



# **EU actions against cancer**

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**European Commission**

**2<sup>nd</sup> iPAAC Stakeholder Forum**  
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HORIZON 2020

# Addressing the growing burden of cancer



## Challenges ('barriers')

- Prevent the preventable
- Combine interventions
- Proven 'personalised medicine' benefits?
- Implementation - Changing healthcare landscape
- Health inequity and inequality – health literacy, access, pricing

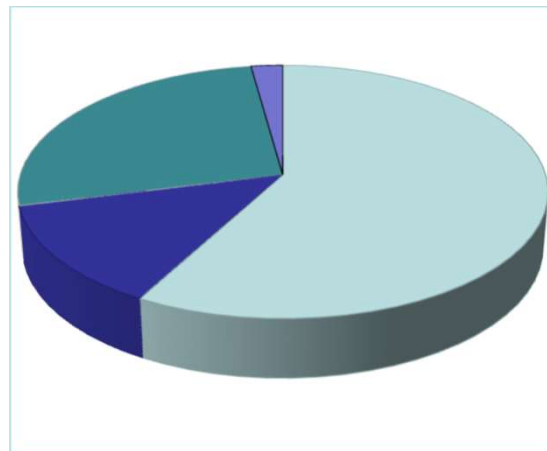
## EU approach ('solutions')

- **Comprehensive: prevention, cure, care, quality of life**
- **Improve uptake in health systems - impact for citizens**
- **Focus on EU-added value**
- **Use partnerships**
- **Foster innovation**



# Cancer research

## What EU has supported



- collaborative research
- training
- frontier
- innovation

### Translational research

- tumour-host environment
- risk factors, biomarkers,
- prevention, early detection
- imaging
- models, technologies
- large data, cloud computing
- all possible treatment options, immunobiology and therapy

### Investigator-driven trials

### Palliative & end-of-life care

### Cost-effectiveness

The Oncologist



Emphasising the European Union's Commitment to Cancer Research:  
A Helicopter View of the *Seventh Framework Programme for Research and Technological Development*

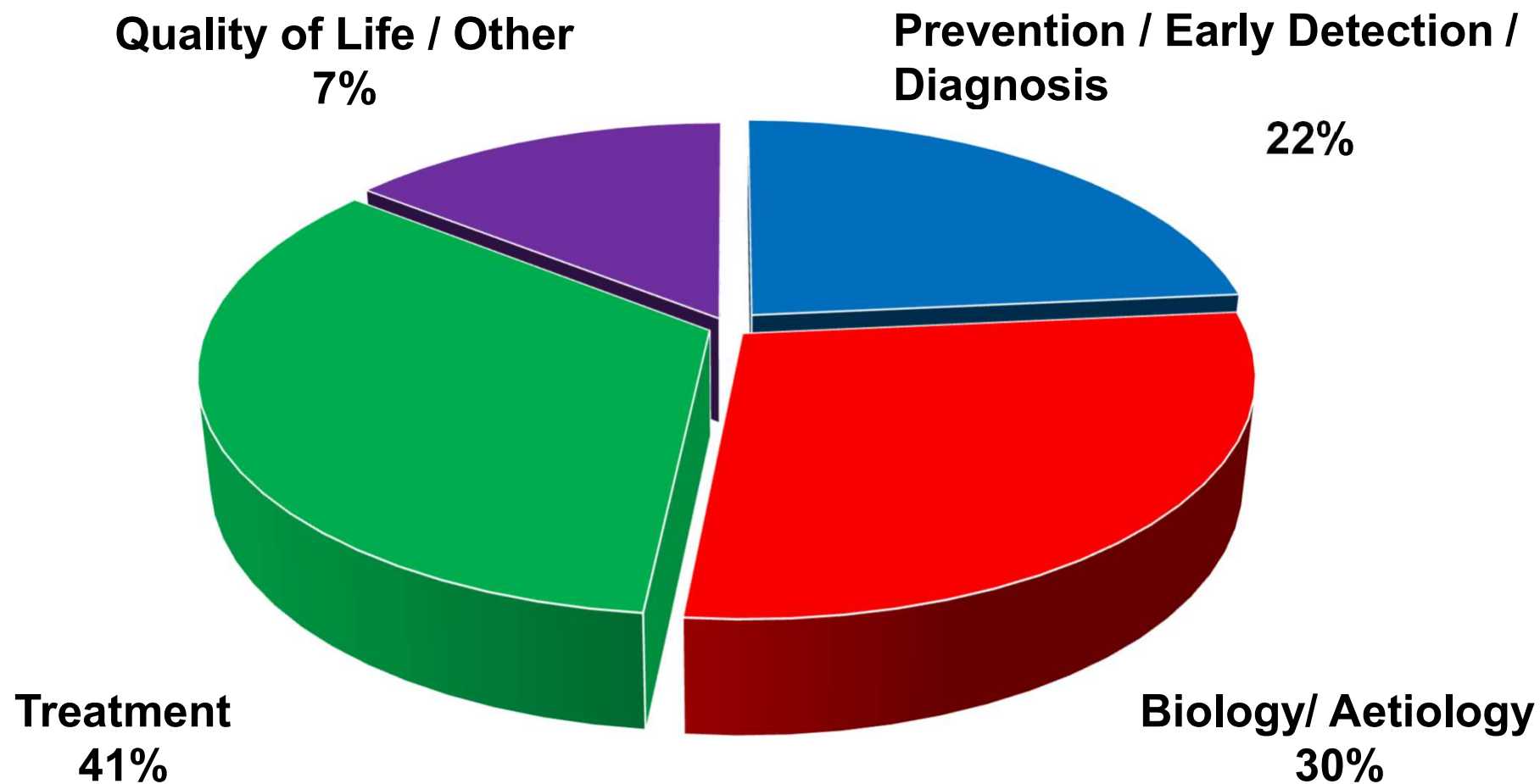
JAN-WILLEM VAN DE LOO, DOMINIK TRZASKA, KARIM BERKOUK, MARIA VIDAL,  
RUXANDRA DRAGHIA-ARLI

European Commission, Health Directorate, Directorate General for Research and Innovation,  
Brussels, Belgium

**€3.1 billion (2007-2019)**

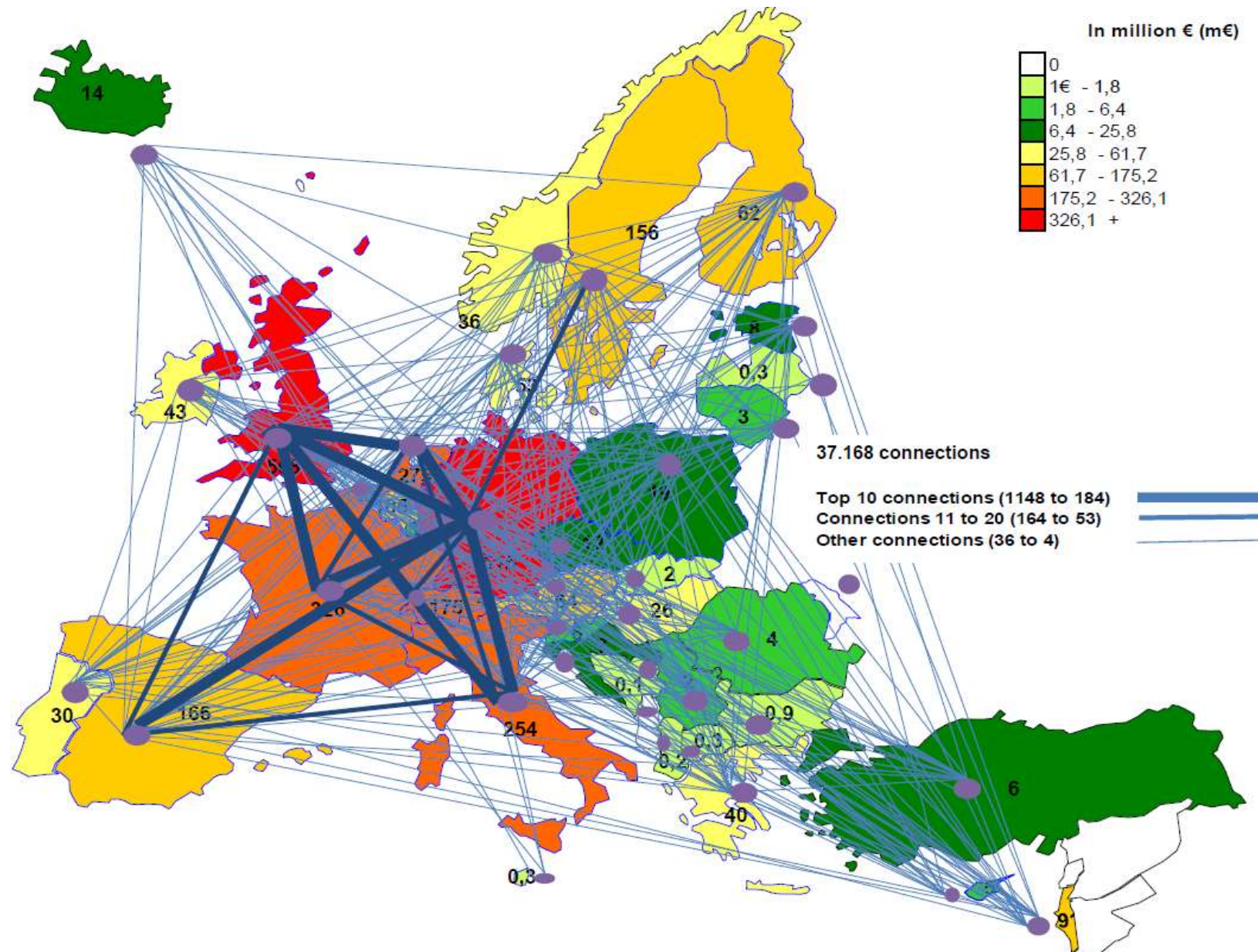
➤ **focus on solutions for patients, innovation, close-to-market**

# EU funded cancer research - H2020



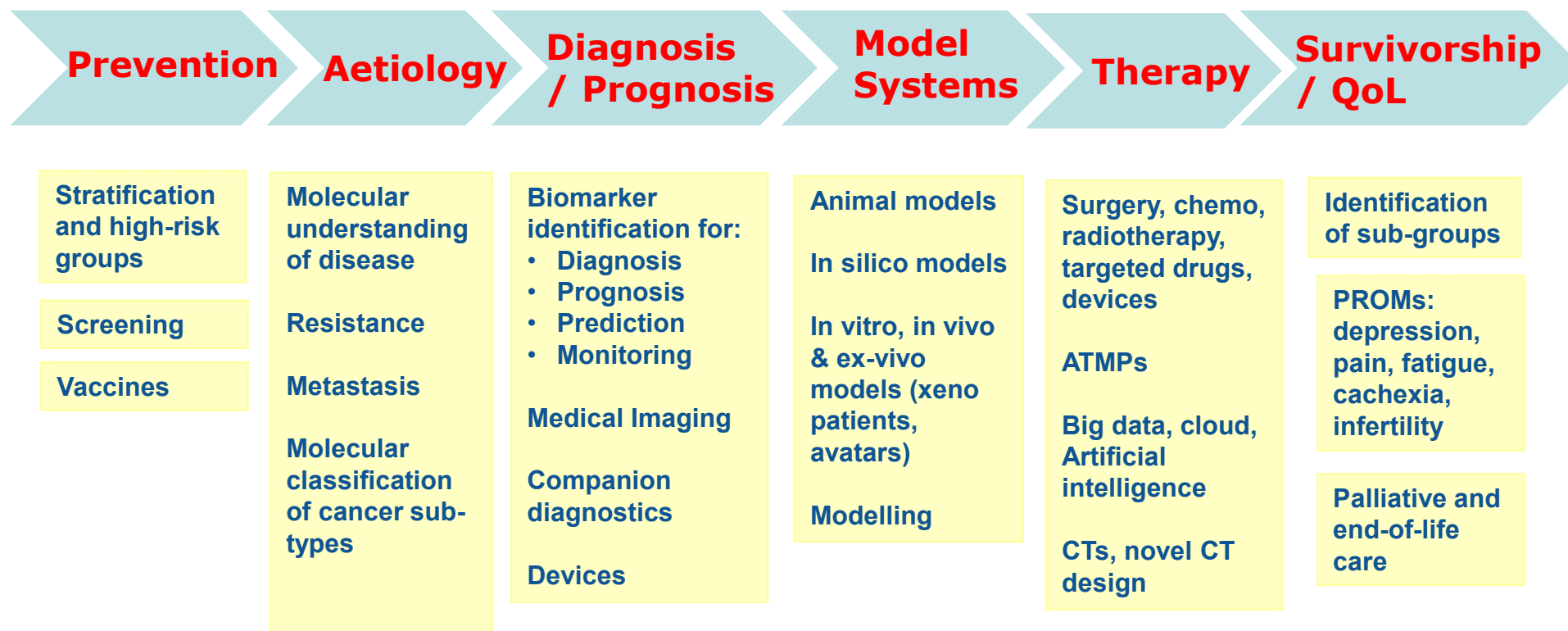


# EU Cancer connections



# Towards person-centred care

## Personalised medicine



# Personalised breast cancer prevention



**Towards improved screening for breast, cervical and colorectal cancer in all of Europe**

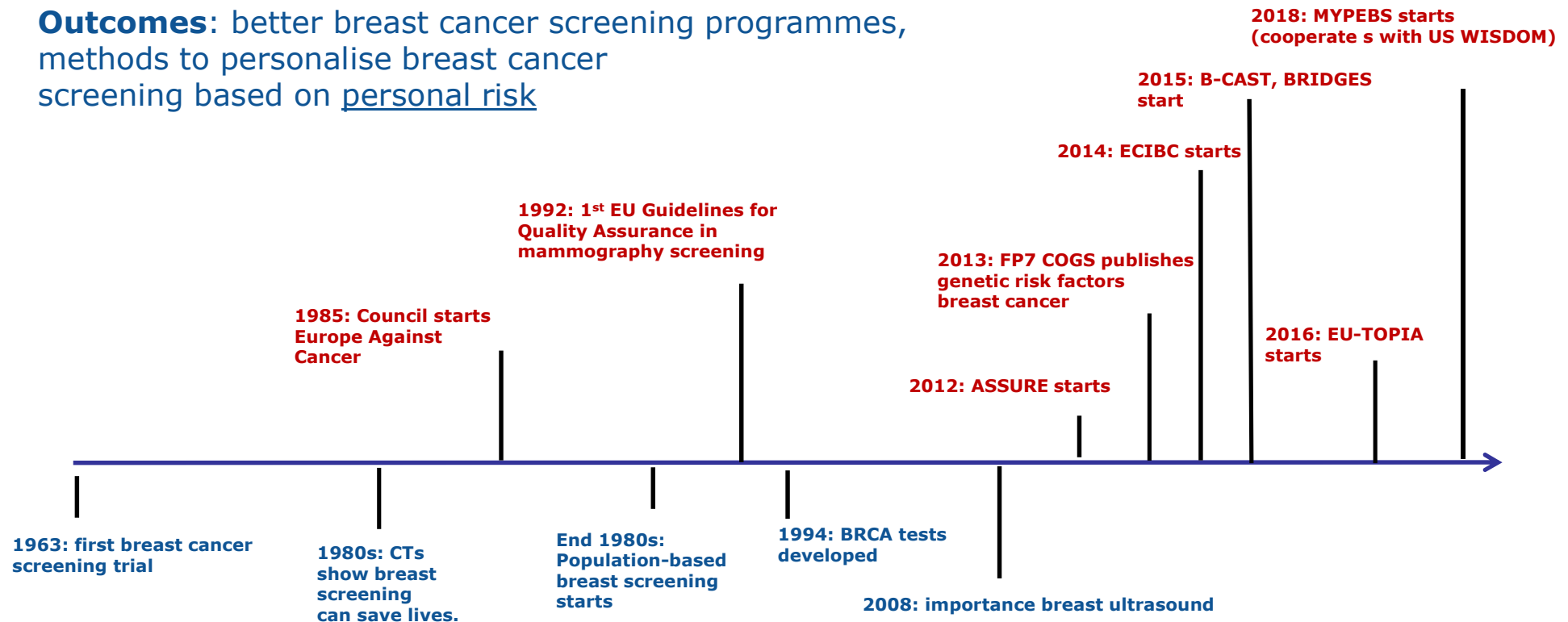


**Adapting Breast Cancer Screening Strategy Using Personalised Risk Estimation**



**Randomized, Comparison Of Risk-Stratified versus Standard Breast Cancer Screening In European Women Aged 40-74**

**Outcomes:** better breast cancer screening programmes, methods to personalise breast cancer screening based on personal risk



# Patient-centred quality-of-life portfolio



Validated **predictive models of radiotherapy toxicity** to improve quality-of-life and reduce side-effects in 5300 breast, lung, prostate cancer survivors



Advance Care Planning; an **Innovative Palliative Care Intervention** to Improve Quality of Life in Cancer Patients - a Multi-Centre Cluster Randomized Clinical Trial



Randomised controlled trial to evaluate electronic Symptom Management using the Advanced Symptom Management System (ASyMS) Remote Technology for **home-based care** of patients with advanced cancer







# Working in partnerships

# Public – Public partnerships: Coordination of national research actions (1)



- Linking national/regional cancer registries and bio-banks to improve quality of data collection, optimise cancer control in Europe and evaluate therapy effectiveness

➤ **Basis for creation of European Cancer Information System (ECIS)**



- Linking national/regional and charity funding organisations in MS on translational cancer research.

➤ **1<sup>st</sup> joint call on 'Tumour heterogeneity'**

➤ **2<sup>nd</sup> joint call on 'Immunotherapy'**

➤ **3<sup>rd</sup> joint call on ' Early detection and/or progression'**

➤ **4<sup>th</sup> joint call on 'Translational Research on Rare Cancers'**

RESEARCH FUNDING

**Toward Variable Funding  
for International Science**

Jakob Edler

European ERA-NETs offer lessons for flexible  
international funding to better meet the needs  
of science and society.

# Public – Public partnerships: Coordination of national research actions (2)

## The International Consortium for Personalised Medicine – IC PerMed – 30 Funders

### WHY

Establish **Europe as a global leader** in PM research

Support PM science-base via a **coordinated research approach**

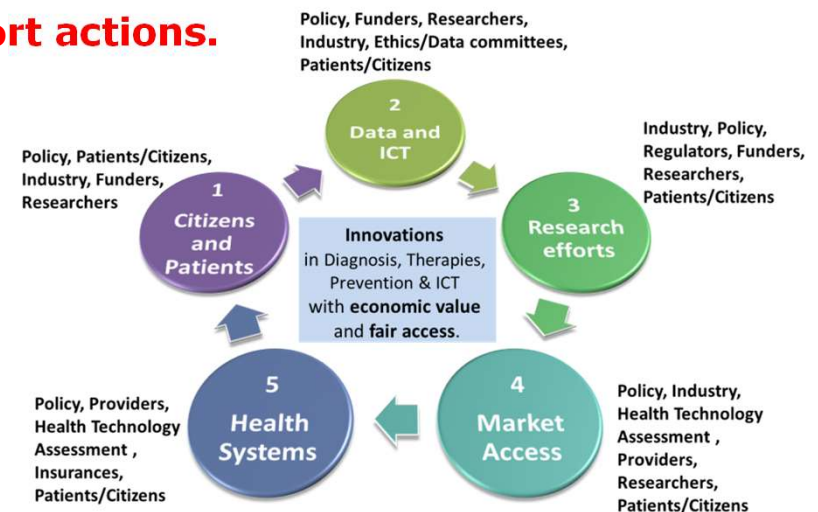
Support research to **demonstrate benefits** of PM to citizens and healthcare systems

Prepare for PM approaches for citizens

### HOW

#### Implementation based on PerMed Strategic Research Agenda

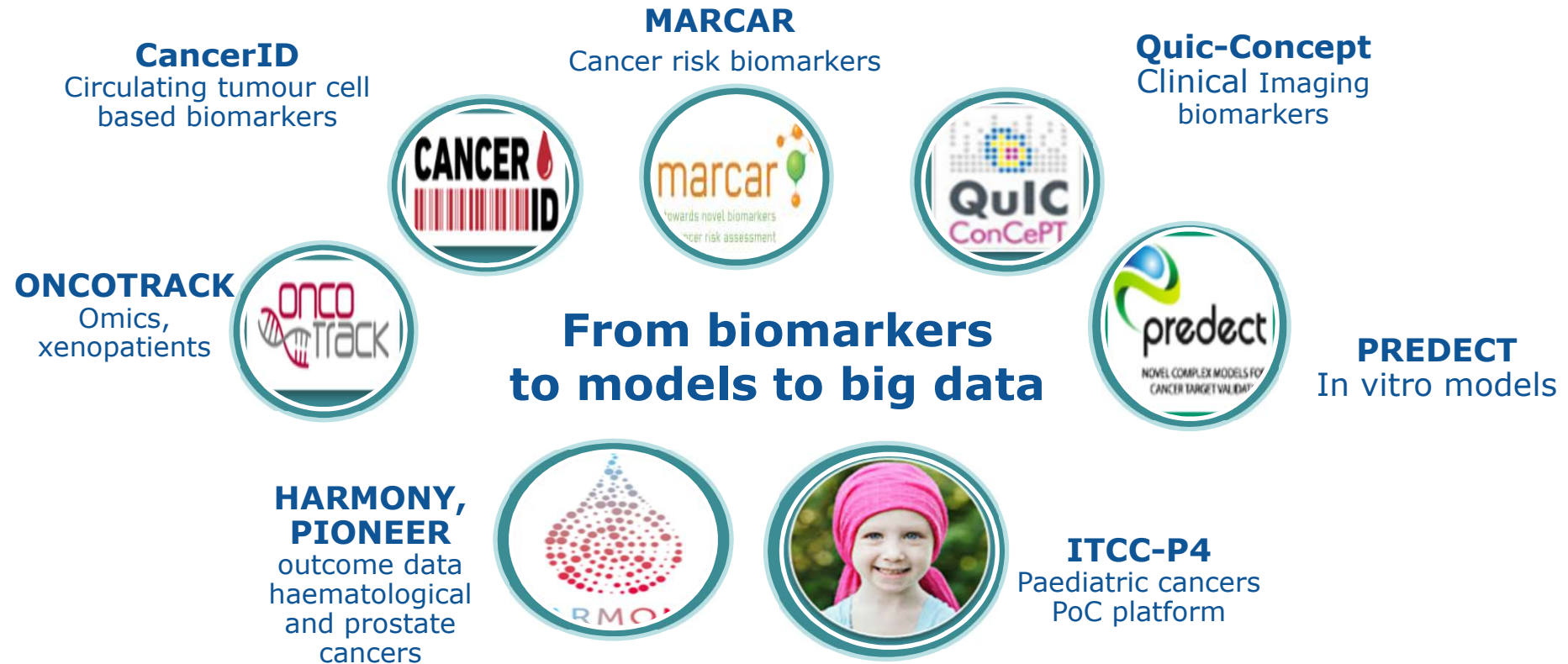
**ICPerMed Action Plan: 22 research, 8 support actions.**



# Public - Private partnership The Innovative Medicines Initiative



Innovative Medicines Initiative



## *Latest and future calls:*

- Patient-reported outcomes and quality of life endpoints
- CAR-T
- Proton versus photon therapy oesophageal cancer
- Real-world implementation liquid biopsies

# International Partnerships

## The Global Alliance for Chronic diseases

- Address non-communicable diseases in LMICs and vulnerable populations in HICs
- Focus on **implementation research** and scaling up interventions in non-communicable diseases

### Coordinated call on **cancer** in 2020

“Further research is needed to adapt existing approaches to produce meaningful advice that accounts for the complexity of health systems, political systems, and contexts.”

(Lewin, Bosch-Capblanch, Oliver et al., PLoS Medicine, 2012)



# Next steps



**Horizon Europe Strategic Planning**



**Horizon Europe Mission for Cancer**



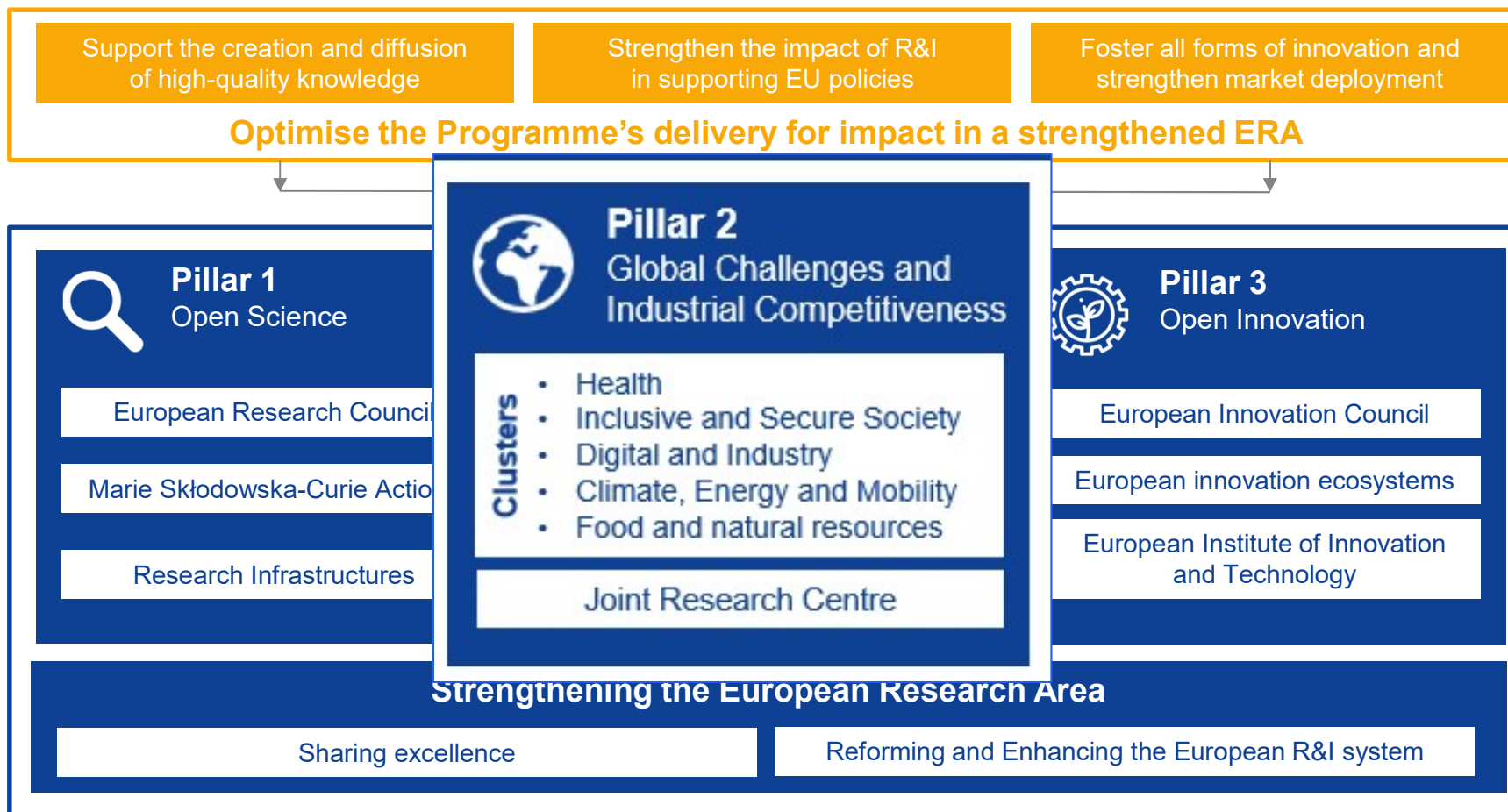
**EU Action Plan against Cancer**

*"Survival rates are on the up, especially thanks to early detection and screening programmes. But there is a lot more we can do. I will put forward a **European plan to fight cancer**, to support Member States in improving cancer control and care."*

Ursula von der Leyen, European Commission President

# Horizon Europe - evolution not revolution

## Specific objectives of the Programme



# Horizon Europe - Missions

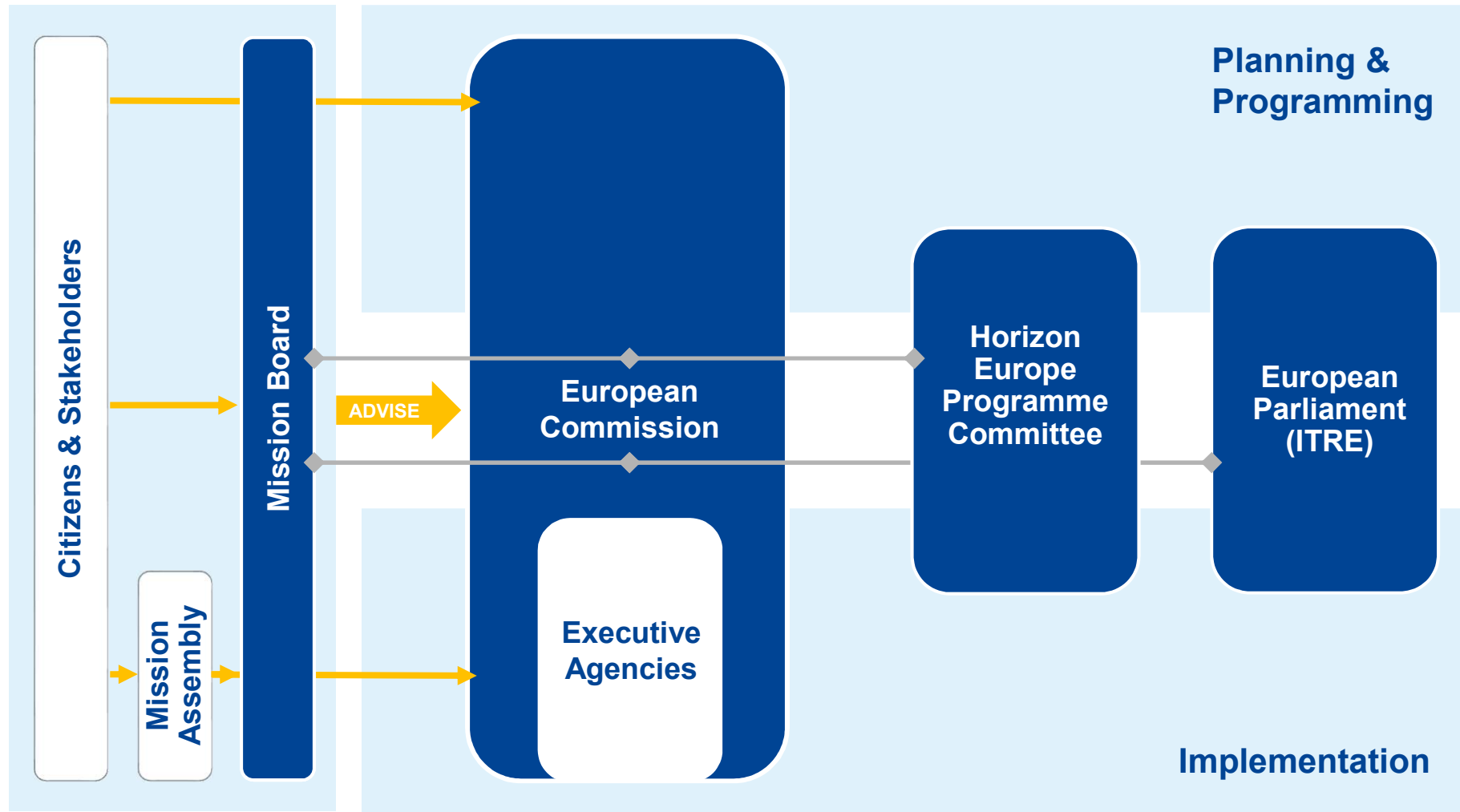
- Strong visibility and **impact**
- Achieve a bold, inspirational and measurable **goal** within a set timeframe
- Find **solutions** to some of the major challenges faced by European citizens

# Horizon Europe – what Missions are NOT

Missions are an entirely new approach based on portfolios of actions working towards broadly defined goals, and should not be confused with existing methods and instruments i.e. missions are not the same as

- **R&I** Programmes
- R&I **Partnerships**
- Focus Areas from **Horizon 2020**
- Single projects or topics
- Horizon Europe **Clusters**

# Actors in Mission Co-Design





# Mission Sub-groups of the Shadow Programme Committee

- Regular meetings with the Commission and members of Mission Boards for open exchange on identification of specific missions in the Horizon Europe Strategic Plan (early 2020)
- Feedback to the Horizon Europe Shadow Programme Committee
- Identify key national events for co-design of missions with citizens
- Identify relevant national programmes to join forces for accomplishing the missions

# Cancer Mission Board - members

## Chair



**Walter  
RICCIARDI (IT)**



**Ruth  
LADENSTEIN (AT)**



**Pedro  
PITA BARROS (PT)**

## Vice-Chair



**Christine  
CHOMIENNE (FR)**



**Marcis  
LEJA (LV)**



**Kondrad  
RYDZYNSKI (PL)**



**Regina  
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**Tomi  
MÄKELÄ (FI)**



**Anne Lise  
RYEL (NO)**



**Serban  
GHEORGHIU (RO)**



**Andres  
METSPALU (EE)**



**Bettina  
RYLL (DE)**



**Fiona  
GODFREY (BE)**



**Martin  
PICCART (BE)**



**Elisabete  
WEIDERPASS (SE)**

# Cancer Mission Board - role

Mission Boards will **advise** the European Commission on:

- Identification of one or more missions in the respective mission area, with input from stakeholders and citizens
- Content of work programmes, with input from stakeholders and citizens
- Characteristics of project portfolios for missions
- Adjustment actions, or termination if appropriate
- Selection and briefing of independent expert evaluators, specific evaluation criteria and their weighting;
- Framework conditions which help achieve the objectives of the mission
- Communication
- Policy coordination/synergies
- Key performance indicators



# Thank you!

#HorizonEU

**Horizon Europe dedicated website**

<http://ec.europa.eu/horizon-europe>

**European Innovation Council**

<http://ec.europa.eu/research/eic>

**EU budget for the future**

[http://ec.europa.eu/budget/mff/index\\_en.cfm](http://ec.europa.eu/budget/mff/index_en.cfm)