calling for R&I actions (RIA, CSA, partnership)

Expected Outcomes leading to impact per Destination (set by WP23-24)

Expected Impacts per Cluster (set by SP21-24)

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Pillar II, Cluster 1 'Health'



HORIZONTE EUROPA 2021-2027 (M€, precios corrientes)

95.517

Pilar 1: Ciencia de Excelencia

25.011

Consejo Europeo de Investigación

16.004

Acciones Marie Skłodowska-Curie

6.602

Infraestructuras de Investigación

2.406

Pilar 2: Desafíos Mundiales y Competitividad Industrial Europea

53.516

Salud

8.246

Cultura, Creatividad y Sociedad Inclusiva

2.280

Seguridad Civil para la Sociedad

1.596

Mundo Digital, Industria y Espacio

15.349

Clima, Energía y Movilidad

15.123

Alimentación, Bioeconomía, Recursos Naturales, Agricultura y Medio Ambiente

8.952

Centro Común de Investigación (no nucleares)

1.970

Pilar 3: Europa Innovadora

13.597

Consejo Europeo de Innovación

10.105

Ecosistemas Europeos de Innovación

527

Instituto Europeo de Innovación y Tecnología

2.965

Ampliar la participación y fortalecer el Espacio Europeo de Investigación

3.393

Ampliar la Participación y Difundir la Excelencia

2.955

Reformar y Mejorar el Sistema Europeo de I+D

438

¿Por qué? Problemas de salud nuevos o persistentes

Amenazas para los ciudadanos y la salud pública

Sostenibilidad de los sist. sociales y de atención de la salud

Competitividad de la EU industria de la salud y la atención sanitaria

Desafíos complejos, interrelacionados y globales

Contexto Político

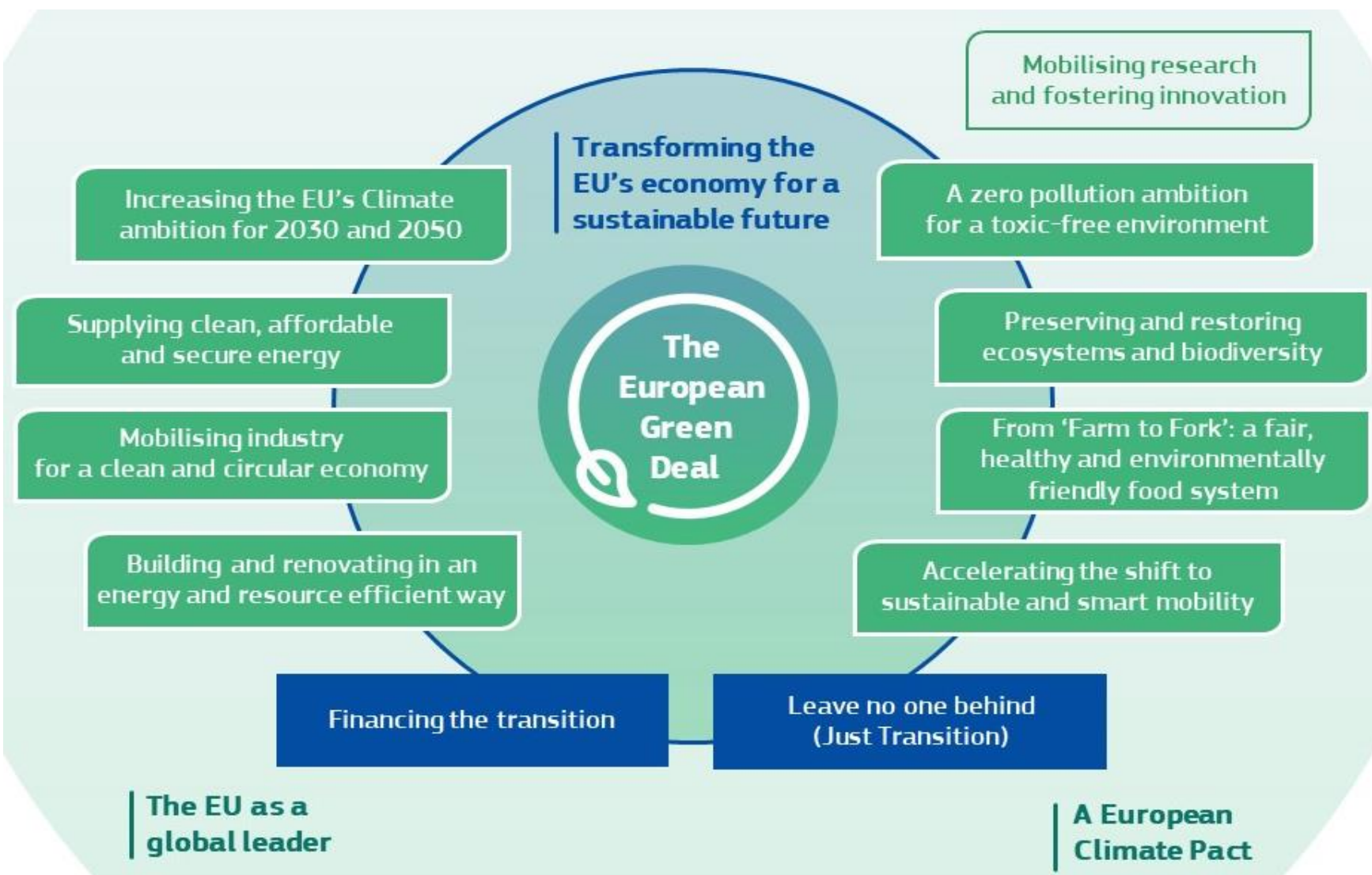
Una UE climáticamente neutra y verde, apta para la era digital.
Unión Europea de la Salud: Preparación y respuesta a las crisis.



... de acuerdo con los **Objetivos de Desarrollo Sostenible** de la ONU



Pacto Verde Europeo



Estrategia de sostenibilidad para las sustancias químicas

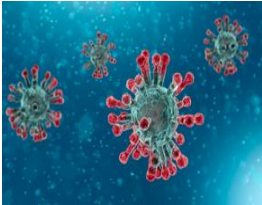
Plan de Acción de Contaminación Cero

Estrategia Biodiversidad 2030

Ley Europea del Clima

Estrategia de adaptación al cambio climático

Unión Europea de la Salud



Proteger la salud de los europeos y responder colectivamente ante las crisis sanitarias transfronterizas

**Union Europea
de la Salud**

Iniciativas destacadas

Medidas de preparación y respuesta ante las crisis

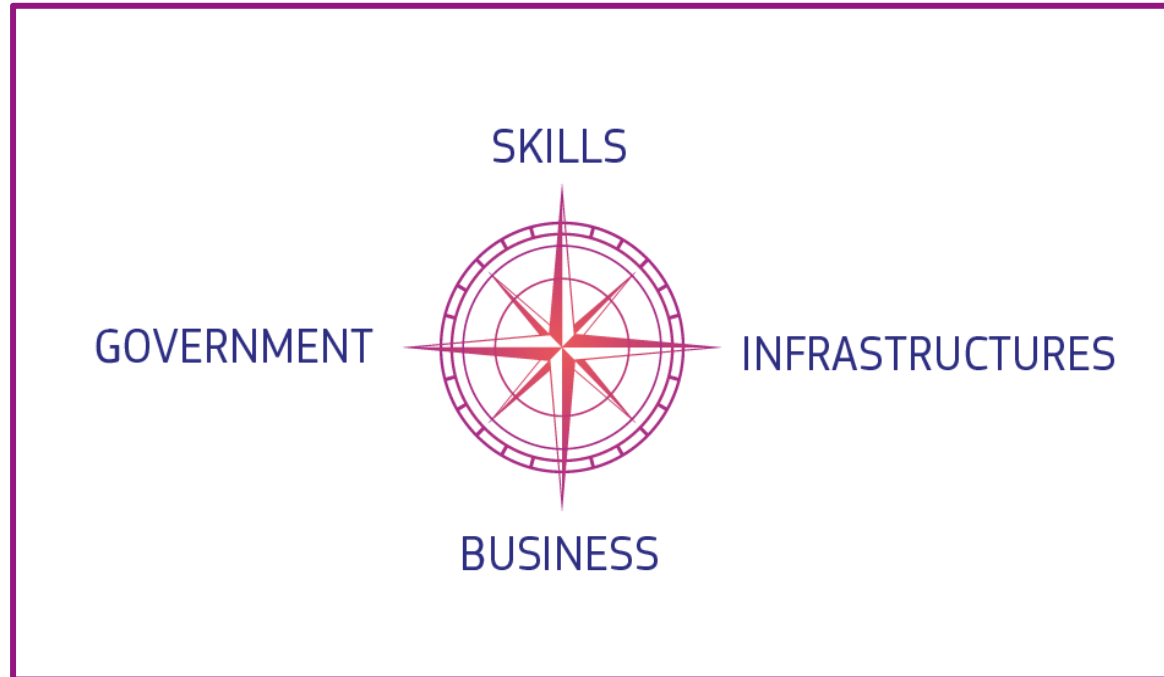
Autoridad Europea de Preparación y Respuesta ante Emergencias Sanitarias (HERA)

Una estrategia farmacéutica para Europa

Plan Europeo de Lucha contra el Cáncer

Espacio Europeo de Datos Sanitarios (EEDS)

2030 Path to the Digital Decade



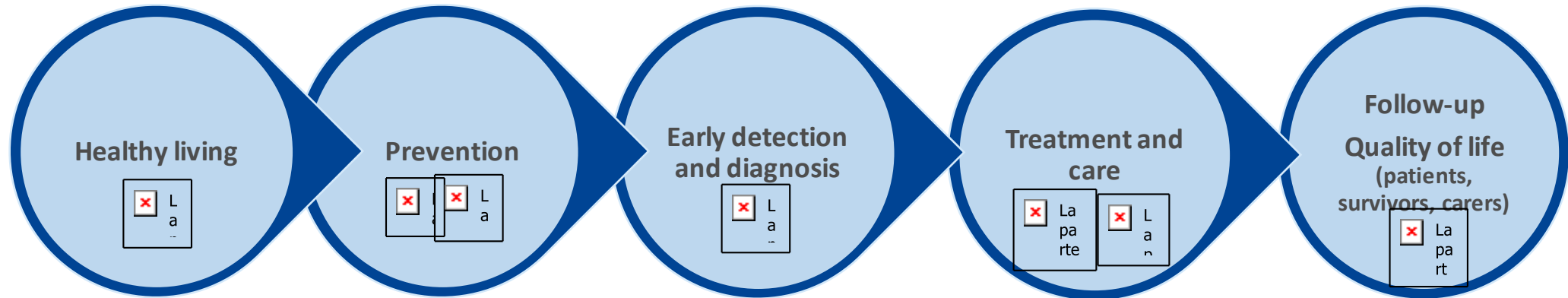
Personas en el centro

Las tecnologías digitales deben proteger los derechos de las personas, apoyar la democracia y garantizar que todos los actores digitales actúen de manera responsable y segura. La UE promueve estos valores en todo el mundo

- **Soluciones digitales inclusivas, seguras y éticas que benefician a los pacientes**

Digital technologies driving innovation in health

Across the care pathway



- ✓ Citizen empowerment through access to own health data
- ✓ mHealth apps
- ✓ COVID-19 contact tracing apps / EU Digital COVID-19 Certificate

- ✓ Diagnostic tools and AI applications
- ✓ Robotics
- ✓ 1+ Million Genomes Initiative
- ✓ European Cancer Imaging Initiative
- ✓ Virtual twins

- ✓ Virtual twins
- ✓ AI and data analytics solutions for clinical research and decision making
- ✓ Robotics
- ✓ mHealth Apps

- ✓ AI solutions to monitor health status and quality of life after treatment

➤ **Societal impact – cost efficiencies – long healthy lives – personalised care – patient empowerment**

Horizon Europe – Cluster 1 ‘Health’

Strategic Plan 2021-24 → 6 Expected Impacts

= 6 “Destinations” of :

Work Programme 2023-24

1. Staying healthy in a rapidly changing society
2. Living and working in a health-promoting environment
3. Tackling diseases & reducing disease burden
4. Ensuring access to innovative, sustainable & high-quality healthcare
5. Unlocking the full potential of new tools, technologies and digital solutions for a healthy society
6. Maintaining an innovative, sustainable & globally competitive health industry



→ Topics

Focus on outcomes contributing to the impacts specified per Destination

Project proposals should

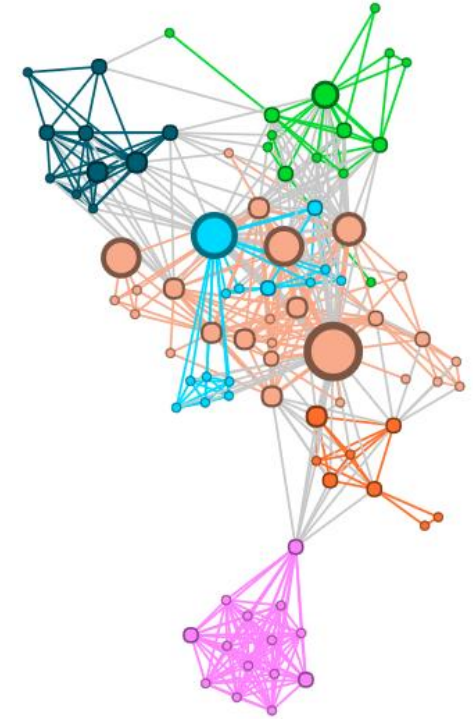
- make a **clear case** (*value proposition*)
- supported by a **convincing trajectory** (*pathway to impact*) for the project proposal to deliver the **output**, promote the **outcome** described in the topic, and contribute to the **impact** expected under that destination.

Aspectos horizontales relevantes



Project Clusters: por qué?

- **Harmonisation** of approaches
- Strengthen **Science4Policy** link
- Promote **synergies** and **networking**
- **Capacity building**
- **Streamline** information flows
- Communication and dissemination: maximises **outreach**
- Increased **impact**





Destino 1: Mantenerse sano en una sociedad que cambia rápidamente

Call – Staying Healthy (Single stage - 2023) - (€40 million-RIA)

- The Silver Deal - Person-centred health and care in European regions

1 topic

Call – Staying Healthy (Two stage - 2024) – (€80 million)

- Towards a holistic support to children and adolescents' health and care provisions in an increasingly digital society (€30 million - RIA)
- Personalised prevention of non communicable diseases - addressing areas of unmet needs using multiple data sources (€50 million- RIA)

2 topics



Destino 2: Vivir y trabajar en un ambiente que promueva la salud

Call – Environment and health (Single stage - 2023) – (€103 million)

4 topics

- Planetary health: understanding the links between environmental degradation and health impacts - (€30 million –RIA)
- Evidence-based interventions for promotion of mental and physical health in changing working environments (post-pandemic workplaces) - (€30 million - RIA)
- Health impacts of endocrine-disrupting chemicals: bridging science-policy gaps by addressing persistent scientific uncertainties - (€40 million-RIA)
- Global coordination of exposome research - (€3 million - CSA)

Call – Environment and health (Two stage - 2024) – (€60 million - RIA)

1 topic

- The role of environmental pollution in non-communicable diseases: air, noise and light and hazardous waste pollution



Destino 3: Hacer frente a las enfermedades y reducir la carga de la enfermedad

8 topics

Call – Tackling diseases (Single stage - 2023) - (€224 million)

- Novel approaches for palliative and end-of life care for non-cancer patients (€50 million -RIA)
- Interventions in city environments to reduce risk of non-communicable disease (Global Alliance for Chronic Diseases - GACD) (€20 million - RIA)
- Relationship between infections and non-communicable diseases (€30 million - RIA)
- Towards structuring brain health research in Europe (€1 million - CSA)
- Pandemic preparedness and response:
 - Broad spectrum anti-viral therapeutics for infectious diseases with epidemic potential (€50 million - RIA)
 - Sustaining established coordination mechanisms for European adaptive platform trials and/or for cohort networks (€3 million - CSA)
 - Understanding vaccine induced-immunity (€20 million - RIA)
 - Immunogenicity of viral proteins of viruses with epidemic and pandemic potential (€50 million -RIA)

Call – Partnerships in Health (2023) - (€50 million- COFUND)

- European Partnership on Rare Diseases



Destino 3: Hacer frente a las enfermedades y reducir la carga de la enfermedad

4 topics

Call – Tackling diseases (Two stage - 2024) (€125 million)

- Comparative effectiveness research for healthcare interventions in areas of high public health need (€45 mio-RIA)
- Tackling high-burden for patients, under-researched medical conditions (€25 million - RIA)
- Validation of fluid-derived biomarkers for the prediction and prevention of brain disorders (€25 million -RIA)
- Pandemic preparedness and response:
 - Adaptive platform trials for pandemic preparedness (€30 million -RIA)

2 topics

Call – Tackling diseases (Single stage - 2024) (€52 million)

- Pandemic preparedness and response:
 - Hostpathogen interactions of infectious diseases with epidemic potential (€50 million - RIA)
 - Maintaining the European partnership for pandemic preparedness (€2 million - CSA)

Call – Partnerships in Health (2024) - (€100 million- COFUND)

- European Partnership : One Health Antimicrobial Resistance



Destino 4: Garantizar el acceso a una atención sanitaria innovadora, sostenible y de alta calidad

Call - Ensuring access to innovative, sustainable & high-quality healthcare (Single stage – 2023) - (€60 million)

3 topics

- Maintaining access to regular health and care services in case of cross-border emergencies (€20 million - RIA)
- Resilience and mental wellbeing of the health and care workforce (€20 million - RIA)
- Environmentally sustainable and climate neutral health and care systems (€20 million - RIA)

Call – Partnerships in Health (2023) - (€100 million -COFUND)

European Partnership on Personalised Medicine

Call - Ensuring access to innovative, sustainable & high-quality healthcare (Two stage – 2024) - (€30 million - RIA)

1 topic

- Access to health and care services for people in vulnerable situations (€30 million - RIA)



Destino 5: Desplegando todo el potencial de las nuevas herramientas, tecnologías y soluciones digitales para una sociedad sana

Call – Tools and technologies for a healthy society (Single stage - 2023) – (€214 million)

6 topics

- Clinical trials of combined Advanced Therapy Medicinal Products (ATMPs) (€50 million -RIA)
- Integrated, multi-scale computational models of patient patho-physiology ('virtual twins') for personalized disease management (€50 million - RIA)
- Better integration and use of health-related real world and research data, including genomics, for improved clinical outcomes (€35 million - RIA)
- Harnessing the potential of real-time data analysis and secure Point-of-Care computing for the benefit of person-centred health and care delivery (€35 million - IA)
- Pandemic preparedness and response: In vitro diagnostic devices to tackle cross-border health threats (€40 million - IA)
- Developing a Data Quality and Utility Label for the European Health Data Space (€4 million - CSA)



Destino 5: Desplegando todo el potencial de las nuevas herramientas, tecnologías y soluciones digitales para una sociedad sana

Call – Tools and technologies for a healthy society (Single stage - 2024) – (€25 million - RIA)

- Bio-printing of living cells for regenerative medicine

1 topic

Call – Tools and technologies for a healthy society (Two stage - 2024) – (€25 million - RIA)

- Innovative non-animal human-based tools and strategies for biomedical research

1 topic



Destino 6: Mantener una industria de la salud innovadora, sostenible y competitiva a nivel mundial

Call - A competitive health-related industry (Single stage - 2023) – (€56 million)

- Supporting the uptake of innovative Health Technology Assessment (HTA) methodology and advancing HTA expertise across EU (€5 million -CSA)
- Expanding the European Electronic Health Record exchange Format to improve interoperability within the European Health Data Space (€8 million -RIA)
- Modelling and simulation to address regulatory needs in the development of orphan and paediatric medicines (€25 million - RIA)
- Mapping the hurdles for the clinical applications of Advanced Therapy Medicinal Products (ATMPs) (€3 million -CSA)
- Development and harmonisation of methodologies for assessing digital health technologies in Europe (€15 million - RIA)

5 topics



Destino 6: Mantener una industria de la salud innovadora, sostenible y competitiva a nivel mundial

Call - A competitive health-related industry (Single stage - 2024) – (€12 million)

- Developing EU methodological frameworks for clinical/performance evaluation and post-market clinical/performance follow-up of medical devices and in vitro diagnostic medical devices (IVDs) (€10 million -RIA)
- Gaining experience and confidence in New Approach Methodologies (NAM) for regulatory safety and efficacy testing – coordinated training and experience exchange for regulators (€2 million - CSA)

2 topics

Calendario convocatorias WP 2023-2024

2023

- Apertura de convocatorias: 12 enero 2023
- Cierre de convocatorias : 13 abril 2023 ⁽¹⁾

2024

- Apertura de convocatorias: 30 marzo 2023
- Cierre de convocatorias : 19 septiembre (1st stage)
11 abril 2024 (2nd stage)

(1) Excepto: "HORIZON-HLTH-2023-DISEASE-07-01: European Partnership on Rare Diseases", con cierre el 19 Septiembre 2023

HORIZON EUROPE

Cancer Mission





Misión Cáncer



Mejorar la vida de más de 3 millones de personas para 2030, mediante la prevención, la curación y para que los afectados por el cáncer, incluidas sus familias, vivan más y mejor, junto con el Plan Europeo para Vencer el Cáncer.

Luchar contra el cáncer desde todos **los frentes**



1 >> **comprender** el cáncer y sus factores de riesgo;

2 >> **evitar** lo que sea evitable;

3 >> optimizar **el diagnóstico y el tratamiento;**

4 >> mejorar la **calidad de vida** de las personas durante y después de la enfermedad, al tiempo que se garantiza un acceso equitativo para todo el mundo.

Plan EU: 4.000 M€ para acciones contra el cáncer

Plan Europeo de lucha contra el cáncer

#EUCancerPlan
#UniónDeLaSalud



Reducir el número de personas afectadas por el cáncer a través de 10 iniciativas emblemáticas



Centro de Conocimiento sobre el Cáncer



Diagnóstico y tratamiento del cáncer para todos



Iniciativa Europea de Obtención de Imágenes Oncológicas



Iniciativa Europea para Comprender el Cáncer



Eliminar los cánceres causados por el virus del papiloma humano



Iniciativa «Una vida mejor para los pacientes con cáncer»



Plan de la UE para el cribado del cáncer



Registro de Desigualdades en relación con el Cáncer



Red de la UE de Centros Oncológicos Integrales Nacionales



Iniciativa «Ayudar a los niños con cáncer»

Misión Cáncer: Plan de Implementación



18 R&I priority areas
4 transversal R&I priorities:
 equity, innovation,
 childhood cancer and
 personalised medicine

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Misión cancer 2021-22-23

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

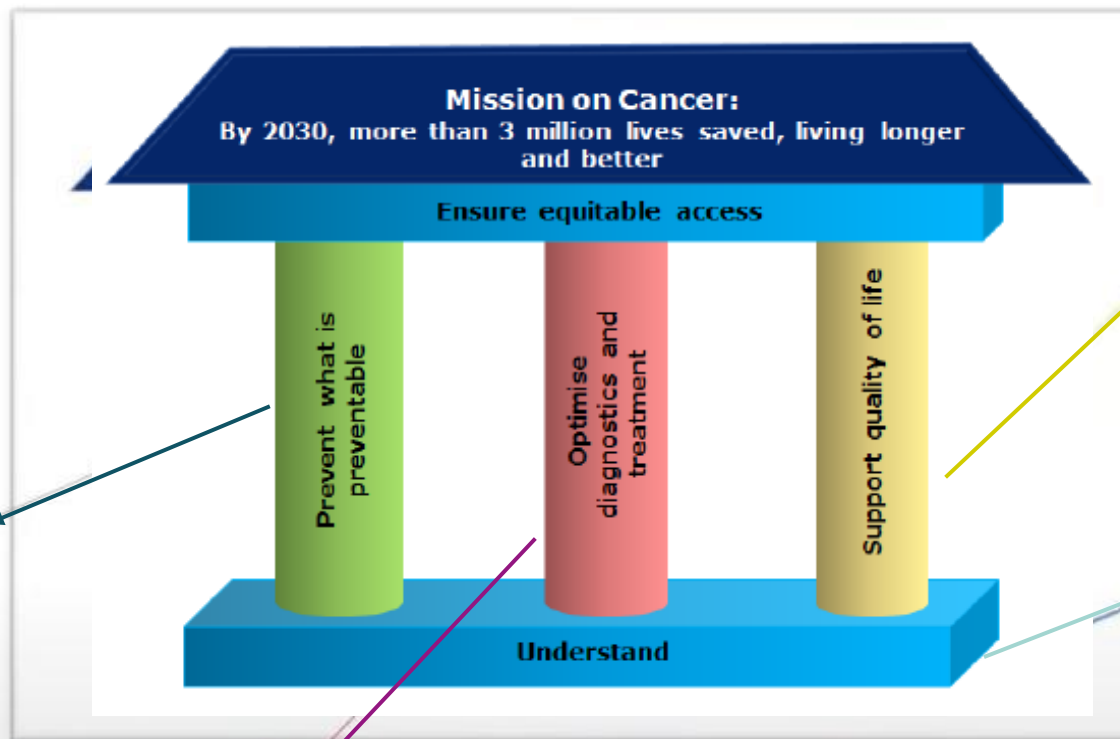
Enhance cancer prevention through behaviour change
 HORIZON-MISS-2023-CANCER-01-02

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

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



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

Misión cancer 2023

- Apertura de convocatorias: 12 enero 2023
- Cierre de convocatorias: 12 abril 2023

Topics by 'Call'	Type of Action	Total budget (M€)
HORIZON-MISS-2023-CANCER-01		
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.	RIA	36,68
HORIZON-MISS-2023-CANCER-01-02: Enhance primary cancer prevention through sustainable behavioural change	RIA	25
HORIZON-MISS-2023-CANCER-01-03: Pragmatic clinical trials on minimally invasive diagnostics	RIA	43
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	IA	6

Misión cancer: Aspectos diferenciales



AMBICIÓN: La convocatoria debe fijar objetivos ambiciosos porque es competitiva; menos ambición reduciría el nivel de excelencia e innovación.

ÁMBITO DE APLICACIÓN: similar “estándar” Horizonte Europa, importantes diferencias:

- Implicar sistemáticamente a los ciudadanos, incluidos los pacientes y sus cuidadores.
- Participación mayor de lo habitual de disciplinas y sectores diferentes.
- Mayor atención a: generación de resultados tangibles, atención al impacto social, TRLs altos, implementación e investigación aplicada, soluciones orientadas a atención sanitaria.
- Participación de Regiones / Estados Miembros y los Países Asociados, si adecuado.

AGRUPACIÓN: formación de clústeres de proyectos

PORTFOLIO : CANCER-01-01, CANCER-01-02 : *“grants will be awarded to applications not only in order of ranking but also to **at least one** application that fully addresses cancer in children, adolescents or young adults (meaning people between birth and the age of 24), provided that the application attains all thresholds”.*

COMING SOON

Horizon Europe info day - Cluster 1

This info day aims to inform (potential) applicants about topics included in the Cluster 1 'Health' work programme of 2023

📅 19 January 2023

🕒 08:30 (GMT+01:00)



[Events | The research and innovation community platform \(europa.eu\)](https://europea.eu)



Thank you!

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